2013 ANNUAL REPORT

EETT

HELLENIC TELECOMMUNICATIONS & POST COMMISSION

Contents

Administration

This Annual Report presents the work, initiatives and actions of the Hellenic Telecommunications and Post Commission (EETT) for the period from January 1st to December 31st, 2013.

January 1st – December 17th, 2013[1]	December 18th – December 31st, 2013[2]
Leonidas Kanellos President	**Constantine Louropoulos** President
Constantine Delicostopoulos Vice President for the sector of electronic communications	**Nikolaos Papaoulakis** Vice President for the sector of electronic communications
Michael Sakkas Vice President for the sector of postal services	**Constantine Delicostopoulos** Vice President for the sector of postal services
Panagiotis Kottis Member	**Ioannis Anastassakos** Member
Ioannis Papaioannou Member	**Dimitrios Vergados** Member
Nikolaos Papaoulakis Member	**Andreas Lamprinopoulos** Member
Georgios Papapavlou Member	**Spyridon Livieratos** Member
Ioannis Tzionas Member	**Michael Sfakianakis** Member
Konstantinos Tsigaridas Member	**Ioannis Tzionas** Member

1. The Plenary's term ended on September 3rd, 2013. The Presidency continued to exercise its duties until the new Plenary was appointed.

2. The selection and appointment of EETT President and Vice Presidents were published in GG 634/18-12-2013 and those of the Members were published in GG 636/19-12-2013.

I. Message from the President

In a period of major developments for the Greek economy and society, the Hellenic Telecommunications and Post Commission undertakes significant initiatives and pursues interventions, fostering competitive growth in electronic communications and postal services. Their impact goes way beyond their nominal size and most certainly has a multiplier effect on growth in both markets, as they underpin the transition to new technologies and affect both entrepreneurship and all kinds of services delivered to citizens by the State.

Two developments of critical importance for the future of electronic communications in our country have turned 2013 and 2014 into milestones. In order to manage scarce national resources, such as the radiofrequency spectrum in a beneficial way, in 2013 EETT launched the process for licensing the digital broadcasting network (digital television) releasing valuable radiospectrum. The first objective was to promote digital technology in television, thus organising licensing for the first time and bringing order to the use of television frequencies. According to the timeline, EETT overviews until the end of 2014, the digital broadcasting network roll-out and the analog television broadcasting switch off. This also enables EETT to pursue its second objective, namely the "Digital Dividend", allocating the spectrum that was released from analog television. The tender process – a major one for mobile telephony in Greece – for allocating radiofrequency rights of use in the 800MHz and 2.6GHz Bands is already in a preliminary phase and will be completed in the second half of 2014.

As regards the Regulator's other actions discussed in the present Annual Report, their significance is critical for enhancing the prospects of both supervised markets. It is imperative to forge a brand new EETT as soon as possible in order to address the challenges in the European and Greek electronic communications and postal services landscape, in the next five years. Principally we need to turn the Authority to a "one-stop" shop. Interpreting the will of the EETT Plenary, we would like to assure the State, as well as the supervised markets that we have a strong sense of our duties, being well aware of the Greek economy and market needs in this specific momentum. We will make every possible effort to enable EETT to play its decisive role, as it is now an undisputed fact that the Authority contributes significantly to the competitive growth of both markets.

Within this framework, we aim to further reinforce our institutional armour and effective internal organisation in accordance with the European framework, making certain that EETT will always be ready to respond to future developments and address emerging needs. EETT should operate as a well functioned business unit, focusing on its long-term vision and a broader remit. Our actions are directed towards this goal.

Constantine G. Louropoulos
President
April 2014

II. Identity

The Hellenic Telecommunications and Post Commission (EETT) is an Independent Administrative Authority. It acts as the National Regulator that monitors, regulates and supervises: (a) the electronic communications market, which comprises the activities of fixed and mobile telephony, wireless communications and Internet access providers, and (b) the postal services market, which comprises the activities of postal and courier service providers. Moreover, EETT is entrusted with the competences to act as the Competition Authority in the said markets.

The Authority was established in 1992 by virtue of L.2075/1992 and originally named Hellenic Telecommunications Committee (EET), whilst its competences initially focused on the supervision of the liberalized telecommunications market. It started operating in the summer of 1995. With the enactment of L.2668/1998 that defined the organization and operation of the postal services, EET was also entrusted with the responsibility of supervising and regulating the postal services market, and was renamed Hellenic Telecommunications and Post Commission (EETT).

L.2867/2000 enhanced EETT's regulatory, supervisory and monitoring roles. By incorporating more recent European regulations, L.3431/2006 on electronic communications, defined the framework for the provision of electronic communications networks and services and related facilities in Greece, expanding EETT's competences. L.4070/2012 on electronic communications and L.4053/2012 on postal market and electronic communications matters, significantly reinforced EETT's role as the new framework further enhanced its competences, including inter alia management of the radiofrequency spectrum for terrestrial digital broadcasting, whilst ensuring transparency and effectiveness in a series of matters, such as licensing the construction of antennas, market analysis and consumer protection.

EETT is a highly specialized public sector body. However its high level efficiency and effectiveness bear a resemblance to private sector companies, as EETT:

- Issues a Balance Sheet and a Profit and Loss Statement.
- Finances its own operation.
- Possesses an integrated information system for document processing.
- Employs high skilled experts.
- Pursues goals focused in growth and improving the operating conditions for two particularly dynamic sectors of the economy.

It should be noted that the markets that fall under EETT's supervisory authority are of a critical size for the Greek economy, as their total turnover is over 6 billion euro (2012 figures), with a multiplier effect on the development output.

Table I: Key Figures for the Markets Supervised by EETT* (in billion EUR)

Sector	Number of Companies	Turnover (2012)
Telecommunications	89**	5.92
Postal	474	0.57
Total	**563**	**6.49**

**No financial results for the financial year 2013 had been released until the publication hereof.*
***It should be noted that the turnover of the companies operating in the telecommunications sector makes up 95% of the total turnover of the telecommunications market.*
The above figures correspond to the sales of the companies that answered EETT's questionnaires and/or publish a balance sheet.

III. Plenary

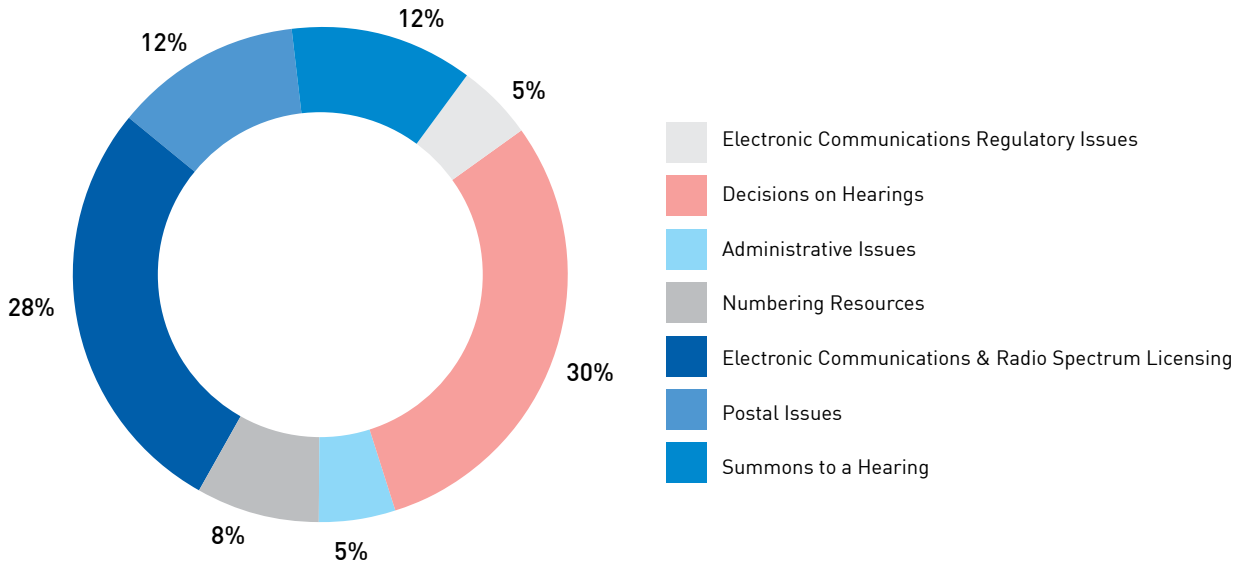
EETT's administrative body is the Plenary, which consists of nine members – namely the President, two Vice Presidents competent for the sectors of electronic communications and postal services respectively, and six members. All Plenary members enjoy full personal and operational independence in exercising their duties.

According to the existing legal framework (L. 4070/2012, in which article 6(1)6 and 6(1)7 was amended by article 123 of L.4199/2013[3]), the President and the Vice Presidents are selected and appointed by the Ministerial Cabinet, upon proposal by the Minister of Infrastructure, Transport and Networks and following the opinion of the Parliamentary Commission for Institutions and Transparency. EETT's other members are appointed by the Minister of Infrastructure, Transport and Networks. The appointments of all EETT members are published in the Government Gazette (GG). EETT members are persons of high status, who enjoy wide public acceptance and are distinguished for their scientific expertise and professional competence in the technical, economic or legal sector. All EETT Plenary members serve a four-year term, while no member can be appointed for more than two consecutive terms.

In 2013, 24 Plenary meetings were held, producing a total of 2,016 decisions, related primarily to hearing procedures, electronic communications and radiofrequency spectrum licensing, regulatory electronic communications issues, managing number allocation resources, postal market and administrative issues. The following chart presents a detailed breakdown of EETT's Plenary decisions by subject matter.

The agenda of the Plenary meetings as well as EETT's decisions are posted on its website and the "DIAVGEIA" website. Specifically, decisions related to regulatory acts are published in the Government Gazette.

Chart I: Plenary Decisions by Subject (2013)



Source: EETT

3. See L.4199 "Public interurban passenger transport by road – Regulatory Authority for Passenger Transport and other provisions" GG A' 216/11-10-2013.

Brief CVs of Plenary Members

Constantine Louropoulos

President

Mr C. Louropoulos was appointed President of Hellenic Telecommunications and Post Commission in December 2013. Two months before assuming EETT Presidency, Mr Constantine Louropoulos was president and CEO of OPAP SA, a Greek betting company with a turnover of 4 billion euro and one of the largest in the world. His 14-month term at the helm of OPAP came to an end in October 2013, when the Greek State sold its remaining 33% stake in the company to private investors. Before holding public offices, he was involved in the IT sector as an entrepreneur. In 1999, he established a start-up company, called E-ON INTEGRATION SA, which develops and manages software applications in cloud computing technologies, using Internet infrastructure. Mr Louropoulos started his career in 1979 at Arthur Andersen. He then went on to establish the Greek office of Andersen Consulting (currently Accenture), of which he was president and CEO until September 1997. In Andersen Consulting, he was nominated partner in the company's world-wide management team. He also acted as a member of several international management and technical committees, namely South Europe Management Committee, Worldwide Telecom Industry Group, Business Process Management, Financial Services Industry Group, etc. During his long career, Mr Louropoulos has cooperated with large private and state owned enterprises in Greece and internationally. His main expertise is information technology, business process transformation and change management. He is the author of the book "Kata Laistrygonon – The Business Manifest against the Economic Crisis". Mr Louropoulos was born and raised in Athens. He studied business administration and economics at the Athens University of Economics and Business.

Nikolaos Papaoulakis

Vice President for the sector of electronic communications

Dr N. Papaoulakis is an alumnus of the Experimental School of the University of Athens. He received the diploma in electrical and computer engineering from the National Technical University of Athens (NTUA) in 2002, as well as his PhD in 2007. Between 2001 and 2013, he was a senior research associate at the Telecommunications Laboratory of the NTUA School of Electrical and Computer Engineering. He has participated in many European and national research projects as technical manager on topics related to telecommunications and especially mobile - personal communications networks and PC networks. Dr Papaoulakis has published extensively with more than 73 papers in widely recognized international conferences and prestigious scientific journals. Moreover, he was a member of the task force for the production of a technical report for Tactical Ad-Hoc communication systems of NATO and he also participated in the Institute of Electrical and Electronics Engineers (IEEE) working group for the radio resource management on IEEE 802.11 networks. From September 2009 until the end of 2013 he served as Member of EETT's Plenary.

Constantine S. Delicostopoulos

Vice President for the sector of postal services

Dr C. Delicostopoulos holds a Bachelor's degree in law (LL.B.) from the London School of Economics and a Bachelor's degree in law (Maîtrise en droit) from Université Paris 2 Pantheon-Assas. He also holds a Master's degree in law (D.E.A. en droit privé) and in the year 2000 he received his PhD in law (Doctorat en droit) -summa cum laude- both from Université Paris 2 Pantheon-Assas. For a year, he also served as visiting researcher at Harvard Law School, USA. Dr C. Delicostopoulos is former Assistant Professor of Law (Maitre de Conférences en droit) at Université Paris 2 Pantheon-Assas (P.RE.S. Sorbonne Universités). He taught and conducted research in fields such as, inter alia, Procedural Law, European Law, as well as Independent Regulatory Authorities Law. He also lectured for several years at the Institute of Judicial Studies (I.E.J. "P. Raynaud") of Université Paris 2 and served as chairman of the entrance examinations' committees for the Paris Bar School (E.F.B.). He is admitted to practice as a lawyer before the Supreme Court of Greece and before the Appellate Court in Paris. From January 2012 to December 2013, he also served as Vice President for the

sector of electronic communications and from September 2009 to December 2011 as a Member of EETT's Plenary.

Ioannis Anastassakos

Member

Dr I. Anastassakos holds a diploma in electrical and mechanical engineering from the National Technical University of Athens, a DEA and a PhD in statistics from Université Pierre et Marie Curie and a Master's degree in sociology from Université de Paris-Sorbonne. He served as executive advisor at the Ministry of Infrastructure, Transport and Network, as well as communication advisor since 2011. Moreover, he has served as managing director and president of AGB Hellas/Nielsen Media Research (1988-2011), whilst he also has longstanding professional experience in important positions in advertising and market research agencies, as well as in research centres in Greece and in France.

Dimitrios Vergados

Member

Dr D. Vergados is an Assistant Professor in the Department of Informatics at the University of Piraeus. His research interests focus on computer networks and telecommunication systems, cloud computing and green technologies and computer vision. He has several publications in well respected scientific journals, books and conference proceedings. He has served as editor of international journals, program chair in several conferences, member of many technical programme committees, reviewer in journals and conferences and as a committee member and evaluator in national and international committees and organisations.

Andreas Lamprinopoulos

Member

Mr A. Lamprinopoulos studied at the School of Mechanical and Electrical Engineering (1955-1960) at the National Technical University of Athens, continued his postgraduate studies in digital technology as scholar in W. Germany (1967-1968) and attended financial education training programs at the Technical Chamber of Greece. His professional career started at OTE, where he advanced to the rank of director. Thereafter, he served at Hellenic Railways Organisation (OSE) as chief and chairman of the Board (1982-1986), general manager (1986-1988) and president (1987-1988). During the years 1988-1989, he served as general manager of the Ionian Bank of Greece, and at the same time as chairman of the OSE Board and vice president of the board at the company "Phosphate Fertilizers", the Commercial Bank of Germany and the Shipyards at Neorion of Syros Island. From 1990 to 1993 he served as general manager of the consulting firm "GETREN Ltd" and in 1994, he became chairman of the monitoring committee for the EEC modernization programme of OTE. From 1995 to June 2000, he served as EETT's president, afterwards as chairman of the Board of OSE (2000-2003) and until 19-12-2013 as president of the Hellenic Authority for Communication Security and Privacy (ADAE).

Spyridon Livieratos

Member

Dr S. Livieratos holds a diploma in electrical engineering and a PhD in wireless-satellite communications from the National Technical University of Athens (NTUA). Since 2009, he has been Assistant Professor at the Department of Electrical and Electronic Engineering Educators, School of Pedagogical and Technological Education. Between 1993-1997 he was instructor at the Hellenic Naval Academy and at the Graduate School of Greek Army Technical Officers. His research interests cover a wide scope of telecommunications issues, his publications are extensive, and he has participated in many European and Greek research projects as project manager or main researcher. Before 2009 and for many years, he worked in the telecommunications market at various positions, such as sales engineer at SIEMENS, carrier sales manager at OTEGLOBE and head of the telecommunications regulation department at EETT.

Michael Sfakianakis

Member

Dr M. Sfakianakis is head of the Department of Business Administration and professor in Informatics for Business Administration of the University of Piraeus since 2000. In the period 1995-2000 he served as research fellow at the Centre of Planning and Economic Research (KEPE) in Greece. Also, he was adjunct lecturer at the Department of Statistics of the Athens University of Economics and Business (1993-2000) and at the Section of Statistics & Operations Research of the Department of Mathematics at the University of Athens (1991-1994). In addition, amongst other positions he has served as president of the Central Supervisory Board of the General Commercial Registry (2011–today); member of the Coordinating Committee for the Global Project on Measuring the Progress of Societies of OECD; member of the European Advisory Committee on Statistical Information in the Economic and Social Spheres; Full member of the Independent Public Procurement Authority; president of the Consumer Price Index Revision Committee of Greece of ELSTAT, as well as vice president of the board of directors of Electronic Governance of Social Security (IDIKA) SA.

Ioannis Tzionas

Member

Mr I. Tzionas is a professor at the University of Macedonia and an attorney at law, registered at the bar of Thessaloniki. He graduated from the Law School of Democritus University of Thrace and pursued postgraduate studies (LL.M) in European Union Law and International Economic Law at the London School of Economics and Political Science and obtained his PhD from the Institute of Advanced Legal Studies of the University of London in the field of International Economic and European Law. Mr Tzionas has specialized in International Economic Law and International Business Transactions, European Union Law, Business Law, inter alia, subjects which he has taught and which form his scientific and research interests.

Executive Summary

Administration Annual Financial Report Internal Organisation Management of National Resources Focusing on Consumers Electronic Communications Sector Analysis Radiofrequency Spectrum Sector Analysis Postal Services Sector Analysis Strong International Presence Action Plan for 2014 Appendix

1. Executive Summary

In the context of its competencies, EETT undertakes a wide range of actions and interventions in its supervised sectors. In the following paragraphs, the Authority's work for 2013 is summarised, with reference to key macroeconomic figures and developments in the supervised markets.

1.1. EETT at a glance

EETT is a "hive of industry" where regulatory interventions are crafted. It processes, on an annual basis, thousands of requests, issues and cases. In 2013, EETT's Integrated Information System (IIS) received approximately 41 thousand incoming documents and sent 12.5 thousand outgoing documents in reply to requests. Overall, the EETT's information systems received, stored and processed approximately 60 thousand electronic documents of all kinds. The following table provides an overview of the main case categories.

Table 1.1: Task Management by EETT (2013)

Task Category	Number of cases submitted and processed
Incoming to the Integrated Information System (IIS) requiring a reply	12,572
Consumer Service Sector	
Requests/Complaints	12,015
Telecommunications Directorate	
Dominant operator's bundled services for approval	86
General License applications for telecommunications	145
Applications by telecommunications registrars	98
Applications for numbering resources	181
On the spot compliance controls to network and/or electronic communication services providers	308
Spectrum Directorate	
Applications for licensing antennas	4,837
Applications for microwave links	387
Applications for special radio networks	84
Applications for licensing terrestrial satellite stations	5
Applications for provisional rights	18
Cases related to the supervision of the spectrum of fixed and mobile services & amateur radio services	293
Cases related to the supervision of public networks	41
Cases related to the supervision of mobile telephony antennas	981
Radio and Telecommunications Terminal Equipment (RTTE) sample controls	161
Postal Services Directorate	
General Authorisation Applications for Postal Services (registration, amendment, expiry)	284

(table 1.1 continued)	
Task Category	**Number of cases submitted and processed**
Individual License applications for postal services	2
On the spot compliance controls for postal services providers	53
Miscellaneous	
Parliamentary controls	85
Cases in trial	500
Hearings	758

From another perspective, it should be noted that EETT carries out 139 principal processes, a particularly large number, as many new processes have been added to its competence over the past few years. Each process requires its own expertise, experience on the subject, staff with specialised training and customised information systems. The above table presents the number of EETT processes.

Table 1.2: EETT Processes per Directorate and Department		
	Directorates/Departments	**Number of processes listed**
T1	Telecommunications Regulation Dept.	16
T2	Telecommunications Monitoring & Supervision Dept.	7
T3	Market and Competition Monitoring Dept.	9
CSS	Consumer Service Sector	1
F1	Spectrum Management Dept.	18
F2	Spectrum Monitoring Dept.	9
F3	Telecommunications Equipment Dept.	12
POST	Postal Services Directorate	18
FIN	Financial & Administrative Services Directorate	16
LEG	Legal Services Dept.	10
IT	IT Dept.	4
PR	Public Relations Dept.	9
ADMIN	President's and Commission's Secretariat Office	10
Total		**139**

1.2. Financial Report

As demonstrated in EETT's Balance Sheet, in 2013 there was an increase in assets, due to a significant increase in the Authority's revenues, as 2013 was not a year in which EETT pays its contribution to the state budget. The Profit and Loss Statement shows that operating profit has been decreased by 49.67%. This is due to:

a) a reduction in the turnover (administrative fees and R/F usage fees) by 15.49% due to the economic crisis' impact on the telecommunications and postal markets;

b) a reduction of other operating revenues (fines) by 54.92%. It should be noted that fines are collected via the Public Revenues Collection Code and there are significant fluctuations over the years;

c) a decrease in financial revenues up to 31.87% due to a significant drop in the interest rates of term savings accounts;

d) a significant increase in the expenses of previous financial years (in reference mainly to fines, which have been significantly reduced and/or cancelled by decisions of the Athens Appellate Court, while a detailed breakdown on their return, is to be expected by the competent Tax Offices).

e) the calculation of supplementary provisions for pending cases and other extraordinary risks (bad debt).

It should also be noted that EETT once again reduced its overall operating cost by 4% (in the four years 2013-2010 the overall reduction exceeds 21%) despite the fact that it has taken on 25 new employees as a result of staff transfers from other organizations of the public sector.

Pursuant to the above, the Net Operating Result amounted to 36,156,864.75 euro and in combination with the operating result of 2012 which was 71,835,459.68 euro, the amount to be attributed to the state budget for the two years 2012-2013 is 86,393,859.54 euro, increased by 12.83% as compared to the corresponding amount paid for the years 2010 and 2011.

1.3. Human Resources

EETT's staff has exceptionally high academic qualifications in a wide range of disciplines and scientific fields. Our staff handles cases that are characterised by complexity and uniqueness, so frequently several different disciplines must work together to settle a case.

Based on the foregoing, it is apparent that staffing EETT is a very sensitive process, given the requirements in educational qualifications, as well as the fact that incorporating new employees into its productive force is a time consuming process. It is obvious that there has to be a plan for systematic knowledge transfer, so that all of EETT's accumulated intellectual resources can be diffused to new employees.

Besides, more people with high skills and market experience are needed, through tranfer from other organisations or new hirings. These people will be called upon to become directly incorporated and work in order to meet the ever increasing and more complex needs of EETT, aiming at the smoother operation of the market.

At the end of 2013, EETT's employees numbered 214 compared to 217 in 2012.

1.4. The Macroeconomic Environment in which EETT operates

Europe

The global economic crisis that started in 2007–2008 created the need for improvements in the regulatory framework and closer supervision of the global credit systems, while as a result, the financial sectors of many countries have been supported and restructured. Important decisions were reached in the European Union (EU) with the purpose of strengthening the institutional framework and supervising the financial sector, as well as ensuring the financial stability of the eurozone. The growth rate of the global economy was 3% in 2013, and is expected to be accelerated in 2014 to 3.5% in parallel with the acceleration of the upturn in international commerce.

The eurozone is expected to have a positive contribution in the recovery of the global economy, which according to forecasts will grow at a rate of around 1% in 2014, compared to its negative growth rate, namely -0.4%, in 2013, as it appears that the investment and consumer confidence is gradually restored and progress is noted in institutional reforms. This is accompanied by improved economic indicators across almost all eurozone countries, including Greece.

In the second quarter of 2013, the economy of the eurozone came out of the recession, after six continuous quarters of GDP decline and continued to grow in the second semester of the year, whilst economic activity in the countries facing the most difficulties showed the first signs of stabilisation. The EU intuitional bodies' initiatives for dealing with the debt crisis and the macroeconomic imbalances within the eurozone, as well

HELLENIC TELECOMMUNICATIONS & POST COMMISSION

BALANCE SHEET AS OF 31st DECEMBER 2013 - 19th FISCAL YEAR (1st JANUARY - 31st DECEMBER 2013, AMOUNTS IN EUROS)

ASSETS

	Amounts for the period ended 2013			Amounts for the period ended 2012		
	Acquisition value	Depreciations	Net Value	Acquisition value	Depreciations	Net Value
B . ESTABLISHMENT EXPENSES						
1. Formation and set-up expenses	465.538,60	465.538,57	0,03	465.538,60	465.538,57	0,03
4. Other establishment expenses (Computer S/W)	2.649.619,30	2.641.388,04	8.231,26	2.645.159,32	2.633.378,99	11.780,33
	3.115.157,90	3.106.926,61	8.231,29	3.110.697,92	3.098.917,56	11.780,36
C . FIXED ASSETS						
II. Tangible assets						
5. Transport equipment	99.303,76	90.109,41	9.194,35	99.303,76	87.418,39	11.885,37
6. Furniture and other equipment	13.172.962,31	12.698.333,02	474.629,29	12.925.425,94	12.392.614,21	532.811,73
Total tangible and intangible assets (C II)	13.272.266,07	12.788.442,43	483.823,64	13.024.729,70	12.480.032,60	544.697,10
III. Participations and other long term financial assets						
7. Other long term claims			83.431,21			83.431,21
Total fixed assets (CII + C III)			567.254,85			628.128,31
D. CURRENT ASSETS						
I. Stocks						
4. Fixed asset spare parts			237.898,37			293.125,37
II. Debtors						
1. Customers		3.041.445,01			6.465.506,09	
Less: Allowances (44:11)		1.687.903,32	1.353.541,69		2.649.995,84	3.815.510,25
11. Sundry debtors			14.014.745,44			10.001.910,61
12. Advances and credits suspense accounts			109.902,06			12.283,21
			15.478.189,19			13.829.704,07
IV. Cash items						
1. Cash on hand			1.771,56			1.670,81
3. Sight and time deposits			263.329.796,37			216.858.243,14
			263.331.567,93			216.859.913,95
Total current assets (DI + DII + DIV)			279.047.655,49			230.982.743,39
E. DEBIT TRANSIT ACCOUNTS						
1. Prepaid expenses			56.947,47			31.775,48
2. Accrued income receivable			509.061,61			1.755.409,16
			566.009,08			1.787.184,64
TOTAL ASSETS (B+C+D+E)			280.189.150,71			233.409.836,70
DEBIT MEMO ACCOUNTS						
2. Debit accounts of guarantees & collateral security			20.612.860,72			20.811.412,24
4. Various debit information accounts			63.617.684,92			63.609.900,00
			84.230.545,64			84.421.312,24

CAPITAL & LIABILITIES

	Amounts for the period ended 2013	Amounts for the period ended 2012
A. OWNER'S EQUITY		
IV. Reserves		
2. Extraordinary reserves	293.470,29	293.470,29
3. Special reserves		
Former EET's capital equipment	15.430,67	15.430,67
Reserve under art. 75 of Law 4070/2012	8.850.355,80	11.112.273,23
	9.159.256,76	11.421.174,19
V. Results carried forward		
Profit carried forward	204.158.093,67	166.130.615,91
	204.158.093,67	166.130.615,91
Total owner's equity (AIII+AIV+AV)	213.317.350,43	177.551.790,10
B. PROVISIONS FOR CONTINGENCIES AND EXPENSES		
1. Provision for personnel redundancy and retirement compensation	639.599,31	293.504,96
2. Other provisions	16.375.000,00	16.775.000,00
	17.014.599,31	17.068.504,96
C. LIABILITIES		
II. Short term liabilities		
1. Suppliers	298.704,71	413.244,33
4. Advances from customers	2.572.119,74	2.287.798,92
5. Tax and duties payable	124.245,14	154.910,79
6. Insureance and person fund dues	211.305,18	249.670,92
11. Sundry creditors	31.893.119,20	24.878.915,80
Total liabilities (CII)	35.099.493,97	27.984.540,76
D. CREDIT TRANSIT ACCOUNTS		
1. Deferred income	14.615.328,55	10.712.987,07
2. Accrued expenses	142.378,45	92.013,81
	14.757.707,00	10.805.000,88
TOTAL OWNER'S EQUITY (A+B+C+D)	280.189.150,71	233.409.836,70
CREDIT MEMO ACCOUNTS		
2. Credit balances of guarantees & collateral security	20.812.860,72	20.811.412,24
4. Various credit information accounts	63.617.684,92	63.609.900,00
	84.430.545,64	84.421.312,24

NOTE: The Balance Sheet Account "Sundry Debtors" includes receivable amounting in total to 7.953.692,55 euros from fines and fees imposed by EETT's decisions to liable parties, due to infringements of the legislation in force during the current and previous accounting periods.
They will be collected according to the procedure prescribed by the Code for the Collection of Public Revenues and will bee recorded in the respective revenues of the accounting periods in which they will be collected. The respective amounts of the aforementioned fines are in the "Unearned and deferred income" credit transit accounts.

INCOME STATEMENT (PROFIT & LOSS ACCOUNT) FOR THE YEAR ENDED 31st DECEMBER 2013 (1st JANUARY - 31st DECEMBER 2013)

			Amounts for the period ended 2013			Amounts for the period ended 2012
I. OPERATING RESULTS						
Net turnover (collected fees)			42.069.024,31			49.777.957,72
Less: Cost of services provided			12.277.958,67			12.520.610,64
Gross operating results (profit)			29.791.065,64			37.257.347,08
Plus: Other operating income			8.569.722,91			19.008.711,82
Total			38.360.788,55			56.266.058,90
Less: 1. Administrative expenses			1.547.763,74			1.878.386,60
Operating results (profit) before financial transactions			36.813.024,81			54.387.672,30
Plus: 4. Credit interest and related income		8.446.454,26			12.395.310,08	
Less: 3. Debit interest and related income		2.555,85	8.443.898,41		1.360,52	12.393.949,56
Total operating results			45.256.923,22			66.781.621,86
II. PLUS: EXTRAORDINARY RESULTS						
1. Extraordinary and non-operating income		31.224,26			401.562,56	
3. Prior period income		1.071,00			5.013.504,29	
4. Income from unused prior period provisions		71.614,72			184.733,20	
		103.909,98			5.599.800,05	
Less: 1. Extraordinary and non-profit expenses	17.445,39			43.332,79		
3. Prior period expenses	7.773.769,79			445.785,32		
4 Provisions for extraordinary contingencies	1.412.753,27	9.203.968,45	-9.100.058,47	56.844,12	545.962,23	5.053.837,82
Net income (profit) before taxes and extra depreciation			36.156.864,75			71.835.459,68
Total depreciation recorded		316.418,88			415.001,72	
Less: Normal depreciation (included in the operating cost)		316.418,88	0,00		415.001,72	0,00
NET RESULTS (PROFIT) FOR THE YEAR BEFORE TAXES			36.156.864,75			71.835.459,68

INCOME (PROFIT) APPROPRIATION ACCOUNT

		Amounts for the period ended 2013	Amounts for the period ended 2012
Net results (profit) for the period		36.156.864,75	71.835.459,68
Balance (profit) brought forward		166.130.615,91	170.965.627,89
Reserve under art. 75 of Law 4070/2012		11.112.273,23	11.677.572,90
	Total	213.399.753,89	254.478.660,47
Profit appropriation			
- Reimbursements according to MITN Decisions		391.304,42	663.768,29
- Reimbursements to national budget		0,00	76.572.003,04
- Reserve under art. 75 Law 4070/2012		8.850.355,80	11.112.273,23
- Profit Carried Forward		204.158.093,67	166.130.615,91
		213.399.753,89	254.478.660,47

Maroussi, 30 April 2014

THE ACCOUNTABLE FINANCIAL ADMINISTRATOR
EETT PRESIDENT

CONSTANTINE LOUROPOULOS
I.D. No AB 590026

THE FINANCIAL & ADMINISTRATIVE SERVICES DIRECTOR

GIORGOS M. ORFANOS
I.D. No AZ 095420
ECONOMIC CHAMBER OF GREECE CLASS A REG No 0003970

THE HEAD OF THE EETT ACCOUNTING DEPARTMENT

AGGELIKI H. SPIGGOU
I.D. No AB 047533

CERTIFIED AUDITOR - ACCOUNTANT'S REPORT
To the "Hellenic Telecommunications and Post Commission"

Report on Financial Statements.
We have audited the above Financial Statemens of the "Hellenic Telecommunications and Post Commission" which comprise the Balance Sheet as of December 31st 2013 the Income Statement (Profit & Loss Account) and the Income Appropriation Account for the period then ended.
Administration's Responsibility for the Financial Statements.
The Administration of the "Hellenic Telecommunications and Post Commission" is responsible for the preparation and fair presentation of the Financial Statements in accordance with the Accounting Standards prescribed by Greek Legislatio and Articles 42a to 43c of CL 2190/1920, as well as for designing, implementing and maintaining an internal audit system relevant to the preparation and fair presentation of Finacial Statements that are free from material misstatement, whether due to fraud or error.
Certified Auditor's Responsibility.
Our responsibility is to express an opinion on the above Financial Statements, based on our auditing data. We conducted our audit in accordance with the international Auditing Standards. These Accounting Standards require that we comply with the rules of business ethics and that we plan and perform the audit to obtain reasonable assurance that the Financial Statements are free from material misstatement. An audit involves following procedures for obtaining audit evidence about the sums and disclosures in the Financial Statements. The procedures selected depend on the auditor's judgment, including the assessment of the risk of material misstatement of the Financial Statements, whether due to fraud or error. In making those risk assessments, the auditor takes into account the internal control system which is relevant to the entity's preparation and fair presentation of the Financial Statements, in order to design audit procedures that are appropriate for the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control system of the "Hellenic Telecommunications and Post Commission". An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the Administration's accounting estimates, as well as the overall presentation of the Financial Statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide the grounds for our audit opinion.
Opinion.
In our opinion, the above Financial Statements give a true and fair picture of the economic situation of the "Hellenic Telecommunications and Post Commission" as of December 31st 2013 and of its financial performance for the year then ended, in accordance with the Accounting Standards prescribed by Greek Legislation and and Articles 42a to 43c of CL 2190/1920.
Report on other legal and regulatory requirements.
The content of EETT's President's report to the Plenary regarding the Annual Report is consistent with the accompanying Financial Statements.

Athens, 30 April 2014
THE CERTIFIED AUDITOR - ACCOUNTANT

MAKRIS KONSTANTINOS
ICPA REG NO 26771

MAZARS

Mazars Chartered Accountants
Business Consultants SA
130 Syngrou Avenue, 176 71 Athens
ICPA REG NO: 154

as the monetary policy followed by the European Central Bank (ECB) contributed to the reduction of uncertainty. However, the credit crunch and high unemployment in numerous member states continue, in the short term, to inhibit the recovery of the European economy with developments that greatly differ between the different economies of the eurozone, even though differences in their economic performance have been decreased. Out of the countries that are facing serious macroeconomic imbalances during the crisis, Greece, Portugal, Spain and Italy continued to be in recession, albeit less intense in 2013.
In June 2013, the European Council promoted the establishment of the Single Supervisory Mechanism, which will be fully operational by November 2014, as well as the Single Resolution Mechanism, which together with the Single Supervisory Mechanism will constitute a major step towards the completion of the banking union, so as to put to an end the vicious cycle between banking and fiscal performance and prospects.

Greece

As far as Greece is concerned, in 2013 the twin deficits were successfully controlled and Greece established to practically eliminate budgetary and current account deficits, and successfully restored competitiveness. For 2014, the Medium Term Fiscal Strategy 2015-2018 foresees a primary surplus equal to 2.3% of the GDP, a growth rate equal to 0.6% of the GDP and an unemployment rate of 24.5%. Public debt is expected to fall from 175% of the GDP in 2013 to 139% in 2018, whilst unemployment is expected to fall from 24.5% in 2014 to 15.9% in 2018. The 2014 budget includes measures that have already been adopted and pertain to the Medium Term Loan Agreement 2013-2016 with an expected yield of 3.4 billion euro.
The key economic developments of 2013 can be classified as follows:
a) Economic policy remained focused on stability program implementation. Consistency in program implementation stimulated confidence both domestically and abroad.
b) Improved confidence is also gradually becoming apparent in the real economy, as can be seen namely in the labour market from the increased pace of recruitment and the slow decline in the rate of dismissals.
c) The major undertaking of recapitalising the four systemic banks was successfully completed and major steps for the reorganisation and restructuring of the banking sector were made. Given the lack of access of the Greek banks to international markets and the unprecedented in size terms and duration bank savings outflow, importance was attached to ensuring financial stability in our country through their recapitalisation. After safeguarding depositors, both the banks and the State are taking significant actions to handle the issue of bad loans of companies and households.
d) Fiscal and macroeconomic financials were dramatically improved. One example is that Greece is expected to announce a primary surplus within 2013 – for the first time since 2002.
In the period 2010 to 2013, regarding economic policy measures implementation, a broad array of structural and institutional changes were initiated and carried out in the labour and products market, as well as in the operation of the state, whilst as regards expenses, cutbacks were made to salaries, pensions and allowances.
Based on the improved performance and outlook for the Greek economy for the forthcoming period, the climate in sectoral markets such as telecommunications is expected to be improved.

1.5. Overview of Supervised Markets

1.5.1. The Electronic Communications Market

Globally

Consumer demand for broadband services, through the use of smart phones, remains the main driver for telecommunication services growth. This demand is expected to be significantly increased in the next five years. At the same time, a large percentage of business operations, as well as government services to citizens and corporations are now web-based. Additionally, the increased data traffic and use of wireless services to interconnect devices of all kinds (Internet of Things) triggers an exponentially increasing broadband demand.
According to ITU, the main global indicators for 2013, were the following:

- Only 40% of global population has Internet access, whilst in developed countries the percentage is greater than 77% and in developing countries 31%. Europe is the continent with the greatest rate of broadband penetration (77%), America follows (61%), whilst Africa has the lowest (7%).
- Broadband with speeds higher than 10Mbps, as well as ultra high speed broadband, are

more widespread in Asia (Korea, Hong Kong, Japan), as well as certain European countries.
- The number of mobile telephony subscribers is close to that of the world's population. Penetration is approximately 96% globally, whilst it exceeds 128% in developed countries and 89% in developing.
- The number of wireless connections is continuously rising, reaching 2 billion subscribers globally at the end of 2013. Europe has the greatest penetration in wireless broadband connections, amounting to 68%.

Europe

In 2013 the sector of electronic communications in Europe continued to be affected by the adverse economic conditions. The impact on the telecommunication operators' revenues and investments is demonstrated in Table 1.3, which presents the data from countries comparable to Greece, according to certain criteria (population, income, etc.)

However, new broadband networks, "smart" mobile phones, e-commerce and the rapid expansion of web based applications and services may offer an important growth opportunity and decisively contribute to the recovery effort. Specifically, in the European electronic communications market, according to the European Commission, the widespread use of high speed broadband connections is a critical factor for boostering economic growth and employment opportunities. Relevant studies show that a 10% increase in the broadband penetration rate results to an increase of 0.25%-1.5% in the country's GDP.

For these reasons, the Digital Agenda for Europe sets very ambitious goals, with the aim to ensure broadband access with a speed of at least 100Mbps for half of European households by 2020, whilst speeds of 30Mbps should be available to all European citizens. The Digital Agenda also focuses clearly on fostering high speed networks. This will be accomplished by developing a combination of wired and wireless technologies. Even though the ultra high broadband connections has only just been launched in the European Union, the fast roll-out of broadband shows that the 2020 goals are easily achievable, despite the current economic recession.

Greece

The prolonged economic crisis in Greece has caused a decline in revenues, profits and investments in the telecommunications sector. The Greek telecommunications market diminished in size in 2013, falling to 5.4 billion euro compared to 5.92 billion euro in 2012, 6.39 billion euro in 2011, 6.9 billion euro in 2010, 7.77 billion euro in 2009 and 8.22 billion euro in 2008. The number of fixed lines declined between 2010 and 2013 from 5.3 to 4.7 million. OTE's share in the fixed telephony access market fell from 72.7% at the end of 2010 to 62.4% at the end of 2012 and to 60.9% in mid 2013.

On the other hand, the number of mobile telephony connections, according to 2013 data amounted to 16.5 million, out of which 13 million were active.

As regards the roll-out of Next Generation Access Networks, at the end of 2013, potential VDSL coverage exceeded 69% of the fixed telephony subscribers in Greece, through the relevant infrastructure in 187 local exchanges. VDSL connections amounted to 48,878, compared to 3,165 in 2012.

Broadband penetration amounted to 25.8% compared to 23.8% at the end of 2013 with 2,913,191 connections compared to 2,689,428 at the end of 2012. Moreover, it seems that bundled services have now prevailed as the dominant products in the telecommunications market with operators offering 2-play (fixed telephony + Internet) and 3-play (fixed telephony + Internet + television). Bundled services are now delivered at relatively affordable prices, as the operators are in close competition with each other. In June 2013, 2-play service subscribers numbered 2,544,254 compared to 2,189,284 a year earlier. The penetration of 3-play services was much lower with only 152,712 subscribers in June 2013 compared to 125,214 a year earlier. IPTV and VOD services penetration is limited as demonstrated by the number of 3-play subscribers.

As regards mobile broadband, 2nd generation network coverage (2G) was available for 99.8% of the population, 3rd generation networks (3G) exceeded 98.3% and 4th generation networks (4G) 55% of the population. As of December 2013, 4,412,039 users had access through mobile phones. At the same time, the roll-out of LTE networks continued, through which commercial 4th generation services (4G) are provided since the end of 2012.

Portability in fixed and mobile telephony increased by 18.6%. Approximately 1 million numbers of fixed and mobile telephony change operator each year. Termination rates dropped almost by 250% to 1.269 eurocents from 4.95 eurocents in 2012, whilst a further reduction of rates to 1,189 eurocents (6.3% down) shall apply as of January 1st, 2014. Rates were cut by 12.5% (SMSs)

Table 1.3: The Crisis has Affected Revenues and Investments (in billion EUR)								
	Revenues				Investments			
Countries	**2009**	**2010**	**2011**	**2012**	**2009**	**2010**	**2011**	**2012**
Greece	7.77	6.90	6.39	5.92*	1.35	1.07	0.94	0.73*
Ireland	4.64	4.43	4.24	4.10	0.44	0.44	0.42	0.80
Portugal	5.41	5.25	5.32	4.59	1.05	1.08	0.90	0.77
Austria	4.93	4.90	4.53	4.39	0.52	0.69	0.50	0.55
Sweden	N/A	5.48	5.88	6.06	N/A	0.87	0.99	0.97
The Netherlands	11.27	13.45	13.48	12.20	1.68	1.88	2.23	2.71
EU-27 Total	**335.24**	**327.11**	**237.20**	**234.60****	**39.15**	**40.42**	**N/A**	**N/A**

* *Source: Company Balance Sheets.*
** *Source: EITO. Revenues for 2012 include only telecommunication services and not equipment.*
Source: All information on the EU were taken from Digital Agenda Scoreboard (DAS) 2011 and 2012. The information on the individual countries were taken from corresponding National Regulatory Authorites.

to 55.6% (use of data services) in the context of implementing the new European Regulation on International Roaming.
It should be noted that over the past few years, the market tends to be more concentrate due to the economic conditions, with a decrease of the telecommunication operators number to 7 from 10 in 2010.

1.5.2. The Postal Services Market

Globally

Globally, postal companies continue to face challenges, such as adverse economic conditions, intense competition and increasing digitalization. Nevertheless, the revenues from the global postal market in 2012 amounted to 422.6 billion increased by 6% as compared to 2011. Revenues vary widely with high increases in developing countries and a decline for both Europe and N. America.
In this context, as the operators seek new business opportunities in order to counterbalance the unfavourable economic conditions, changes in the postal services volumes handled have been noted. Specifically, the share of letter post is decreased by 3.1%, whilst the share of small parcels and express shipping was increased by 1,7%. These changes are mainly attributed to the increasing Internet penetration, which on the one hand has substituted the letter post and on the other hand has contributed to the increase in parcel post, because of e-commerce development.
As a result, operators seek to review their business globally, in terms of clientele, procedures, pricing and profitability and to proceed in making the relevant changes or corrective actions, in order to safeguard their shares. The following developments are characteristically mentioned:
• New Zealand Post announced strategic initiatives, in order to tackle the drop in letter post volume, including fewer days of post delivery namely 3 instead of 5 days per week and establishment of self-service kiosks.
• USPS, facing critical threats for its operation, is about to change its customer service, reduce the number of post offices, decrease the frequency of post delivery from 6 to 5 days per week, as well as adopt innovations and new ways of increasing revenues.
• CTT-Correios De Portugal SA and Royal Mail of England have proceeded with a complete or partial privatisation respectively.
• Asendia, the joint venture between La Poste France and Swiss Post, has strengthened its presence in cross-border e-commerce, with a strategic investment in services delivered in other continents and the dynamic marketing of three products that offer tracing and delivery options.

Europe

Over the recent years, there was a significant change in the main figures of the European pos-

tal market, as the total turnover decreased by 3 billion euro, over a period of four years (2007-2011). This drop is almost completely attributed to the drop in letter post. Therefore, the significance and proportion of the subcategories of postal market have changed in recent years, and consequently parcels and courier services make up 52% of the revenues of the European postal market while letters have fallen to 48%.

The rapid drop of revenues from letter post in Europe over this period (2007-2011) is related to developments in technology and the replacement of postal letters by emails (Chart 1.2).

Greece

The Greek economy's recession greatly influenced the postal market's financials. According to 2012 data, the strongly downward trends, which had started in 2009, continued. Specifically, the number of postal items fell by 12.5%, with a respective 10.7% drop in revenues as compared to the previous year. This drop is attributed on the one hand to the number of postal items handled and on the other hand on the end prices/rates due to strong competition. In 2012, the Universal Service Provider (USP) suffered the greatest decline in revenues, as well as in the number of postal items delivered.

The downward trend continued in 2013 according to ELSTAT, as shown in Chart 1.3 that illustrates the postal services and courier businesses turnover.

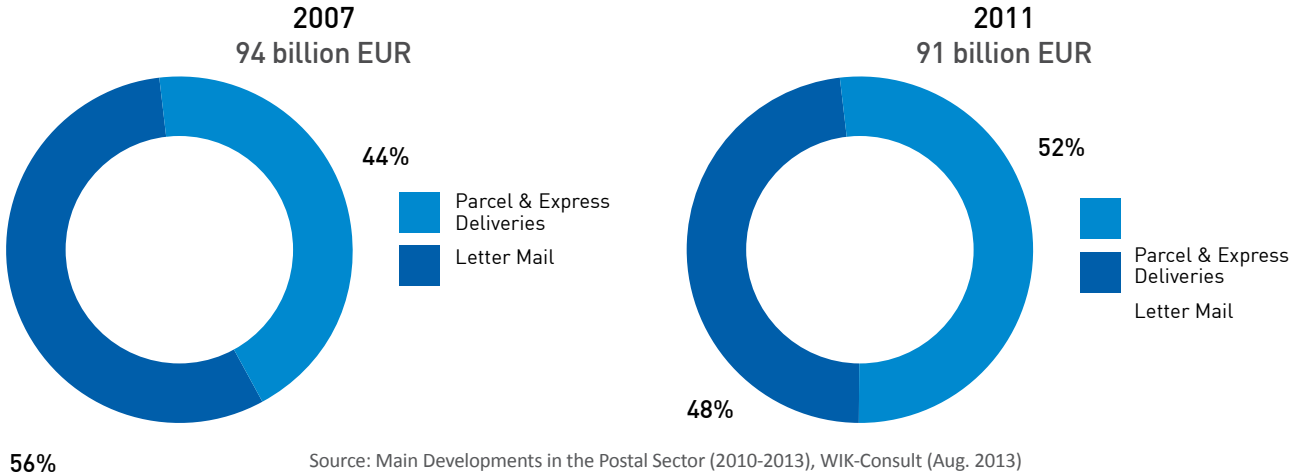
The number of courier companies fell greatly in 2013. Characteristically, 129 companies with General Authorisation have been removed from the postal service provider registry by decision of EETT, due to non compliance with the terms of their authorisation (Chart 1.4).

Full sector liberalisation in 01-01-2013 was an important development. Consequently, public bodies, such as ministries, public utilities, social security funds, etc can now launch open tenders to select a contractor for their postal services. In these tenders, private operators with a solid presence in related services (courier, direct mail) have started to participate in order to compete with the Universal Service Provider (ELTA) in the letter post market.

In 2013, companies with Individual License for delivering letter post services broadened their services to distribution of addressed bills and advertising pamphlets, whilst two more companies have expressed their interest in acquiring an Individual License, including one of the largest courier companies in Greece. These companies were registered with EETT's registry and already offer services.

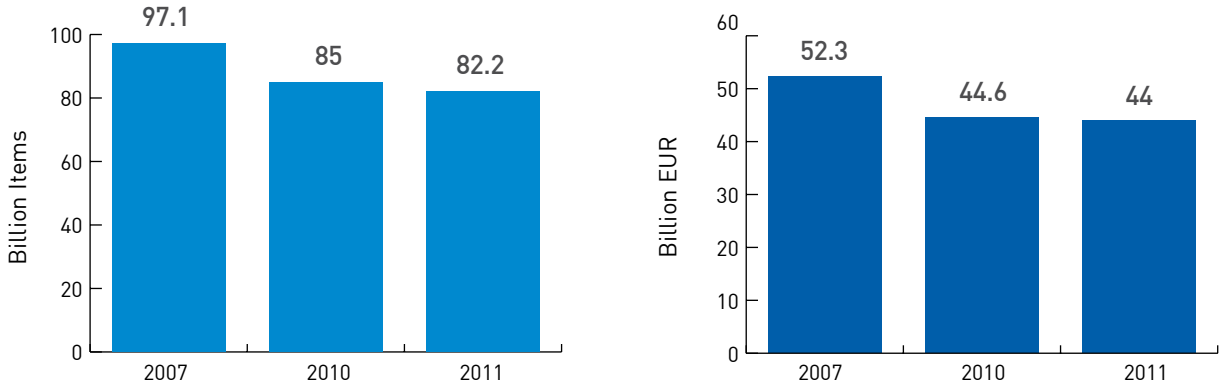
Finally, e-commerce is now an important growth driver for postal services, demonstrating in the first 9 months of 2013 a growth rate of 25% as compared to 2012 (data from the annual ELTRUN survey). With the increasing penetration of e-commerce, the role of postal service providers is reinforced. With a view to increase their market share, large companies have managed to significantly improve their procedures and to offer new services of added value to their consumers. In order to boost e-commerce, initiatives are taken both on a national and international level, through conferences, legislative provisions, business associations, collaborations and certifications.

Chart 1.1: Revenues in the Postal Market (2007-2011)



Source: Main Developments in the Postal Sector (2010-2013), WIK-Consult (Aug. 2013)

Chart 1.2: Evolution of Letter Post in Europe (2007-2011)



Source: Main Developments in the Postal Sector (2010-2013), WIK-Consult (Aug. 2013)

1.6. EETT's Actions in 2013

Given the adverse economic environment in Greece, EETT undertook in 2013 an extensive number of actions and initiatives, focusing on the safeguarding of sound competition in the market to the benefit of the consumer. The most important interventions can be summarised as follows:

As regards consumers, EETT proceeded to:

- Operate the Consumer Service Sector (CSS) more efficiently: In 2013, the CSS handled more than 12,000 written demands and complaints (an increase of 20.8% as compared to 10,000 in 2012), within 8 working days on average. It is worth noting that consumer satisfaction rates from telephone services (KP1) exceeded 99.95% (compared to 98.75% in 2012). At the same time, 240 on-site controls were carried out in stores/points of sale of providers on the application of the Ethics Code of the General Authorisation Regulation.
- Issue the General Authorisation Regulation: The Regulation imposed greater obligations on providers with respect to detailed and timely information to consumers before applying increases in charges and changes to the terms of the contracts of connections/bundles, according to recent European Directives.
- Issue the new Portability Regulation: EETT issued the new Regulation, aiming to improve the portability process and protect consumers. At the same time, through the tender process for selecting the National Reference Database for Portability (NRDP) operator, EETT managed to cut costs paid by providers by 50% and this is expected to also benefit consumers. It should be noted that in 2013, the volume of portability in fixed and mobile telephony increased by 18.6%.
- Upgrade and launch the System for Performance Evaluation of Broadband Connection Services "HYPERION": "HYPERION" enables consumers to measure the actual broadband speed of fixed connections by themselves. As of the end of 2013, it had more than 10,000 registered users.
- Launch the Electronic Communications Products Retail Price Monitoring System in September 2013 with more than 800 commercially available programs (by the end of 2013), which are on the consumers' disposal for comparative evaluation.

In the electronic communications sector, EETT proceeded to:

- Strengthen the roll-out of the Next Generation Networks: Following the review of the Reference Offer for the provision of the Virtual Partially Unbundled Loop (VPU), consumers have guaranteed quality of service, whilst alternative operators are able to market VDSL products on an equal footing and under competitive conditions with OTE.
- Reduce the mobile call termination rates: Rates dropped almost 250% to 1.269 eurocents from 4.95 eurocents in 2012, whilst a further reduction of rates to 1.189 eurocents (down 6.3%) shall apply as of January 1st, 2014. The reduction resulted in new bundled offers for calls terminated to all mobile networks at lower retail prices, thus providing more choices for consumers.
- Reduce the upper thresholds in wholesale and retail roaming service prices: Cuts in rates varied from 12.5% (SMSs) to 55.6% (data services usage) and were carried out in the context of implementing the new European Regulation on International Roaming.

Chart 1.3: Evolution of the Turnover Index

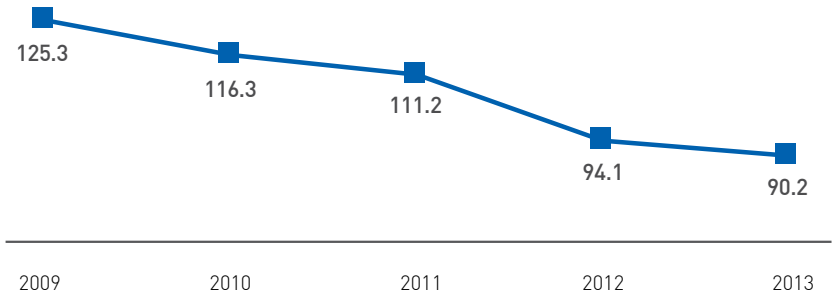
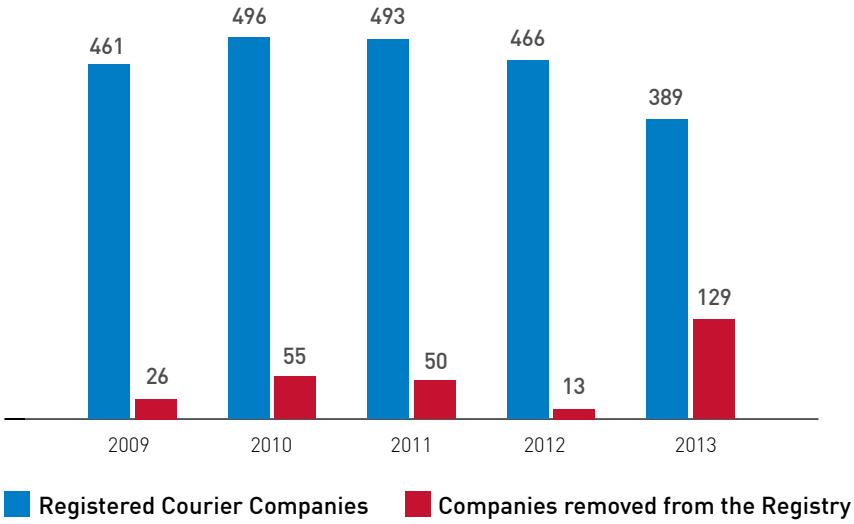


Chart 1.4: Courier Sector



Source: EETT

- Voice call and interconnection markets analysis: EETT decided to deregulate the fixed telephony market for calls within Greece for residential and business customers, lifting the regulatory obligations imposed on OTE. With respect to the wholesale interconnection markets, it should be noted that there are no longer high entry barriers and there is no need for ex ante regulation of this specific market.
- Complete the bottom up model for determining termination rates for calls to fixed networks: EETT took on board the input from the relevant public consultation and developed the model, finalized the methodology and principles and applied it.
- OTE compliance control: EETT completed its control over OTE's compliance, concerning price/cost accounting/accounting separation of regulated services both at a wholesale market level and at a retail market level.
- Issue a New Regulation for the Management and Assignment of Domain Names: The new Regulation significantly simplifies the relevant procedure. It should be noted that in 2013 the Domain Names ending in [.gr] were increased by 6.6%.
- Supervise and improve the Quality Indicator data sent by domestic providers with respect to the quality of fixed telephony network services, fixed broadband services (xDSL) and VoIP services, as well as consumer services.
- Controls and Hearings: EETT carried out controls in OTE local exchanges and infrastructures on matters related to local loops, VDSL infrastructure (street cabinets and next generation cabinets) in operators' facilities for investigating into the implementation of the new Number Portability Regulation, as well as Domain Name registrars. In addition, systematic controls were conducted for compliance with the Spectrum Management and Power Infusion at the Local Loop Regulation. Within 2013, EETT also held 80 hearings on electronic communication issues and imposed 15 fines.

In the Radiofrequencies Spectrum Sector, EETT proceeded to:

- License of Digital Terrestrial Broadcasting Networks: EETT launched the procedure for granting frequencies for digital terrestrial broadband television, paving the way for the switch off of analog television and freeing up a significant part of the radio spectrum (Digital Dividend). It should be noted that it is the first time that radiofrequency rights of use are granted for digital broadband in Greece through a tender process. The relevant tender was completed in the beginning of February 2014. The company under the name "Digital Broadcasting Telecommunications Services Provider SA" under the title "DIGEA–Digital Operator SA" was the highest bidder to which the rights for the national network and regional networks were awarded for the consideration of 18.6 million euro.
- License the electronic communications broadband networks in the 3.4–3.8GHz band: EETT launched the tender process for granting new radiofrequency rights in the 3.6-3.8GHz band, together with the renewal of the rights for the 3.4-3.6GHz band, out of which one right expires in 2015 and the remaining three in 2016. These two broadbands are primarily intended for the delivery of mobile and nomadic broadband services. The tender was completed in March 2014.
- Improve the Electronic System for the Antenna Construction Application Submission (SILYA): 2013 was the first operational year of SILYA, which is a valuable e-governance tool that improves the process and turns it into a one-stop shop. During 2013, through SILYA in total 754 decisions on licenses to construct antenna systems and certificates of compliance were issued.
- Develop a System for Measuring and Presenting Electronic Communications Indicators: In this regard, EETT launched a tender for its implementation with funding from the National Strategic Reference Framework (NSRF). Measurements will pertain to the connection's quality features – such as the scope of coverage or "actual" speed in geographical areas and locations nationwide – and will be published through a Geographic Information System (GIS) on EETT's website. The tender will be completed within 2014.
- Allocate the rights of use of radio frequencies for Fixed, Mobile and Satellite Service: EETT allocated or amended 1,171 fixed service radio frequency rights, 53 mobile service rights and 5 satellite service rights.
- Grant rights of use to television stations: EETT updated the registry of the legally operating television stations nationwide and granted 30 new rights of use. Besides, it checked 972 cases concerning interference, illegal broadcasting and illegal station and antenna mast constructions, imposing the appropriate penalties in each case.
- Radio and Telecommunications Terminal Equipment (RTTE): In 2013, EETT performed 161 inspections, with the purpose of protecting users and legal networks from harmful interference, exceeding the goal set (for 150 samples). In parallel, EETT actively participated in international initiatives such as the European wide campaign for WLAN 5GHz equipment inspections and the revision of European Directive 99/5/EC.
- Upgrade the Radiofrequency Spectrum Management System: EETT launched an international tender for upgrading the "Radio- frequency Spectrum Management System" with an integrated "Electronic Request Submission System Platform". The tender will be relaunched in 2014.
- Conduct Hearings on Radiofrequency Spectrum Matters: EETT held 476 hearings, as a result whereof, 366 fines were imposed, 99 recommendations were made, whilst 11 cases were dismissed.

In the Postal Services Sector, EETT proceeded to:

- Review the General Authorisation Regulation: Following L.4053/2012, EETT made important changes, such as a comprehensive and clear description of courier services, simplified the process for registering with the postal provider service registry, abolished the time restrictions/expirations of the General Authorisations, provided compensation to the consumer due to delayed deliveries of items by couriers, etc.
- Review the Individual License Regulation: This review includes a set of individual amendments concerning specifications for delivering postal services.
- Issue the Postal Service Code of Practice: The Code, which supplements the regulatory and legislative framework, records the procedures that each postal services provider (under a General Authorisation or Individual License) must follow, aiming at providing quality service to the consumer.

- Issue the Dispute Settlement Regulation: The Regulation pertains to investigating user complaints, as well as dispute settlement arising between the public sector and the postal service providers, between postal service providers, as well as between postal service providers and users.
- Develop an Application for Electronic Governance Services: EETT developed an application which enables current or potential service providers to submit electronic applications or requests via EETT's website. The application also enable users to amend General Authorisation details, issue certificates of registration on EETT's registry, obtain information on their postal network and removal from the registry, as well as any other request or service that the Regulator decides to incorporate in the future.
- Upgrade the GIS tool for Postal Services: EETT upgraded it for improving its functionality, whilst it also made it available for smart phones with iOS and Android OS. There were 1,072 visits whilst 102 users downloaded the app for iOS and 80 for Android.
- Perform Universal Service (US) Quality Measurements: Delivery percentages for Domestic First Priority Mail was 90.5% within one working day and 99.7% of the cases within three working days.
- Conduct Onsite Audits and Hearings: EETT conducted 53 on site audits to postal service providers, whilst 202 hearings were held. As a result of the hearings, one fine was imposed, 58 recommendations were made, 130 companies were deleted from the registry, whilst 13 cases were dismissed.

On international level, EETT:

- Developed a large number of activities on a European and international level, participating in the proceedings of international organisations and associations, aiming at harmonising national priorities to international context and also to acquire specialised knowledge on handling the ever more complex regulatory issues.
- Successfully performed its duties in the Chairmanship of the Body of European Regulators for Electronic Communications (BEREC), as well as the Chairmanship of the Independent Regulators Group (IRG), positions held for 2013.

1.7. Action Plan for 2014

In an environment of intense challenges and important developments, EETT has designed its Action Plan for 2014 which has six main axes:

a) Maintain what works well, by setting priorities such as the conduct of market analysis in accordance with the new European framework; the drafting of regulations for the Universal Service; the decision for the net cost of the Universal Service (US) for the year 2010; the completion of OTE's cost accounting audit which sets product prices for the year 2014; the reduction of termination rates in the wholesale market for calls to fixed networks; the increase of market controls regarding radio equipment and telecommunications terminal equipment; as well as the implementation of the new regulatory framework for postal services.

b) Safeguard Authority's Independence with actions, such as enlarging and strenghtening its jurisdiction; the release of the mini module for the control and approval of OTE's bundled services; the increased inspection of operator's compliance to the regulatory framework in both supervised markets; the issuance of a Regulation for the access to the public postal network; the definition of prerequisities for the distribution of postal items; and the release of the measurement quality results of the Universal Postal Service in 2013.

c) Improve internal efficiency by reviewing and strengthening EETT's services and promoting automated processes; the implementation of the Product Price Monitoring System for telecommunications and postal retail products by 2015, the expansion and improvement of authorisation procedures for wireless networks, the measurements for quality indicators for mobile broadband services, the expansion of the System for Performance Evaluation of Broadband Connection Services "HYPERION", the improvement of the consumer complaint management, the modernization of spectrum surveillance equipment mainly in EETT's regional offices, the expansion of the web application for the postal services registry and the development of the English version of the Geographic Information System (GIS).

d) Maximise the public benefits of scarce resources by overseeing implementation of the digital terrestrial broadcasting network; the integration of the two tender processes for the 3.4-3.8GHz and 800MHz (Digital Dividend) and 2.6MHz bands and the conduct of a study to redesign the information system and management processes of the country's postal codes.

e) Identify and participate in e-business initiatives by conducting consumer surveys on SMP, Universal Service and roaming, as well as annual analyses and other studies on new trends in the postal market and EETT's interventions in broader projects G2G, G2C, B2B, B2C.

f) Contribute to European debate on regulatory issues by participating in international and European committees, organisations, institutions and groups to improve EETT's know-how and adopt best practices.

Annual Financial Report

Administration Executive Summary

Internal Organisation Management of National Resources Focusing on Consumers Electronic Communications Sector Analysis Radiofrequency Spectrum Sector Analysis Postal Services Sector Analysis Strong International Presence Action Plan for 2014 Appendix

2. Annual Financial Report

EETT's economic independence guarantees the efficient performance of its competences. At the same time, the Authority is a main contributor to the State revenues, as it attributes its surplus to the state budget.

2.1. Revenues

EETT's administrative and financial independence is guaranteed by the collection of fees payable by the liable companies and bodies. EETT's revenues constitute state revenues and originate from collecting administrative fees, usage fees, and fines. According to the legislation in force, the above fees cover EETT's total administrative expenses.

Specifically, pursuant to the relevant Laws[4] and the respective Regulations, EETT collects fees for:

- General and Individual Licenses for electronic communications and postal services network providers.
- Assignment and use of numbers.
- Allocation and use of radiofrequency rights.
- Private mobile radio networks.
- Domain Names.
- Antenna construction licenses.

It is also noted that, EETT, in the context of its monitoring responsibilities, imposes fines to providers of electronic communications and postal services that breach their legal obligations, which are either paid directly to EETT or collected in accordance with the stipulations of the Code for the Collection of Public Revenues[5]. Particularly, the total amount of fines collected by EETT since 2006 to date, amounts to 99,881,659.45 euro (Table 2.1).

Besides the aforementioned fees and fines, EETT's total operational revenues include also the financial income accrued by the effective management of its reserves and the collection of late payments interest, as presented in more detail in Table 2.2.

Table 2.1: Fines Collected by EETT (in million EUR)

Year	Collected Amount
2006	7.4
2007	4.9
2008	21.5
2009	3.9
2010	29.2
2011	5.4
2012	19.0
2013	8.6
Total	**99.9**

Source: EETT

Note: The considerable variations in the above collected amounts are due to the large time lag between the time of submission, the court proceedings and the collection of the fine, as well as to large fines imposed in exceptional cases.

4. L.4070/2012 (GG 82/A/10-04-2012), L.2668/1998 (GG 282/A/18-12-1998).

5. Decision 1104800/5972/0016 of the Minister of Finance, GG Issue 2198/B/22-12-1999.

Table 2.2: Financial Income (in million EUR)		
Year	Collected Amount	Late Payment Interest
2006	3.6	0.144
2007	5.6	0.063
2008	8.7	0.060
2009	5.6	0.065
2010	8.5	0.572
2011	13.7	0.183
2012	13.1	0.580
2013	10.1	0.081
Total	**68.9**	**1.748**

Source: EETT

2.2. Expenditure

In 2013, EETT's operating cost amounted to 13,828,278.26 euro, decreased by 4% as compared to 2012. It should be noted that EETT's total operating cost has been reduced by 25% in the seven year period of 2007-2013 (Table 2.3) despite the fact that the Regulatory Authority is continuously undertaking new competences.

Expenses are annually budgeted by EETT's Directorates and Departments and approved by the Plenary. All expenses are audited in accordance with the provisions of EETT's Financial Management Regulation[6] and the Expenditure Management Directive[7].

Budget goals and execution are monitored periodically by the respective Directorates and Departments, whilst EETT's financial management is audited annually by the Body of Chartered Auditors (the 2013 audit has already been completed) and the ex-post control of the Court of Auditors (the audit for 2012 is underway and is expected to be completed by June 2014).

Up to 80% of EETT's annual financial surplus, which is accrued by subtracting total expenses from the above revenues, is being conveyed[8] every two years to the National Budget, as state revenue. For the two-year period 2012-2013, the amount of 86,393,859.54 euro is expected to be attributed in May 2014 to the state budget and therefore EETT's total contribution to the state budget to this date, will be 434,884,578.15 euro (Table 2.4).

It should be noted that in accordance with L. 4070/2012, EETT pays the balance of its surplus to the reserve account for expenses of the Secretariat General of Communications of the Ministry of Infrastructure, Transport and Networks by virtue of the Minister's decision (indicatively listed are expenses such as surveys, conferences, trips, subscriptions, etc.).

Moreover, EETT grants, under certain conditions, radiofrequency spectrum rights, through auctions conducted exclusively with its own resources and staff. Auction yields collected by EETT are immediately conveyed to the National Budget, after subtracting the administrative costs of the tender process.

To date the total amount from tenders that has been conveyed by EETT to the National Budget is 1,017,903,998.45 euro (Table 2.5), while an additional amount of 63,609,900 euro has been secured and will be collected and attributed in three equal annual instalments of 21,203,300 euro in 2015, 2016 and 2017 respectively.

6. GG 1391/08/22-10-2001.
7. GG 1701/08/18-12-2001.
8. As set forth in par.6 of art.75 of L.4070/2012.

Table 2.3: EETT's Total Operating Cost (in million EUR)	
Year	Total Cost
2007	18.4
2008	20.3
2009	19.4
2010	17.7
2011	15.8
2012	14.4
2013	13.8

Table 2.4: Financial Result and EETT's Contributions to the State Budget (in million EUR)			
Year	Net Results	Contributions of Reserves to the State Budget	
		Amount Contributed	Year of Contribution
2000	67.8		
2001	17.8		
2002	27.4		
2003	25.0	110.5	January 2006
2004	23.0		
2005	26.0	39.2	July 2006
2006	33.4		
2007	30.3		
2008	54.2	51.0	May 2008
2009	34.8		
2010	50.5	71.2	May 2010
2011	45.2		
2012	71.8	76.6	May 2012
2013	36.2		
2014		86.4	May 2014
Total		**434.9**	

Table 2.5: EETT's Contribution to the State Budget (auction proceeds) (in million EUR)		
Auction Proceeds (Frequencies Allocation)	Year	Amount
3rd UMTS / 2nd DCS/GSM	August 2001	644.1
TETRA	July 2002	2.8
E-GSM	July 2002	37.9
Fixed Wireless Access at 3.5GHz	July 2006	16.2
GSM 900 & DCS 1800	November 2011	316.9
Total		**1,017.9**

Source: EETT

Administration Executive Summary Annual Financial Report

Internal Organisation

Management of National Resources Focusing on Consumers Electronic Communications Sector Analysis Radiofrequency Spectrum Sector Analysis Postal Services Sector Analysis Strong International Presence Action Plan for 2014 Appendix

3. Internal Organisation

3.1. Human Resources

Even though the number of competencies assigned to EETT continues to increase, the number of staff remained stable over the past six years. At the end of 2013, EETT employed 214 people, as compared to 217 in 2012. Of these, 211 were employed on a permanent basis, while three were seconded police officers, engaged in spectrum monitoring.

The evolution of EETT human resources and the number of employees per staff category is demonstrated in Table 3.1.

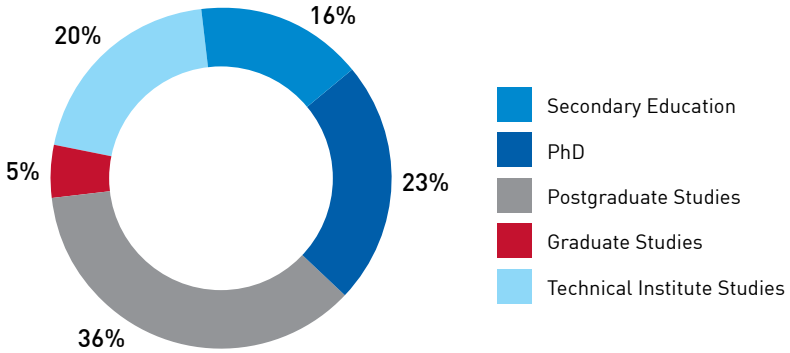
Since its establishment, EETT has made systematic efforts to be fully staffed by publicising employment openings, both for scientific experts and for regular employees, following the respective procedures. As shown in Table 3.1, for several years EETT has made extensive use of external associates in order to cover its needs, as the procedures for filling permanent staff positions are time consuming. The number of external associates reached a peak in 2008 and 2009, while in 2010 there was a significant increase in EETT staff, both scientific and regular, particularly through the transfer of administrative personnel from the former Olympic Airlines; respectively, the number of external collaborators was dramatically decreased and, in 2012, when the new staff had been fully incorporated into EETT resources, that number fell to zero. EETT capitalised on this option by transferring personnel from the former Olympic Airlines in order to cover its needs in administrative personnel, a move which turned out to be successful.

Table 3.1: Employee Distribution per Staff Category (2005–2013)

Κατηγορία Προσωπικού	2005	2006	2007	2008	2009	2010	2011	2012	2013
Scientific Experts	70	69	85	83	99	106	108	105	105
In-house Lawyers	0	0	0	0	0	0	0	7	7
Regular Staff (Contracts governed by public and private Law)	60	63	65	66	63	98	98	100	99
Seconded Staff	3	3	3	3	3	3	3	2	3
Temporary Staff Traineeship	0	0	0	0	0	0	0	3	0
External Associates (Members of Working Groups)	38	15	20	65	63	17	10	0	0
Total	**171**	**150**	**173**	**217**	**228**	**224**	**219**	**217**	**214**

Source: EETT

Chart 3.1: Educational Level of EETT Staff



Source: EETT

3.2. Level of Education

As shown in Chart 3.1, EETT human resources are characterised by an exceptionally high level of expertise. It is worth mentioning that 84% of personnel are university graduates, while 70% hold a post-graduate degree. This is the main reason why EETT has such a remarkable track of achievements in its role as Regulator of the electronic communications and postal services. EETT requires a mix of disciplines in almost every issue within its jurisdiction. Table 3.2 records the composition of the Authority per field of expertise and per organisational unit. It is worth noting that EETT, also due to its ever expanding range of competencies, has underscored the fact that it is understaffed, especially in certain fields of expertise.

3.3. Organisation

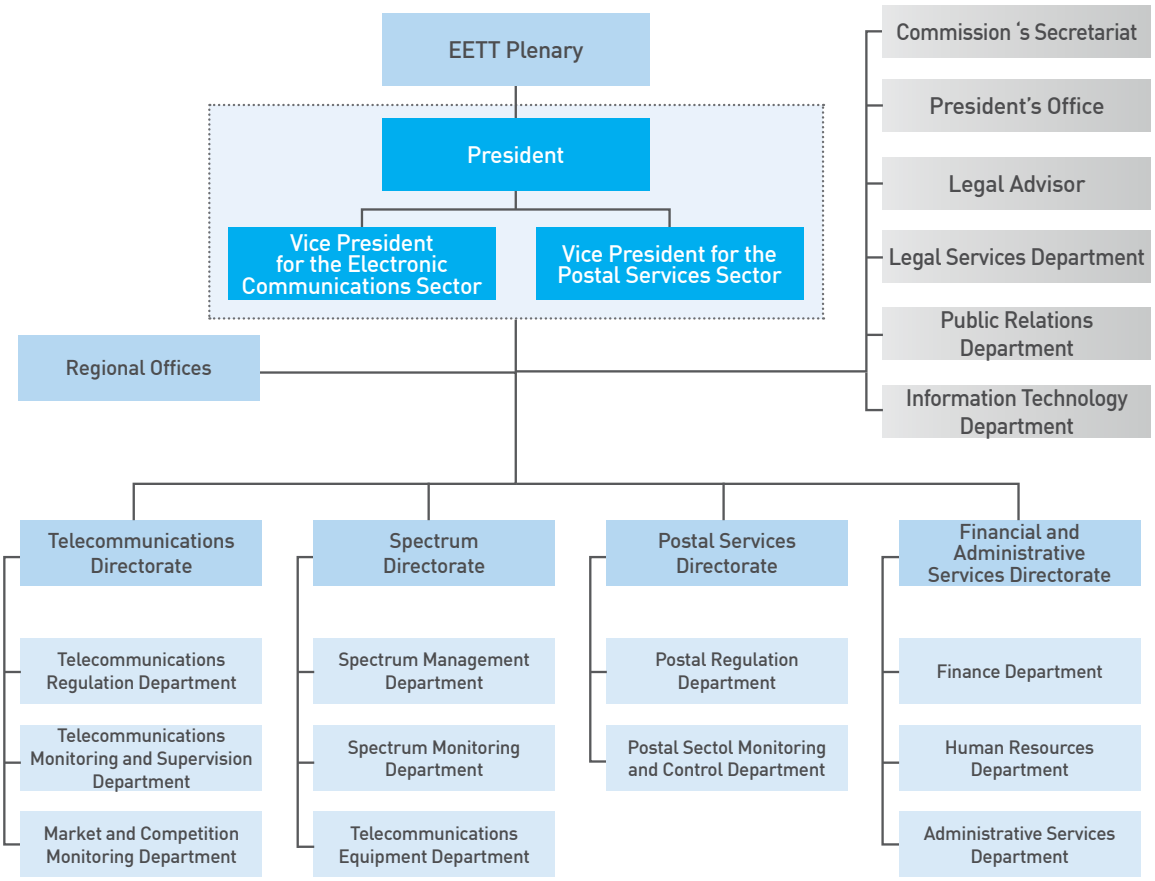
EETT has a formal organisational chart set out, with clear-cut definition of duties for every organisational unit. Each department has recorded its procedures in flow charts.
The organizational structure of EETT is presented in detail in Chart 3.2.

Table 3.2: Review of Fields of Expertise & Number of Employees per Department

	Expertise / Organisational Unit	Plenary office	Telecommunications	Spectrum	Postal Services	Administrative & Financial Services	Legal	Public Relations	Information Technology	Total per field of expertise
1	Directors	0	1	1	1	1	0	0	0	**4**
2	Department Heads	0	3	3	0	1	1	1	1	**10**
3	Engineers	0	14	55	0	0	0	0	0	**69**
4	Physicists	1	4	4	1	0	0	0	0	**10**
5	Economists	0	8	0	2	0	0	0	0	**10**
6	Cost Analysts	0	4	0	3	0	0	0	0	**7**
7	Business Administration	1	2	0	2	0	0	0	0	**5**
8	Information Technology	0	2	1	0	0	0	0	6	**9**
9	Accountants (Technical Education - Administration Accounting)	0	0	0	0	6	0	0	0	**6**
10	International & Public Relations	0	0	1	0	0	0	5	0	**6**
11	Legal	1	0	0	0	0	16	0	0	**17**
12	Administrative (University Education)	2	0	2	1	2	0	0	0	**7**
13	Administrative (Technical Education)	1	2	2	0	6	0	1	0	**12**
14	Administrative (Secondary Education)	0	5	0	0	12	0	0	0	**17**
15	Secretarial (Administrative staff of University Education, Technical Education, Secondary Education)	2	1	2	1	0	2	0	0	**8**
16	Drivers, Police Officers etc.	0	0	14	0	0	0	0	0	**14**
17	Statistics	0	1	0	2	0	0	0	0	**3**
	Total per Organisational Unit	**8**	**47**	**85**	**13**	**28**	**19**	**7**	**7**	**214**

Source: EETT

Chart 3.2: EETT's Organizational Chart



Brief CVs of EETT Directors (in alphabetical order) are presented herein:

Christos Apostolou

Director, Postal Services

Mr C. Apostolou is a graduate electrical engineer of the University of Patras and has a post-graduate degree (DESS) in optical and microwave communications. He has held positions of responsibility in multinational mobile and fixed telephony companies, in the international organisation Eurocontrol in Brussels and in telecommunications and research projects in Eastern European countries. He works at EETT since 2002, where he holds the position of head of the Postal Services Directorate since 2007. He speaks English and French.

Panagiotis Karaminas

Director, Telecommunications

Dr P. Karaminas studied physics at the University of Thessaloniki, completed his post-graduate diploma in electronics and telecommunications at the University of Athens and received his PhD from Imperial College in the United Kingdom (UK) on the topic of array signal processing with applications in mobile communications systems. He worked in the Department of Research and Technology at Nortel Networks (2000-2003) and as Unit Manager at Ofcom, the national regulatory authority for the UK communication industries. In 2005 he was hired by EETT and in 2007 he was appointed head of the Telecommunications Directorate. He is a member of the UK Royal Engineering Council and a Chartered Engineer since 2003.

Anastasios Lyratzis

Director, Spectrum

Dr A. Lyratzis is an electrical engineer with a PhD in Telecommunications (National Technological University of Athens, 1994) and a member of the Technical Chamber of Greece. He has worked for information technology companies (1991-1996) and OTE (1996-2001) as a telecommunications engineer, as well as for European research projects concerning network administration and fraud detection. In 2001 he was hired by EETT and served as head of the Spectrum Management Department. In mid-2011 he was appointed head of the Spectrum Directorate. He speaks English and French.

Georgios Orfanos

Director, Financial and Administrative Services

Mr G. Orfanos is a graduate of the Department of Public Administration at the Panteion University of Social and Political Sciences (1985) with postgraduate studies at the Institute of Regional Development (1987). He is licensed to practice as an economist by the Economics Chamber of Greece and is a holder of a Class A Accountant license. He has worked as an accountant and as head of cash equivalent management for private corporations, and since 2001 he has been employed by the Directorate of Financial and Administrative Services at EETT, where he was appointed head in December 2008.

3.4. Electronic Governance & Transparency

Electronic governance is a top priority for EETT to ensure further transparency, more effective management and operation, as well as to improve the services provided to citizens and the supervised markets, by making use of Information and Communication Technologies (ICT) and promoting new administrative practices. To this end, in 2013, EETT focused on developing or expanding the following electronic governance applications:

"CLARITY" Programme Application (DIAVGEIA): EETT posts all acts specified by the relevant Law[9] on a special-purpose website, at http://sites.diavgeia.gov.gr/EETT. In 2013 the Authority proceeded to fully automate the process of handling and publishing these acts. Throughout the year, 1,543 acts were posted, concerning budget, expenditures, procurements/services assignment, establishment of collective bodies, setting remuneration/pay, other regulatory actions, other individual administrative acts, project contracts, etc.

Electronic System for the Antenna Construction Applications Submission (SILYA): This is a one-stop shop web-based application for submitting and managing applications for the construction of antennas and the relevant approvals and licenses. Section 7.2.1 discusses in detail how this application was expanded in 2013.

Procurement of an Information System to manage Radiofrequency Spectrum with an Incorporated Platform for the Electronic Submission of Requests: In 2013, EETT launched an international tender to procure a new Radiofrequency Spectrum Management System, which is currently under construction and is expected to be completed in 2014. Please see Section 7.1.1.

Upgrading of the web based application to manage the General Authorisation applications for postal services: In 2013 the application was upgraded in order for applications to be submitted solely electronically by postal services providers along with all the accompanying documents. Please see Section 8.2.2.

Enhancement of the EETT Website (www.eett.gr): EETT continued to enrich its website with content and electronic services and created a special microsite for the 8th International Conference. Accor-

9. L.3861/2010 "Strengthening transparency by the obligatory posting of laws and acts of the governmental, administrative and self-administrative bodies on the Internet on "Clarity Program" (Diavgeia) and other provisions", GG Issue GG Issue112/A/13-07-2010.

ding to the website statistics, the average monthly traffic was increased by 11% as compared to 2012. The section that received the most visitors was the one concerning consumers, which presents issues related to electronic communications, a search engine and a section on Domain Names [.gr] Registrars. There were also plenty of visits to pages with request and complaint submission forms. Next came the frequently asked questions on number portability and construction of antennas, EETT press releases and online applications. Most visits to the English language edition of the website were for press releases and the dispute settlement procedures for postal enterprises.

Developing EETT's Intranet: The new EETT Intranet was launched in October 2013. Using a web-based application and intranet technologies, the Intranet constitutes EETT's basic information, communication and knowledge diffusion platform, offering a number of advantages such as:

- the creation of a central point of access to information and adoption of structured ways to inform and communicate;

- diffusion of knowledge generated internally at EETT or originating from external sources;

- up-to-date information on issues of interest to EETT (e.g., legislation, memoranda, procedures, document exemplars, studies);

- electronic applications, which make everyday work easier (e.g., electronic submission of internal requests).

Figure 3.1: The EETT Intranet Home Page (available only in Greek)

Source: EETT

Administration Executive Summary Annual Financial Report Internal Organisation

Management of National Resources

Focusing on Consumers Electronic Communications Sector Analysis Radiofrequency Spectrum Sector Analysis Postal Services Sector Analysis Strong International Presence Action Plan for 2014 Appendix

4. Management of National Resources

Within 2013, EETT prepared two major tenders on licensing terrestrial digital television networks and licensing electronic communications broadband networks in the 3.4–3.8GHz band. A detailed description of the two tenders is given below.

4.1. Licensing of Terrestrial Digital Television Networks

On June 15th, 2015, in compliance with the International Telecommunications Union's (ITU) decisions reached in 2006, analog television will cease to exist on a global level.
This evolution was a one way decision for the old analog TV, which is based on technology originally developed in the '60s and therefore was no longer competitive, given the high quality content available on the Internet today.

Benefits from Licensing the Terrestrial Digital Television Networks

Adopting terrestrial digital technology has many benefits:

- Several programs can be broadcasted from the same television channel, thus releasing radiofrequency spectrum, which is a scarse national resource and may consequently generate revenues by utilising it for other services such as mobile broadband services (Digital Dividend). Moreover, digital transmission enables cost sharing of terrestrial transmission among television stations, as a greater number of programs can be transmitted through the same digital broadcasting network.
- Better quality image and sound for viewers. Digital technology offers consistent image of high quality, eradicating problems such as a blurred image, ghosting and noisy pictures as the signal received is less vulnerable to interference.
- Additional services can be introduced, such as: (a) electronic TV programme guide, (b) choice of foreign language subtitles and dubbing, (c) services for persons with disabilities, (d) interactive television services.
- This results in (a) more employment opportunities, and particularly of higher expertise, (b) increased productivity, as a result of the reduced production cost, (c) ability to better serve the needs of operators and consumers and (d) strengthening innovation. Additionally, licensing terrestrial digital television means significant financial gains, due to the development of the television market in today's terms.

The Plan for Greece

The ITU Regional Radiocommunication Conference (RRC-06), which led to the Geneva 2006 Agreement (GE-06) allocated specific radiofrequencies to each country on the basis of a plan submitted by that country. The purpose of this procedure was for each country to schedule its transition as fast as possible and to accelerate the necessary, but time consuming process of international coordination, so as to avoid interferences in neighbouring countries.
GE-06 provided for a set of 8-10 frequencies in the 34 allotments of the Greek plan. The competent Ministries then created the national frequency map for digital television by virtue of Joint Ministerial Decision (JMD) no. 42800/05-10-2012,[10] setting out precisely the broadcasting centres and their technical parameters (transmission power, direction of antennas, etc.).
L.4070/2012 made a clear distinction between the role of digital television network operator and that of content provider. According to the relevant provisions, EETT was responsible for granting rights to use radiofrequencies to the network operator(s), who essentially provided the transmission platform used by television stations for the signal to reach the end consumer. The competent authority for granting licenses to the television stations is the National Council for Radio and Television (NCRTV).
The project of switching to terrestrial digital television is considered to be particularly demanding. It should be noted that the NCRTV had not carried out the licensing process for the television stations in Greece. EETT could not afford any delays, as the country was under the obligation to assign the "Digital Dividend" for use by November 2014 and the switchover to terrestrial digital television was a necessary precondition.
Based on the financial feasibility study for the regional networks, 13 regional networks came up, for which a maximum number of providers was set. In total, the plan for the rights to be granted by the Greek State pertained to four multiplexers for one national network operator in order to broadcast content nationally and up to 13 network

10. JMD 42800/05-10-2012 "Map of terrestrial digital television broadcasting signal frequencies", GG 2704/B/05-10-2012.

operators in order to broadcast content regionally. It should be noted that two other multiplexers had already been granted by ministerial decision to Greece's Public Television channel for the creation of an independent national public digital television network.

A significant advantage for the creation of a single national digital television network operator, as in the case of other European countries, is the sustainability of the network, which is an important factor for the development of the digital TV market in our country. In addition, the network operator becomes regulated, thus, according to the tender document, EETT should, inter alia, impose to the network operator the equal treatment of the content providers and the adoption of a cost oriented pricing policy. This means that EETT on the basis of the network operators' cost information determines the maximum rate paid by the content provider that uses the network.

The Tender Process

In 2013, EETT launched the process for granting the radio-frequencies rights of use for terrestrial digital television broadcasting networks, signalling the definitive transition to terrestrial digital television and implementing one of Greece's obligations set forth in the Memorandum of Understanding (MoU)[11]. In total, the available radiofrequencies spectrum in the broadcasting regions included as already stated, one right to use radiofrequencies with nationwide coverage with a starting price of 16.39 million euro and 13 rights to use radiofrequencies with regional coverage for the corresponding regional zones (see Figure 4.1) with starting prices of 1.946 million euro total value.

The radiofrequency rights of use are granted for 15 years, whilst Ministerial Decisions designated that there would be four radiofrequencies for the national coverage network and one to three frequencies for the regional networks. The networks to be implemented consist of 156 broadcasting centres throughout Greece (based on the Frequencies Map of JMD 42800/2012) in order to achieve a radio coverage of approximately 96% nationwide, without however excluding the use of gap fillers, in areas with particular geomorphology.

In May 2013, EETT proceeded in public consultation to determinate the number of rights of use of radiofrequencies for digital terrestrial broadcast, the conditions and the obligations proposed to be imposed on network providers as well as the licensing process[12]. Following the end of the consultation, EETT submitted its proposals to the Minister of Infrastructure, Transport and

Figure 4.1: Depiction of the Regional Zones in Greece

Serial No	Regional Zone
RZ-1	Eastern Macedonia & Thrace (Evros, Kavala)
RZ-2	Central Macedonia (Thessaloniki)
RZ-3	Central Macedonia (Chalkidiki)
RZ-4	Western Macedonia (Florina, Kozani)
RZ-5	Ionian Islands, Epirus, Western Greece
RZ-6	Western Greece, Peloponnese
RZ-7	Thessaly
RZ-8	Central Greece
RZ-9	Attica
RZ-10	Crete
RZ-11	Northern & Eastern Aegean (Dodecanese, Samos, Kastellorizo)
RZ-12	Southern Aegean (Cyclades)
RZ-13	Northern Aegean (Lesvos)

11. L.4070/2012 "Regulations of Electronic Communications, Transport, Public Works and other provisions", GG 82/A/10-04-2012, Article 21, par. 16.

12. EETT Decision 691/01/24-05-2013.

Networks[13] and the relevant ministerial decisions[14, 15] regarding the terms of the tender procedure were issued.
On December 27th 2013, EETT published the Notice of the Call for Tenders[16]. The publication included views and comments expressed in the public consultation and it was in complete agreement with the European and national legislative and regulatory frameworks. Moreover, this process came to the attention of the European Commission which did not express an opposite view.
EETT conducted an open and transparent tender process according to the following key priorities:
• the competitive development of the Greek electronic communications market, in accordance with the principles of transparency, non-discrimination and proportionality,
• maximizing the social benefit in terms of adequacy and quality of service options and
• finding the best possible solution for efficient use of radio spectrum, which consist a scarce national resource.

Note: EETT's tender process for developing a digital television network was completed on February 7th 2014. The company under the name "Digital Broadcasting Telecommunications Services Provider Société Anonyme" and under the title "DIGEA - Digital Provider SA" submitted the only bid and upon reviewing the preselection criteria was awarded the rights for the national network, and also, in accordance with the terms of the tender, for the regional networks for the total consideration of 18.6 million euro. According to the Ministerial Decision, network roll-out includes the development of 156 broadcasting centres at specific sites and moreover supplementary coverage stations, if required, within 2014.

4.2. Licensing in the 3.4–3.8GHz Band

Harmonising the use of the radio frequencies band in the 3.4-3.8GHz band is one of the main objectives of the Digital Agenda 2020. The 400MHz of continuous spectrum comprise an important advantage, as the band is considered important for future growth and the delivery of broadband wireless communication services in Europe, whilst its utilisation has been included in the EU Radio Spectrum Policy Program (RSPP). The 3.4-3.8GHz band due to different current use and commercial demand, is separated into two subzones:
• 3.4-3.6GHz, in which three electronic communications providers operate providing Fixed Wireless Access (FWA) services.
• 3.6-3.8GHz where two portions of the spectrum with a total width of 60MHz have been dedicated to the exclusive provision of electronic communications services through Metropolitan Area Networks (MAN).

The Tender Process

In 2013, EETT, taking into account the instructions of Decision 243/2012/EU[17], held two public consultations with respect to radiofrequency spectrum allocation in the 3.4–3.8GHz band. The first consultation, which took place in February 2013, aimed at investigating market needs with respect to electronic communications services and networks and gathering the views of stakeholders on the EETT's proposed procedure for granting rights. EETT's proposals on important issues such as: (a) the duration of the rights, (b) bandwidth and number of rights, (c) technical means for avoiding interference and (d) attaching a value to the spectrum, were based on the principles for the optimal use of the spectrum and the need to create suitable conditions for the development of advanced broadband wireless access networks in the 3.4–3.8GHz band. In addition, to estimate the starting price, EETT used the current European practice of creating business investment scenarios, proportionally assessing the cost of replacing existing links, as well as the results of market consultations. It should be noted that a 2x5MHz portion of the spectrum was used for calculating the cost.
Seven bodies and companies participated in the consultation, namely COSMOTE, CRAIG, ESOA-EUROPEAN SATELLITE OPERATORS ASSOCIATION, NOKIA SIEMENS NETWORKS, OTE, VODAFONE, WIND. The market demonstrated its interest both in maintaining and increasing the spectrum in the 3.4-3.6GHz sub-band, as well as acquiring new rights in the 3.6–3.8GHz sub-band.
Afterwards, EETT by utilizing the results of the above consultation, held a new public consultation (May 16th–June 3rd 2013) on the new draft tender document that set out the tender process, the portions of the spectrum for renewing or granting rights, the duration and scope of such rights, the proposed starting price and the technical and operational terms of the rights.

13. EETT Decision 700/1/29-08-2013.
14. Decision of the Minister for Infrastructure, Transport and Networks no. 45858/1790/12-09-2013 "Restriction of the number of rights to be provided for the use of terrestrial digital broadband radiofrequencies of national and regional coverage and definition of the type of tender process according to article 23 of par. 3 of L.4070/2012" GG 2359/B/20-09-2013.
15. Decision of the Minister for Infrastructure, Transport and Networks no. 68148/2461/20-12-2013 "Amendment no. 45858/1799/GG150 of the Decision of the Deputy Minister for Infrastructure, Transport and Networks on the "Restriction of the number of rights to be provided for the use of terrestrial digital broadband radiofrequencies of national and regional coverage and definition of the type of tender process according to article 23 of par. 3 of L.4070/2012" GG 3275/B/23-12-2013.
16. EETT Decision no. 701/01/23-12-2013, "Approval of tender document for granting the radiofrequencies usage rights for terrestrial digital broadcasting".
17. Decision no 243/2012/EU of the European Parliament and of the Council of March 14th 2012 establishing a multiannual radio spectrum policy.

The segments of the spectrum for which rights can be renewed are in the 3.4-3.6GHz band, in which one right expires at the end of 2015 and other three in 2016, and include:

- One 2x30MHz spectrum segment in the band 3.410–3.440GHz and 3.510–3.540GHz.
- One 2x30MHz spectrum segment in the band 3.440–3.470GHz and 3.540–3.570GHz.
- One 2x20MHz spectrum segment in the band 3.470-3.490 and 3.570-3.590GHz.

The portions of the spectrum for which new rights in the area of 3.6-3.8GHz will be granted include:

- Two 50MHz spectrum segments in the band 3.600–3.670GHz and 3.700–3.770GHz.
- One 40MHz spectrum segment in the band 3.600–3.670GHz and 3.700–3.770GHz, comprising two non contiguous portions of 20MHz.

Note: The tender process that EETT carried out on its own resources, was launched in February 2014 and was completed on March 17th 2014, with the award of one right for the use of radiofrequencies in the spectrum bands of 3.440-3.470GHz and 3.540-3.570GHz to OTE for a consideration of 2.542 million euro.

Administration Executive Summary Annual Financial Report Internal Organisation Management of National Resources

Focusing on Consumers

Electronic Communications Sector Analysis Radiofrequency Spectrum Sector Analysis Postal Services Sector Analysis Strong International Presence Action Plan for 2014 Appendix

5. Focusing on Consumers

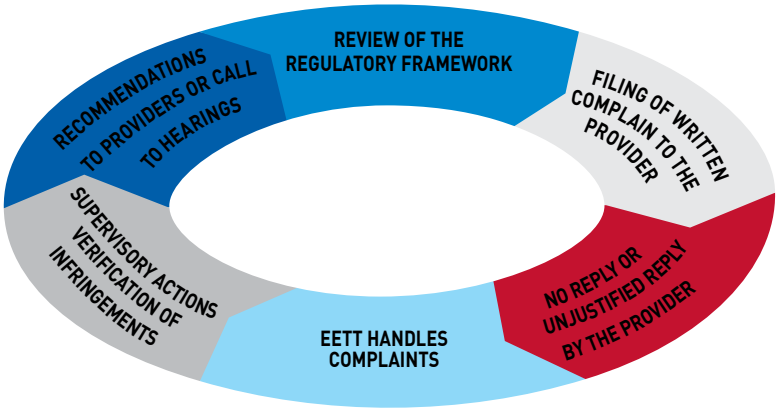
Informing consumers and safeguarding their interests are a top priority of EETT. Within 2013, the Regulator handled more than 12,000 written reguests and complaints, through the Consumer Service Sector (CSS). At the same time, EETT displayed significant initiatives and developed new web applications to benefit citizens.

5.1. Consumer Service Sector: First Line Support

Capitalising on its valuable 8-year experience, EETT's Consumer Service Sector (CSS) constitutes a reference point for consumers in the field of electronic communications and postal services, also triggering a series of supervisory and regulatory interventions by EETT to the benefit of the market and consumers.

During 2013, the CSS recorded and processed 12,015 written complaints (compared to 9,947 the previous year, i.e., an increase of 20.79%), of which 84.6% concerned mobile and fixed telephony services or the Internet, 10.5% concerned radiofrequency spectrum issues, 1.6% concerned postal services and the 3.3% pertained to general information requests (Table 5.1).

Chart 5.1: Operation of EETT's Consumer Service Sector



Note: In order to receive better service, consumers should first and foremost contact their provider, asking in writing to resolve any issues and next the competent authorities and services, such as EETT.

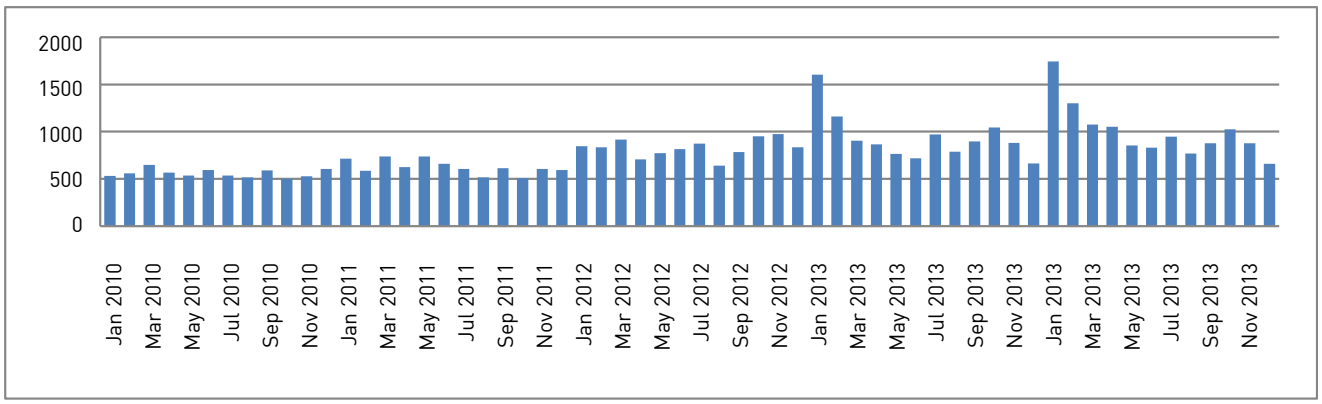
Table 5.1: Classification of Written Requests/Complaints (%)

	2007	2008	2009	2010	2011	2012	2013
Radiofrequency Spectrum (Antennas)	**6**	**6**	**13**	**17.5**	**20**	**15.3**	**10.5**
Electronic Communications Services	**90**	**89**	**78**	**75.1**	**75**	**76.7**	**84.6**
Internet	10	10	3	4.5	2.1	1.4	30.0
Mobile Telephony	3	4	12	17	17.2	19.7	29.3
Fixed Telephony	77	75	63	48	50.5	48.2	21.3
Premium Rate Services	0	0	0	5.6	5.2	7.2	4.0
Postal Services	**1**	**1**	**2**	**2.1**	**2.4**	**1.7**	**1.6**
General Information	**3**	**4**	**7**	**5.2**	**2.6**	**6.3**	**3.3**

Source: EETT

Note: The different percentages in written requests/complaints in electronic communications services for 2013 compared to previous years are due to the fact that complaints related to 2-play and 3-play services are now recorded as Internet complaints. As a result, the percentage of Internet complaints shows a sharp increase and the corresponding percentage for fixed telephony a sharp drop.

Chart 5.2: Monthly Evolution of Written Complaints concerning Electronic Communications and Postal Services (2010-2013)

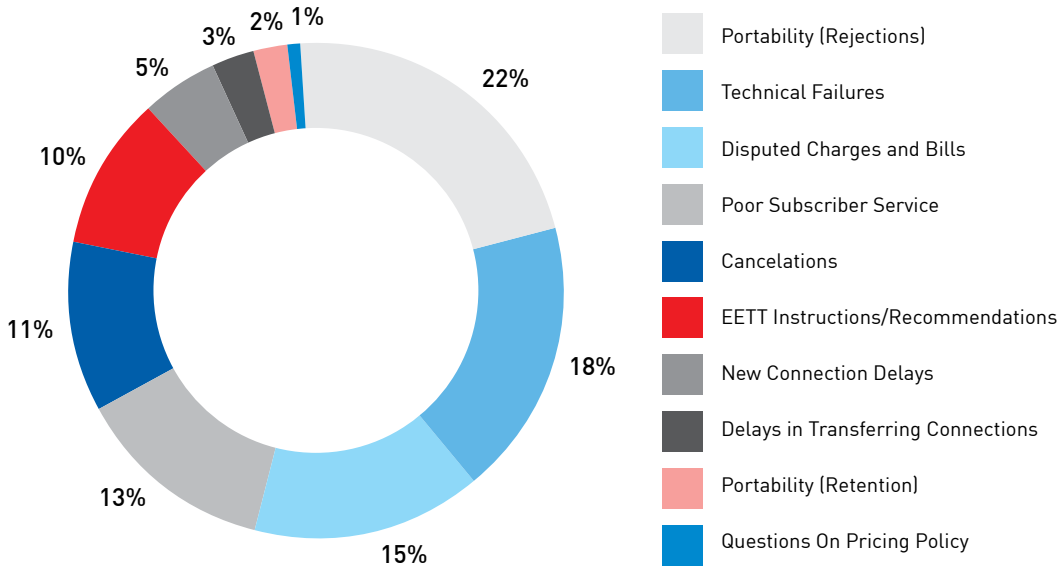


Source: EETT

An overall picture for the electronic communications market is presented in Chart 5.2. According to the Chart, in 2013 recorded requests and complaints followed an upward trend with a monthly average of 1,001 cases, as compared to 829 per month in 2012.

In 2013, 35.53% of complaints concerning electronic communications services were related to Local Loop issues (e.g., faults, connection cancellations, disputed charges, deficient customer service, arbitrary connection activations, charges for Premium Rate Services (PRS), rejection of portability requests, etc.), while roughly 25.12% concerned fixed telephony issues (e.g., faults, disputed bills, activation delays, cancellations). A large number of the overall complaints related to rejections of portability requests by operators (19.31%), disputed charges (23.13%) and faults (11.17%). Charts 5.3 & 5.4 show complaints on fixed and mobile telephony broken down by category. Chart 5.5 provides a detailed presentation of Local Loop issues. In relation to the radiofrequency spectrum, 1,291 written complaints were received concerning radio and telecommunications issues and the construction of mobile telephony antennas. A detailed breakdown of these complaints is presented in Chart 5.6.

Chart 5.3: Fixed Telephony Complaints (2013)



Source: EETT

Chart 5.4: Mobile Telephony Complaints (2013)

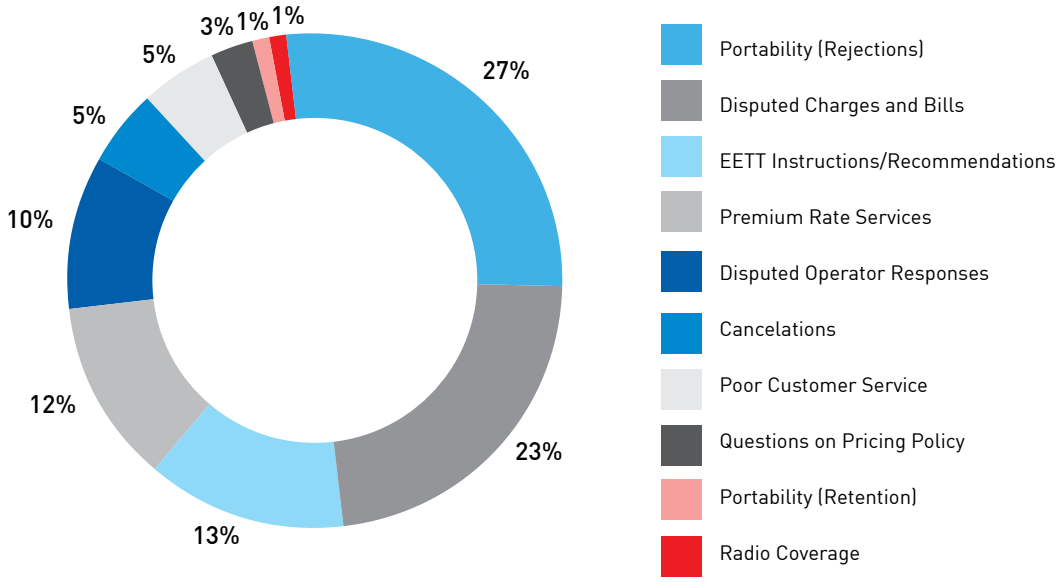


Chart 5.5: Complaints Concerning Local Loops (2013)

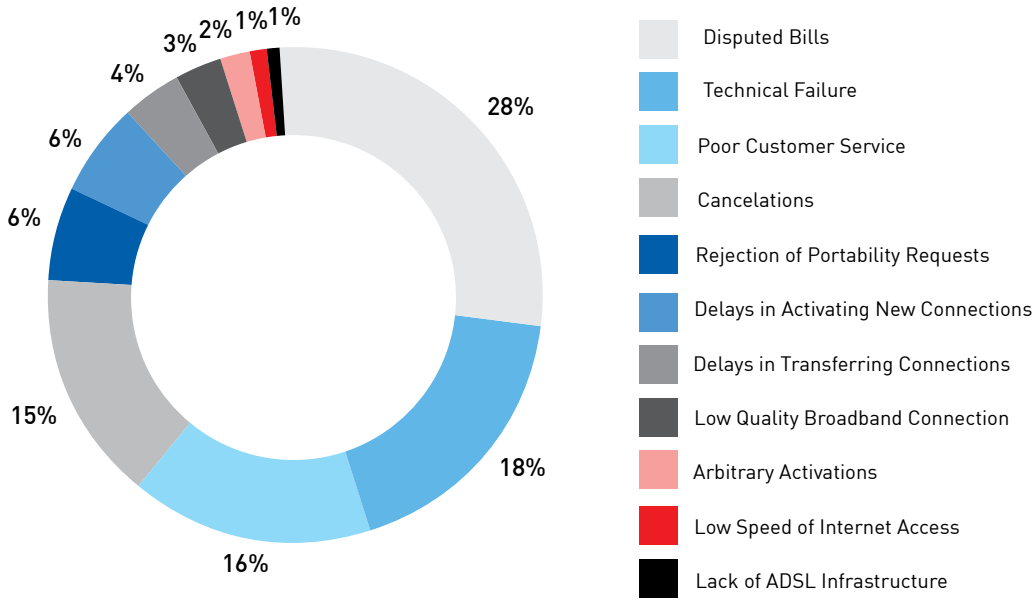
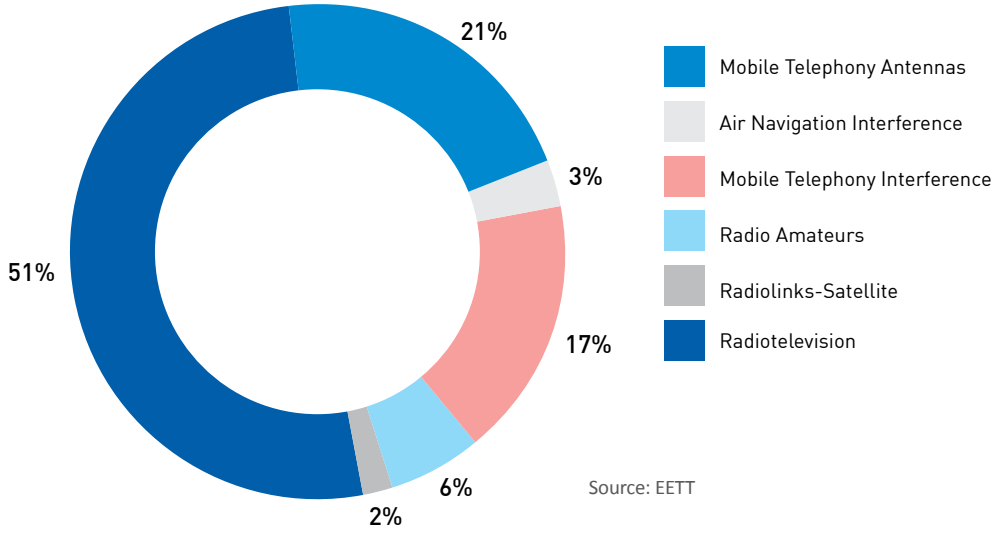


Chart 5.6: Radiofrequency Spectrum Complaints (2013)



Source: EETT

As regards postal services, EETT received 203 written requests/complaints, 71.92% of which were related to the provision of Universal Service (such as a delay in the delivery of postal items, distribution problems, poor customer service, loss or damage of items). Complaints regarding courier services as a rule pertained to delayed delivery of an item and other issues such as loss or damage and poor customer service. A detailed breakdown of all written complaints concerning postal services is presented in Chart 5.7.

Due to the increase of written complaints and the difficulty in managing them to benefit consumers, EETT responds to consumers or forwards their complaint to providers within approximately eight working days (Chart 5.8).

Quality Indicators

To assess CSS's quality of service, EETT has set the following key performance indicators:

- KPI1 Indicator: Reflects consumers' satisfaction rate with the telephone service provided by CSS. In 2013, KPI1 exceeded 99.95%, compared to 98.75% the previous year.
- KPI2 Indicator: Refers to the time required for processing written complaints filed with CSS. In 2013, KPI2 stood at 8.39 working days compared to 4.1 working days the previous year, mainly due to the 20.79% increase in written complaints received in 2013.
- KPI3 Indicator: Reflects the rate of complaints handled by CSS and answered in favour of consumers. In 2013, KPI3 was 30.79% compared to 45.57% the previous year, mainly due to the 20.79% increase in written complaints received in 2013.

Regulatory and supervisory actions arising from CSS actions

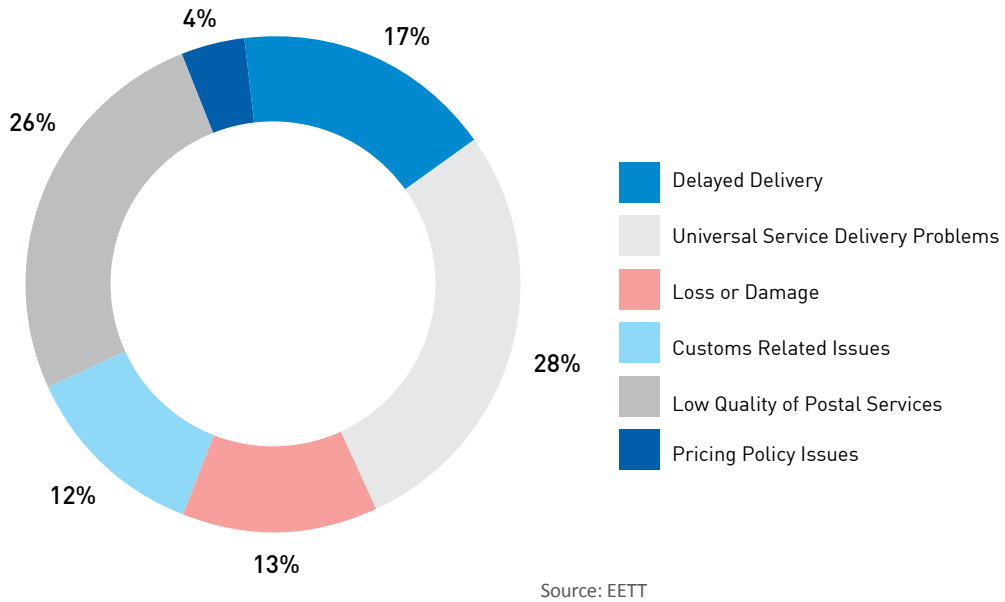
In 2013, CSS's work triggered a series of important regulatory actions such as the updating of the General License Regulation and the Number Portability Regulation. Also complaint management resulted in supervisory controls, such as ex officio inspections by the Monitoring and Supervision Department of the Telecommunications Directorate, as well as 240 inspections at points of sale (stores) of both operators and their associates to ascertain compliance with the regulatory framework. Moreover, drawing on the 12,015 written complaints, EETT issued two recommendations for consumers and held nine hearings with providers that resulted in the revocation of one operating license and penalties imposed. More information on the penalties imposed are given in the following sections.

5.2. Regulatory and Supervisory Interventions to the Benefit of the Consumer

Issuing the General License Regulation

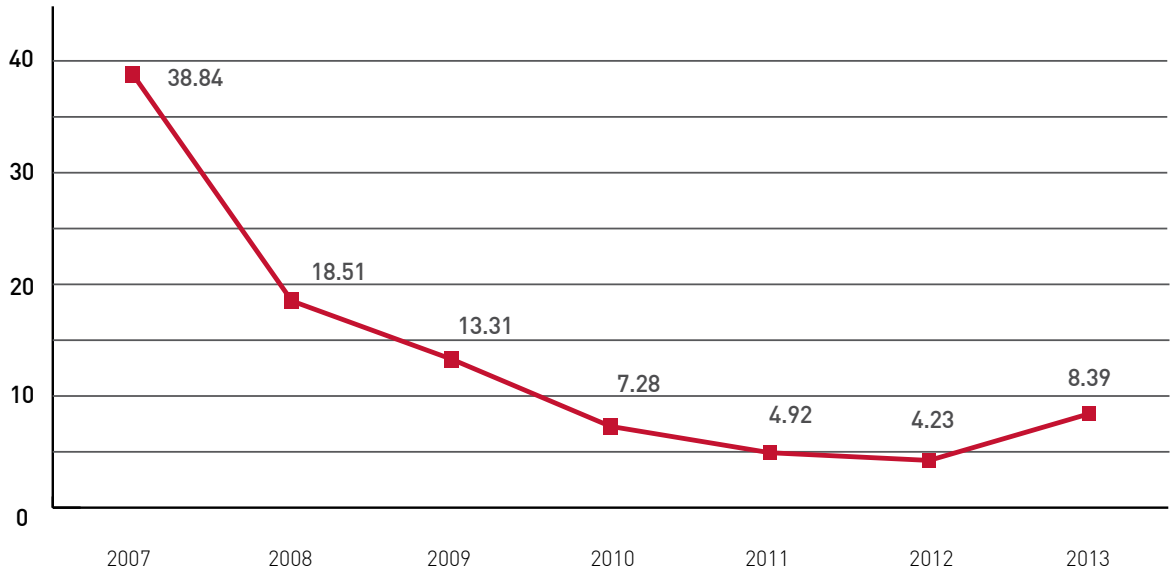
In February 2013, EETT issued a new Regulation on the terms for the licensing and operation of electronic communications operators, in accordance with the revised European and Greek regula-

Chart 5.7: Complaints Concerning Postal Services (2013)



Source: EETT

Chart 5.8: EETT's Response Days to Written Complaints (2007–2013)



Source: EETT

tory framework with the purpose of protecting the rights of telephony and Internet subscribers and controlling the relevant charges.

Specifically, the new Regulation imposes greater obligations on operators with respect to their providing detailed and timely information to their subscribers, before increasing charges and changing the terms of the contract for connections/bundles. Moreover, the Regulation provides for, inter alia, the automatic return of the corresponding fixed monthly charge in the event of delayed repair of a fault, the amount of the charges during a temporary suspension of services and early termination of the contract, as well as no charge for calls queuing for directory enquiries.

Issuing the Number Portability Regulation

Number portability is a main factor for fostering competition in the telephony market, as it enables subscribers to choose amongst operators on the basis of cost and quality of services, without having to change their phone number. In its attempt to safeguard the right to port numbers, EETT issued a relevant decision,[18] which contains, inter alia, the following changes:

- Certain of the existing reasons for rejecting portability applications, such as rejection due to temporary service disconnection because of financial debts are eliminated.
- The procedure and the amount of compensation to subscribers due to the delayed implementation of portability or the abusive porting of their number are set.
- The time for considering portability applications by their current provider is reduced.

Following this decision, EETT stepped up controls and summoned companies to hearings on the matter, contributing greatly to reducing the number of unjustified rejections of portability applications. More details are provided in sections 6.2.12 and 6.3.4.

Reducing call termination rates to mobile networks

Following the relevant decision of EETT, in accordance with the European framework, as of 1 January 2014, the wholesale call termination rates to all mobile networks will go down 6.3%. Specifically, the rate is set at 1.189 eurocents/minute from 1.269 eurocents/minute in 2013. This specific reduction reinforces EETT's effort to ensure that consumers gain the most in terms of choice, price and quality of services. At the same time, this decision is expected to result also in price decline in the retail call market from fixed lines to mobiles, bringing about significant savings for the end consumer.

18. EETT Decision no. 696/115/11-07-2013 "Amendment and Codification of the Regulation on Number Portability in the Greek Market into a single text", GG 1873/B/2013.

Revoking the operating license of a premium rate services operator

In July 2013 and following a great number of complaints by consumers and ex officio controls, EETT decided to revoke the operating license of the company "Dynamic Communication and Technology Limited" (D.C.&T. Ltd) due to serious and repeated infringements of the Code of Ethics for providing Premium Rate Services (PRS), the General License Regulation, as well as the legislation for consumer protection. Specifically, EETT revoked the rights to use numbers 54787 and 54380. These were used in order to send consumers premium rate SMS.

Intervening to Protect Consumers from Unsolicited Calls from Abroad

EETT intervened so as to effectively tackle the phenomenon of unsolicited mass calls to fixed and mobile telephony subscribers from certain numbers abroad. These calls are intentionally short, so as to appear as a missed call, aiming at making the unsuspecting person to respond and as a result incur a high charge. In this framework, the originating numbers were checked and the involved providers were informed. EETT remained in contact with the providers, so as to take the necessary measures.

5.3. EETT's Electronic Applications

EETT continues to develop and provide through www.eett.gr useful tools that permit consumers to be informed, compare and choose electronic and postal services by themselves.

HYPERION (System for Performance Evaluation of Broadband Connection Services)

HYPERION is the upgraded version of the "System for Performance Evaluation of Broadband Connection Services" (SPEBS) for ADSL/VDSL connections. It comprises an innovative, reliable and easy-to-use system for assessing the quality of broadband connections developed by EETT, based on the Measurement Lab Partnership (M-Lab) platform. An important factor both in the effectiveness of HYPERION, as well as in utilising the data offered, is the common acceptance of the methodology followed for measurements. In this framework, a neutral reference platform was selected for the objective end-to-end measurement of network parameters.

At www.hyperiontest.gr, subscribers themselves measure, control and at the same time compare the performance, actual speed and quality features of their broadband connection per geographical area.

In 2013, the website www.hyperiontest.gr was relaunched with a new brand, design, enhanced content and functionality, to simplify navigation for users. Furthermore, a forum was added for users to communicate with each other and for solving technical issues. The incorporation of the diagnostics measurement tool was improved, whilst the website is also available in English. It should be noted that HYPERION is designed to be user-friendly, taking into account that end-users/consumers are not always well acquainted with technical matters, want an immediate measurement result and demand this result to be easy to understand. HYPERION as shown in Figure 5.1, offers a simple graphics interface to users enabling them to easily, simply and directly:

- Measure the actual speed and assess the quality features of their broadband connection.
- Know the track record of their measurements.
- Navigate on the geographical map illustrating the aggregated statistical data for the performance of broadband connections at different zoom levels.

In order to perform measurements, users follow three steps:

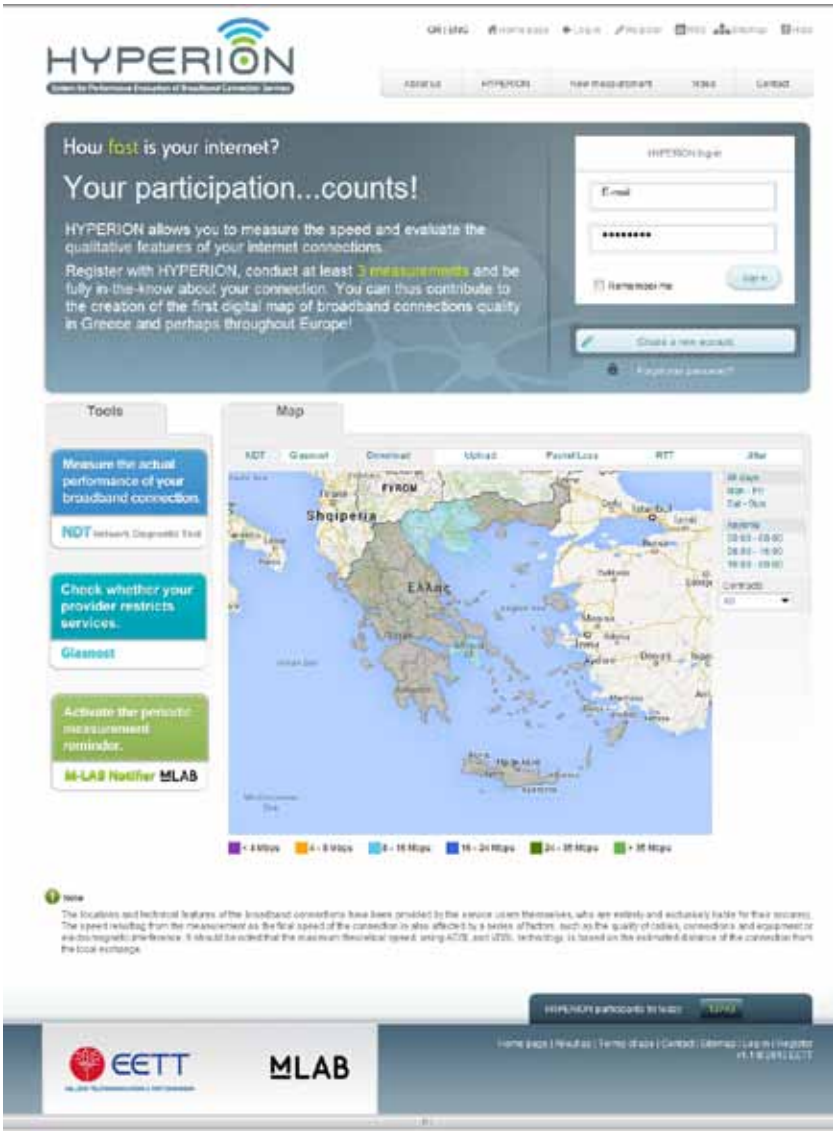
1. They register at hyperiontest.gr, giving their e-mail, mailing address, operator and nominal speed.
2. They choose a measurement tool (Network Diagnostic Tool-NDT, Glasnost).
3. They activate the reminder for performing regular measurements by using the M-Lab Notifier.

At least three measurements should be made at different times, so that users can have a full picture of their broadband connection. Every registered user is able to customise the measurement statistics, keeping their track record in the form of a graph or data file (Figure 5.2). The file with the measurement data may be used as objective information on the broadband connection in the event of the consumer contacting the telecommunications provider.

Moreover, the user is able to record the results of his measurements on the map of Greece (Figure 5.3), a fact that makes it easier for him to zoom into various levels and see in detail the statistical information according to various parameters (address/street, postal code, municipality, region, etc.).

In 2013, HYPERION was launched to the wider public through a web campaign, generating 7,860,380 impressions (1,782,000 in media and 6,078,380 in Google and Facebook) and 111,582 user visits. By the end of 2013, 11,181 users had

Figure 5.1: HYPERION Home Page



registered and performed 69,085 measurements. In addition, an informational video was launced showing how useful HYPERION is and providing instructions also on registering and navigating hyperiontest.gr.

HYPERION's usefulness has already made it popular with other regulators and bodies. In depth presentations of HYPERION have been made successfully to:

1. Providers and consumers in Nicosia in the framework of a meeting with the Office of the Commissioner of the Electronic Communications and Postal Regulation of Cyprus (OCECPR), in February 2013. OCECPR has used HYPERION's open source code to create 2B2T - a similar measuring tool for Cyprus (www.2b2t.ocecpr.org.cy).
2. BEREC's Plenary, in March 2013, in Ljubljana, during a workshop on tools for measuring broadband, in which similar projects from various countries were presented.
3. A tutorial of the BEREC Net Neutrality Expert Working Group in April 2013 in Brussels together with 17 similar tools from other European countries.
4. WP4/11 (Conformance and Interoperability (C&I) testing) of Telecommunication Standardization Sector of the International Telecommunications Union (ITU-T) SG11: Protocols and test specifications, in November 2013 in Geneva, during discussion of question Q15/11: Testing as a service (TAAS). After the presentation, EETT was invited to participate in a study group of the International Telecommunications Union (ITU) to identify new standards with respect to measurement methods at a network characteristic level.

Electronic Communications Product Price Monitoring System

In September 2013, EETT launched the "pilot" operators of the Electronic Communications Products Retail Price Monitoring System for operator.[19] This is an innovative electronic service developed by the Regulator, with the purpose of enabling consumers to assess the bundles available on the Greek market for fixed and mobile telephony, as well as Internet access services. Indeed, it forms the basis for the development by EETT - in the framework of the NSRF - of an integrated platform providing services for the comparative assessment of programmes, according to the ideal or actual usage profile of the consumer.

The System comprises (a) the Electronic Repository for the Prices of Electronic Communications Products and (b) the Electronic Observatory for the Prices of Electronic Communications Products.

Operator pricing information on all commercially available packs is imported, through a secure Internet service and in a uniform manner, into the Electronic Repository. More than 800 bundles had been imported into the System by the end of 2013. It should be noted that all the programmes are outlined on the same parameters, so as to allow for their comparison and assessment. Table 5.2 reflects the commercially available tariff plans for each of the eight companies operating in the domestic market. In addition, the System also presents tariff plans for calls to international destinations, as well as roaming plans.

The Electronic Observatory offers consumers the option to evaluate services per operator on the basis of specific criteria (e.g., type of service). It should be noted that each bundle is described by more than 500 main features besides the information on roaming services or international calls.

In its present form, the System allows the use of five search filters to generate customized tables for tariff plans per company. The search results is a detailed list, containing all information on tariff plans that fulfil the search criteria.

Figure 5.2: Graphs on User Measurement Track Record and Measurement Data (example)

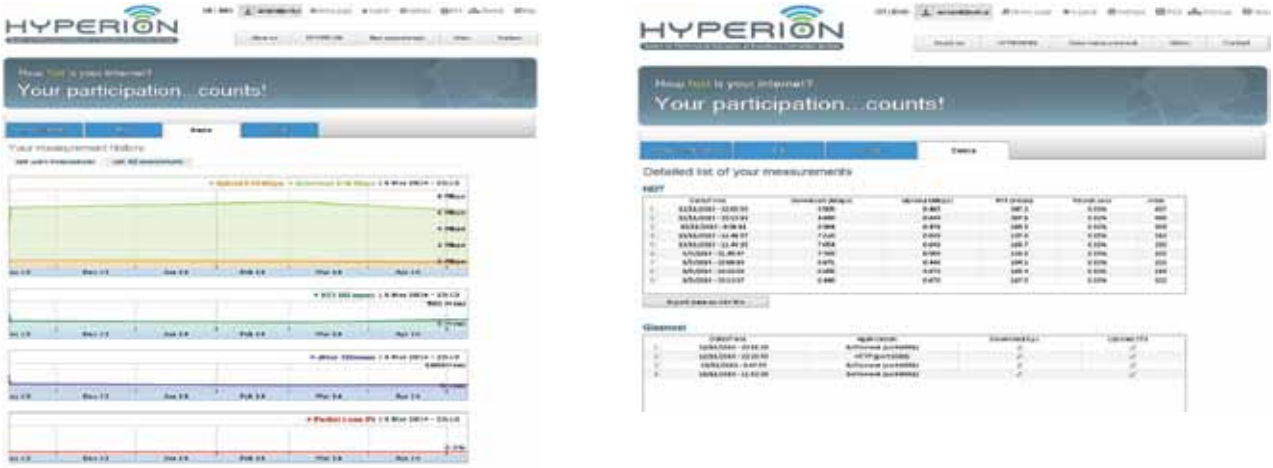
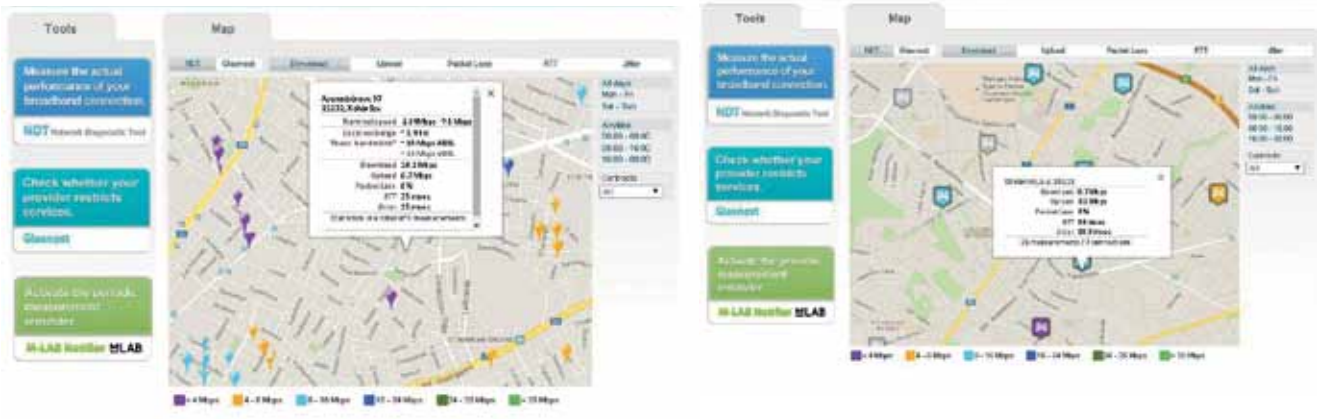
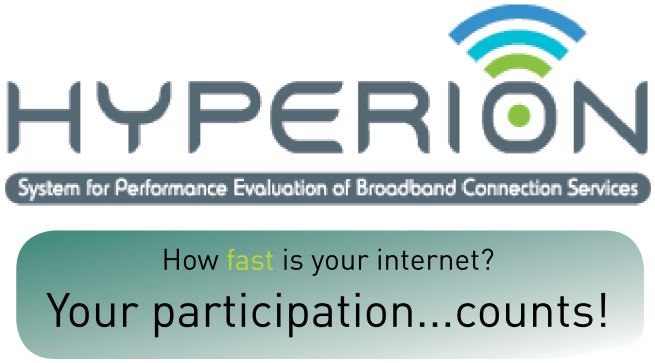


Figure 5.3: Depiction of Measurements on the Map at a Disaggregated Level (left) and with Geographical Aggregation (right)



19. EETT Decisions no. 664/11B/10-09-2012, GG 2973/B/08-11-2012 and no. 688/07/16-04-2013, GG 1149/B/13-05-2013.

Figure 5.4: Advertising Banner for the Web Campaign



Within 2014, the tender process for the project "Retail Price Observatory for Telecommunications and Postal Services" is expected to be completed and project implementation is expected to begin. Inter alia, the project will provide:

- Digital services for the presentation of all publicized retail pricing information on electronic communication services in a combined, single and uniform manner.
- Digital comparative assessment services in a reliable, valid and simple manner with respect to retail prices for services (fixed telephony, mobile telephony and Internet).
- Digital services for finding primary data and the interactive creation of tables and graphs with customized statistical analyses (based on the search information of each user). In addition, based on the aggregated demand and pricing data, actual prices per product commercial category will be reflected.
- Web services for automated information readily available to third parties.

The project is co-financed by Operational Programme "DIGITAL CONVERGENCE"of the NSRF, the European Regional Development Fund (EU participation) and public funding (national participation).

Quality Indicators for Electronic Communication Services

During 2013, EETT continued to supervise the Quality Indicator data[20] sent by domestic providers with respect to the quality of fixed telephony network services (POTS/ISDN), fixed broadband services (xDSL) and VoIP services, as well as consumer services (recording instructions, failures, dealing with issues/complaints by consumers/subscribers, etc.). The specific data were the first to be based on the new Regulation on Quality Indicators.[21]

EETT drafted new guides to thoroughly instruct providers on how to present the results. The new guides aim on the one hand to avoid errors in the submission of data and on the other hand to prepare the regulated operators for a smooth transition to a new automatic data reading information system. The new guides will start being imple-

Table 5.2: Bundled Offers Available in the Market (fixed and mobile telephony, Internet) as of 31-12-2013

COSMOTE	238
CYTA	90
FORTHNET	55
HOL	40
ON TELECOMS	31
OTE	78
VODAFONE	188
WIND	115
Total	**835**

20. The Quality Indicators on our website were taken from the section entitled "For operators" and placed in the section "For consumers" and specifically in the new subject "About the quality of Electronic Communications Services" to help consumers who want to find out about the quality of electronic services.
21. http://www.eett.gr/opencms/opencms/EETT/Consumer/QualityIndicators/

mented from the measuring period of the 2nd semester of 2013. Figure 5.5 gives an example of Quality Indicator B01 on speed of data transmission connections in the Access Network and the Backbone Network.

Additionally, Charts 5.9-5.15 (also available on EETT's website[22]) show the evolution of operators' performance in selected indicators, both overall, as well as of other providers compared to USP (OTE), based on statistics held by EETT for the network providers with the largest number of subscribers.[23]

In parallel, in October 2013, EETT started the project "Study of international practices in measuring Quality Indicators for existing and new technologies and adapting them to the Greek telecommunications market and regulatory framework," which is funded by the NSRF. The purpose of the project is to review modern methodologies for providing information on the quality of electronic communication services. The project will last until July 2014.

EETT's "smart" Geographic Information System (GIS) application for the Postal Network

With a view to protect consumers' rights to continuous service and reliable information, as of 2012, EETT upgraded its Geographic Information System (GIS) with the use of Silverlight technology, in order to ensure their uninterrupted use of all web browsers, the faster management of geographical features and enhanced presentation to users.

With the new GIS application, EETT is contributing to improved service in the use of postal services. The application is available in iOS and Android OS and locates the closest point of service (post office, agency, post-box, P.O. Box), whilst at the same time provides all the information available and shows the best route from the present position to the selected point.

Besides the above new or upgraded applications, EETT continues to provide the following services to consumers through its websites:

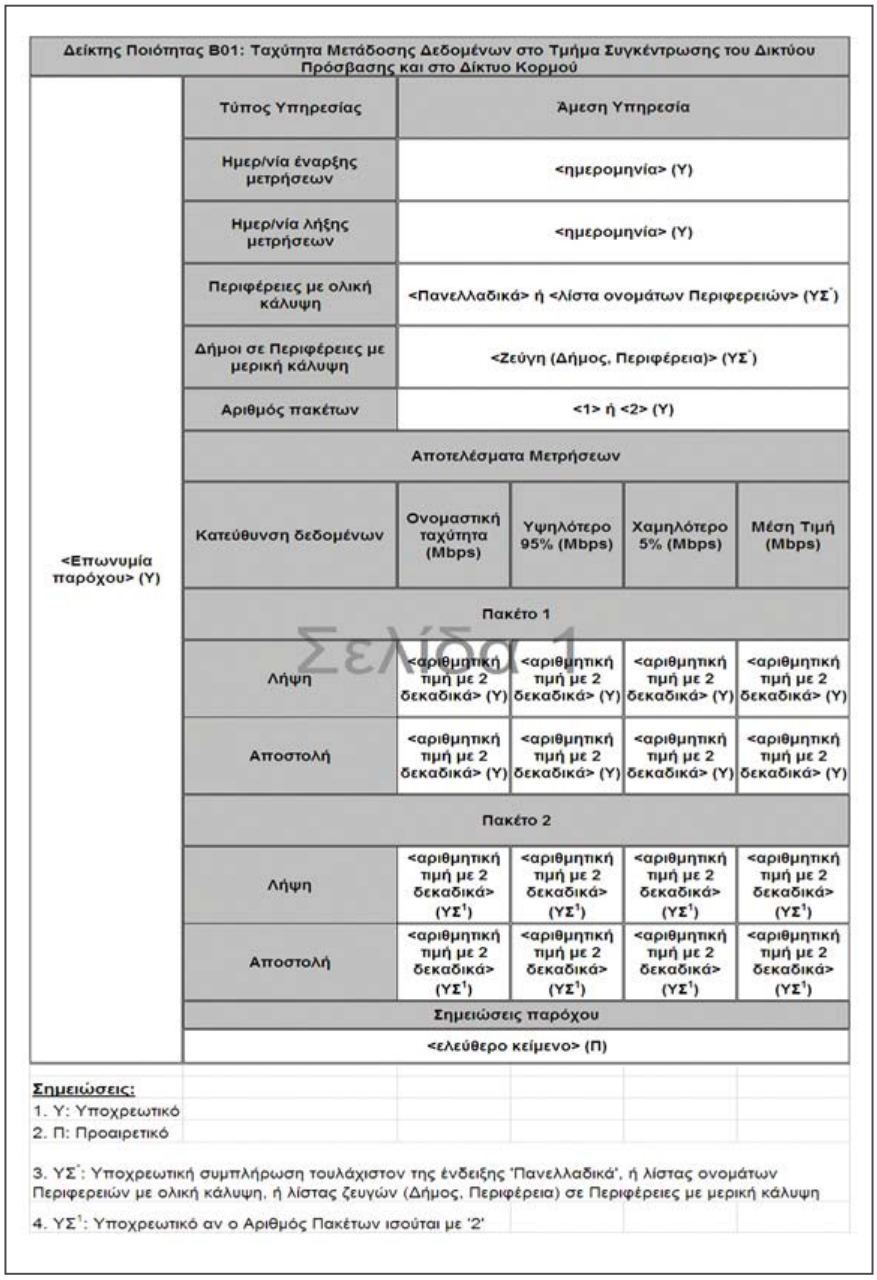
- Monitoring premium rate numbers.
- Geographic Broadband System.
- Electronic submission of a complaint.
- Electronic submission of a question.

EETT is responsible for GIS maintenance and updating, which takes place at regular intervals.

22. http://www.eett.gr/opencms/opencms/EETT/Consumer/QualityIndicators/PerformanceChart/

23. Operators who directly serve more than 50,000 subscribers.

Figure 5.5: New Guide Presenting Quality Indicator B01 (available only in Greek)



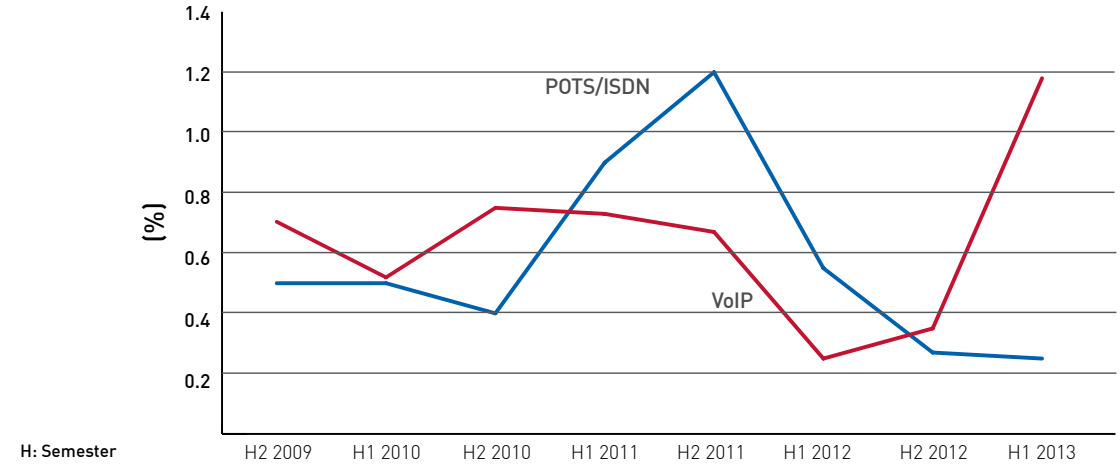
Δείκτης Ποιότητας Β01: Ταχύτητα Μετάδοσης Δεδομένων στο Τμήμα Συγκέντρωσης του Δικτύου Πρόσβασης και στο Δίκτυο Κορμού					
<Επωνυμία παρόχου> (Υ)	Τύπος Υπηρεσίας	Άμεση Υπηρεσία			
	Ημερ/νία έναρξης μετρήσεων	<ημερομηνία> (Υ)			
	Ημερ/νία λήξης μετρήσεων	<ημερομηνία> (Υ)			
	Περιφέρειες με ολική κάλυψη	<Πανελλαδικά> ή <Λίστα ονομάτων Περιφερειών> (ΥΣ*)			
	Δήμοι σε Περιφέρειες με μερική κάλυψη	<Ζεύγη (Δήμος, Περιφέρεια)> (ΥΣ*)			
	Αριθμός πακέτων	<1> ή <2> (Υ)			
	Αποτελέσματα Μετρήσεων				
	Κατεύθυνση δεδομένων	Ονομαστική ταχύτητα (Mbps)	Υψηλότερο 95% (Mbps)	Χαμηλότερο 5% (Mbps)	Μέση Τιμή (Mbps)
	Πακέτο 1				
	Λήψη	<αριθμητική τιμή με 2 δεκαδικά> (Υ)	<αριθμητική τιμή με 2 δεκαδικά> (Υ)	<αριθμητική τιμή με 2 δεκαδικά> (Υ)	<αριθμητική τιμή με 2 δεκαδικά> (Υ)
	Αποστολή	<αριθμητική τιμή με 2 δεκαδικά> (Υ)	<αριθμητική τιμή με 2 δεκαδικά> (Υ)	<αριθμητική τιμή με 2 δεκαδικά> (Υ)	<αριθμητική τιμή με 2 δεκαδικά> (Υ)
	Πακέτο 2				
	Λήψη	<αριθμητική τιμή με 2 δεκαδικά> (ΥΣ[1])	<αριθμητική τιμή με 2 δεκαδικά> (ΥΣ[1])	<αριθμητική τιμή με 2 δεκαδικά> (ΥΣ[1])	<αριθμητική τιμή με 2 δεκαδικά> (ΥΣ[1])
	Αποστολή	<αριθμητική τιμή με 2 δεκαδικά> (ΥΣ[1])	<αριθμητική τιμή με 2 δεκαδικά> (ΥΣ[1])	<αριθμητική τιμή με 2 δεκαδικά> (ΥΣ[1])	<αριθμητική τιμή με 2 δεκαδικά> (ΥΣ[1])
	Σημειώσεις παρόχου				
	<ελεύθερο κείμενο> (Π)				

Σελίδα 1

Σημειώσεις:

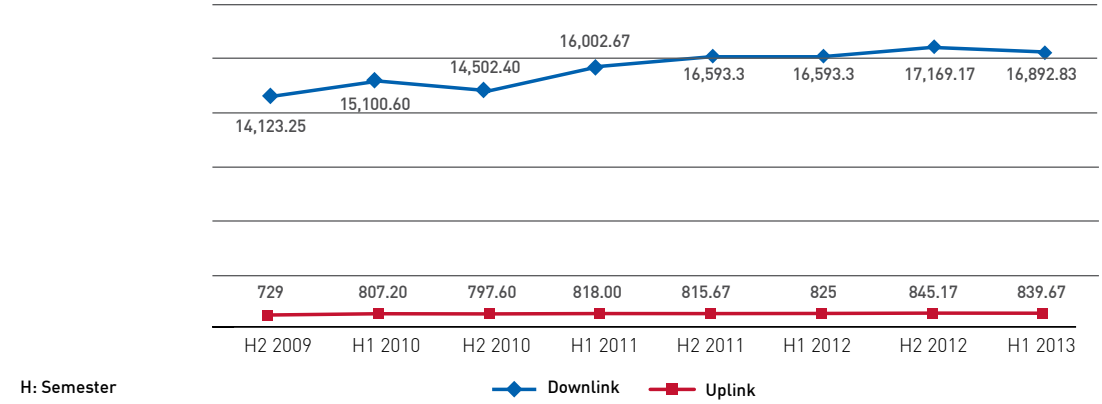
1. Υ: Υποχρεωτικό
2. Π: Προαιρετικό
3. ΥΣ*: Υποχρεωτική συμπλήρωση τουλάχιστον της ένδειξης 'Πανελλαδικά', ή λίστας ονομάτων Περιφερειών με ολική κάλυψη, ή λίστας ζευγών (Δήμος, Περιφέρεια) σε Περιφέρειες με μερική κάλυψη
4. ΥΣ[1]: Υποχρεωτικό αν ο Αριθμός Πακέτων ισούται με '2'

Chart 5.9: Call Failure Rate



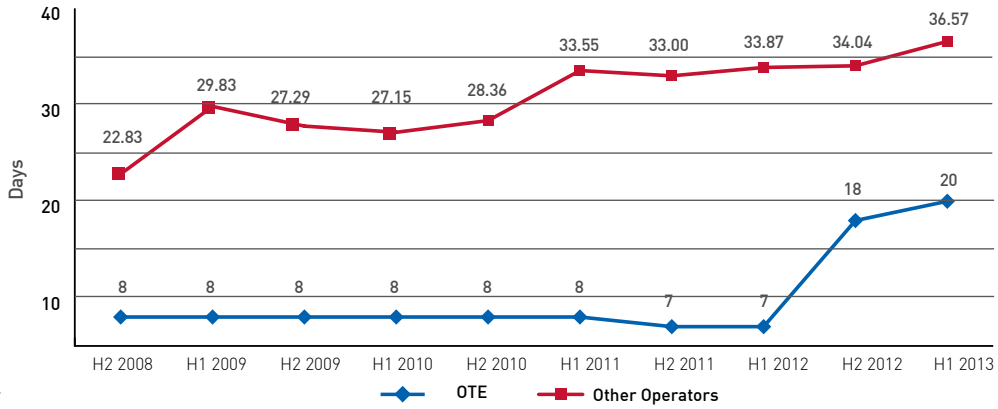
Note: Chart 5.9 shows the average call failure rate for national calls for all operators with the largest subscriber base. Results are presented separately for POTS/ISDN (FORTHNET, HOL, ON TELECOMS, OTE, WIND) (Q.I. F01) and separately for VoIP (CYTA, ON TELECOMS) (Q.I. B03). The results for HOL concerning VoIP calls are included only in the first six months of 2013. Only VoIP services packages originating from the local loop or subloop have been included for VoIP.

Chart 5.10: Average Speed of Transmission from Local Exchange (kbps) (24Mbps/1Mbps bundled services)



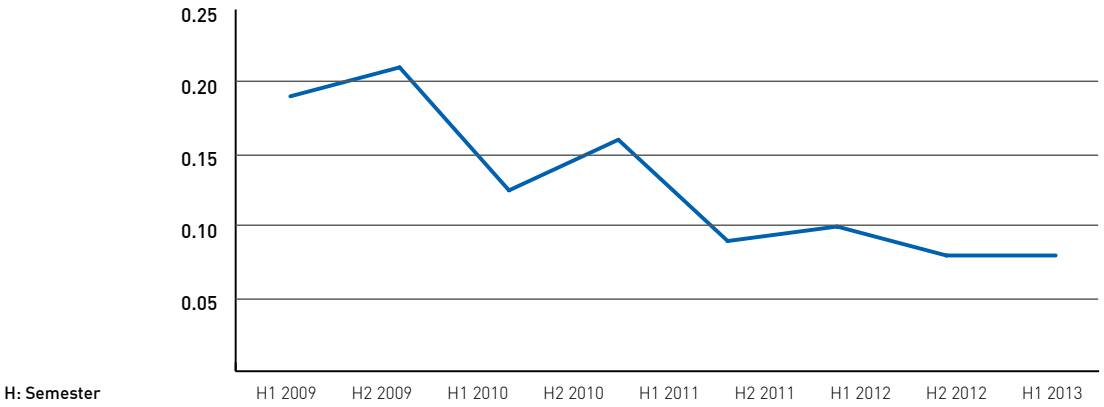
Note: Chart 5.10 reflects the average speed of data transmission of operators in the connections of the access network and the backbone network (Q.I. B01). The average results of the following operators are presented: CYTA, FORTHNET, HOL, ON TELECOMS, OTE and WIND. The results of FORTHNET are available as of the first six months of 2010 and for CYTA as of the first six months of 2011.

Chart 5.11: Provision Times for Initial Broadband Connection (95 hundredths)



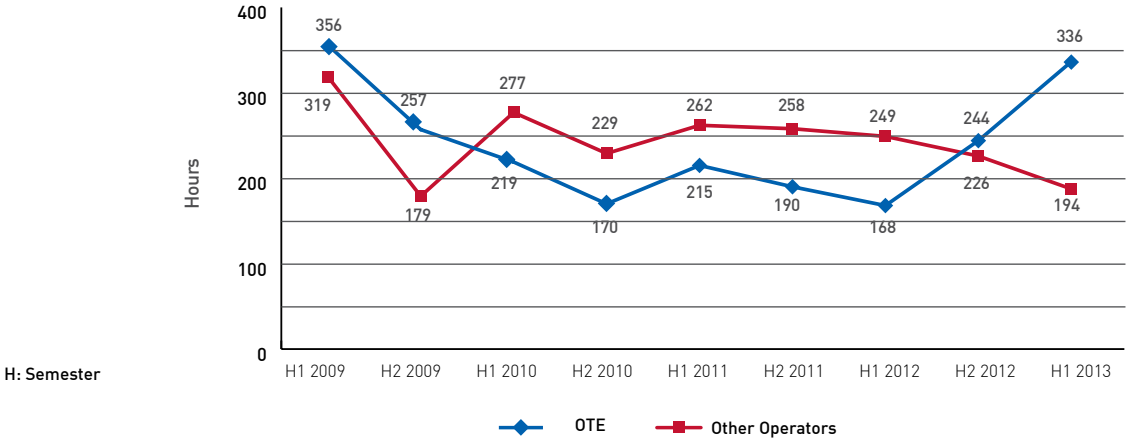
Note: Chart 5.11 shows the provision times for the initial broadband connection (Q.I. B05). The results for other operators up to the 2nd semester of 2010 refer to the companies: FORTHNET, HOL, ON TELECOMS. From the 1st semester of 2011 onwards the companies CYTA and WIND were added. Each point of the curve for the other operators refers to the average of the operators' results. In brackets the number is broken down (OTE days + days of the operators themselves). The results are based on measurements of operators in the direct LLU service.

Chart 5.12: Frequency of Failures per Access Line



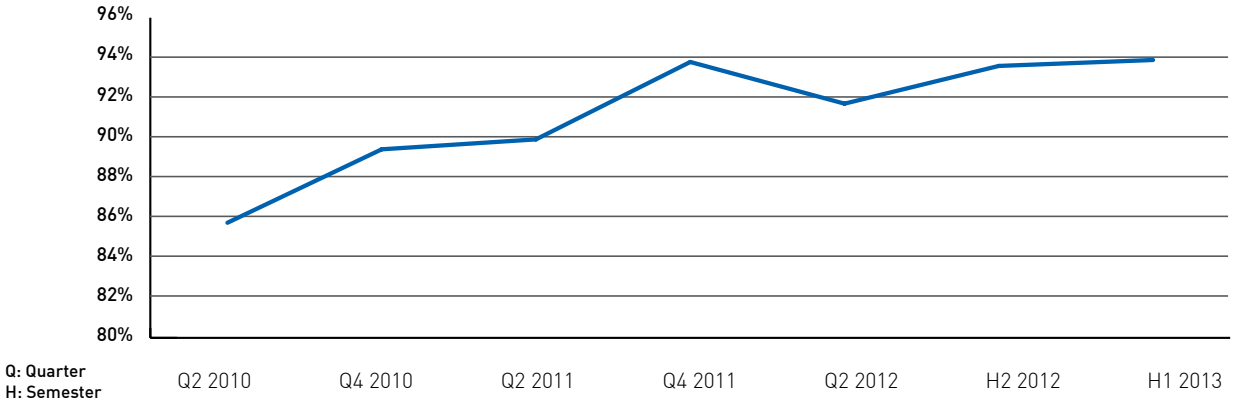
Note: Chart 5.12 shows the number of failures per access line (Q.I. B06). It gives the average for operators CYTA, FORTHNET, HOL, ON TELECOMS, OTE and WIND. The data for the first six months of 2009 do not include CYTA.

Chart 5.13: Failure Recovery Time for Broadband Access Lines (80 hundredths)



Note: The Chart 5.13 shows the failure recovery time for broadband access lines (Q.I. B07). The results for other operators up to the 2nd semester of 2010 refer to the companies FORTHNET, HOL and ON TELECOMS. From the 1st semester of 2011 onwards the companies CYTA and WIND were added.

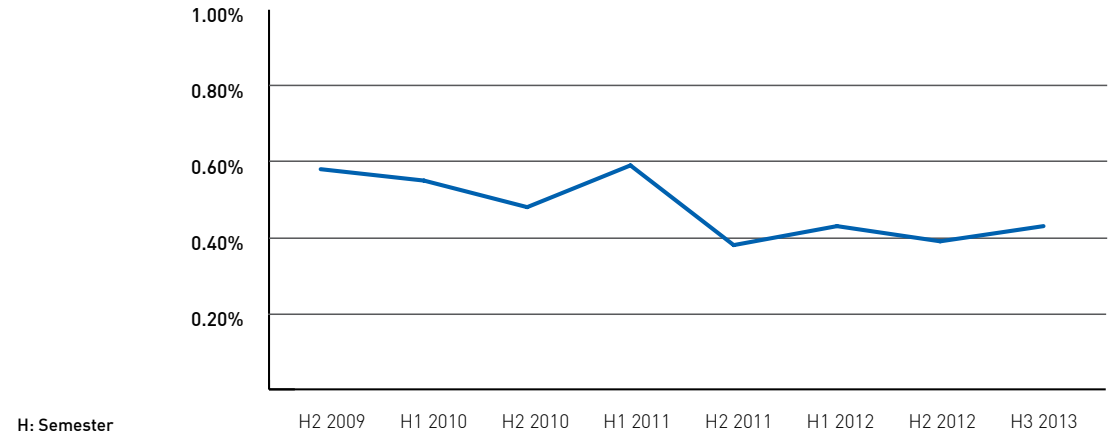
Chart 5.14: Average Percentage of End User Complaints Response



Note: Chart 5.14 reflects the percentage of service related to end user complaints (Q.I. H04). The graph presents the average results for companies COSMOTE, CYTA, FORTHNET, HOL, ON TELECOMS, OTE, VODAFONE and WIND. The results are calculated by operators on a quarterly basis up to the 2nd semester of 2012, and thereafter on a six-month basis.

Source: EETT

Chart 5.15: Average Percentage of Complaints on Billing Mistakes



Note: Chart 5.15 reflects the percentage of complaints related to billing mistakes (Q.I. H05). The graph presents the average results for companies COSMOTE, CYTA, FORTHNET, HOL, ON TELECOMS, OTE, VODAFONE and WIND.

Source: EETT

5.4. Informative Actions

a) Events

8th International Conference "Regulation towards a Smart Digital Ecosystem"

The main conclusions of the EETT's 8th International conference entitled "Regulation towards a Smart Digital Ecosystem" were that a speedy transition to Digital Economy and the equal participation of citizens in Information Society constitute the main priorities for competitiveness and recovery. The conference took place on May 16th and 17th 2013.

The Conference considered the challenges and prospects showcased in the new digital reality in the electronic communications and postal services markets. More than 600 participants attended the conference, in which distinguished speakers, senior executives from operators and bodies of the Greek and international telecommunications market, as well as officials from the European Commission and the international Regulators participated.

2nd Joint Conference of the Regulators of Greece & Cyprus (EETT – OCECPR)

In the context of their close and constructive collaboration, the Regulators of Greece and Cyprus (EETT – OCECPR) met at a common Conference that took place in Athens on March 28th, 2013, in which their representatives and senior executives from the Greek and Cypriot market participated. On the following day, meetings were held between executives of the two Regulators in order to exchange best practices and regulatory know-how.

b) Publications

The magazine "Communications In High Speed"

EETT continued to publish its quarterly informational magazine "Communications in High Speed" both in Greek and in English. It contains articles on EETT initiatives and actions and articles by senior government officials, and representatives of international Regulators. It is distributed to more than 3,500 recipients.

Electronic "NewslEETTer"

In an effort to communicate and provide information on a more regular basis, EETT continued to publish the electronic newsletter entitled "NewslEETTer". It contains news in brief and announcements on initiatives, public consultations, decisions and other developments related to what is happening at EETT and is sent on a fortnightly basis to more than 2,000 recipients.

Annual Market Review

EETT issues the annual "Market Review" presenting the course of the supervised markets with data, detailed tables and comparative information from corresponding markets of other EU member states. The data are collected by EETT based on questionnaires, published reports and balance sheets, as well as the European Commission's Digital Agenda Scoreboard, usually issued each year in June. The "Market Review" is available at www.eett.gr.

Annual Postal Market Review

On an annual basis, EETT in collaboration with the postal service providers registered on its registry, collects and presents quantitative information pertaining the competitive environment, financials for postal services providers, as well as trends and statistics of the postal sector in Europe. The "Annual Postal Market Review" is available at www.eett.gr.

Administration Executive Summary Annual Financial Report Internal Organisation Management of National Resources Focusing on Consumers

Electronic Communications Sector Analysis

Radiofrequency Spectrum Sector Analysis Postal Services Sector Analysis Strong International Presence Action Plan for 2014 Appendix

6. Electronic Communications Sector Analysis

In 2013, EETT undertook important initiatives and actions in the electronic communications sector, encouraging, inter alia, the roll out of Next Generation Access Networks (NGAs), reducing mobile termination rates and the upper limits of wholesale and retail prices for roaming services, analyzing the voice call and interconnection markets, completing the bottom up model for setting termination rates in all fixed networks and issuing a new Regulation for Managing and Assigning Domain Names. All of the Regulator's actions in the electronic communications sector throughout the year are discussed in the following sections.

6.1. The Electronic Communications Market

During the last years, the figures of the Greek electronic communications market have been significantly affected by the prolonged recession. Specifically, with respect to performances and in accordance with 2012 data, Mobile Telephony Companies (MTCs) suffered significant reductions to their turnover (7.5%) and gross profits (13%), whilst their assets increased by 1.9%. Similarly, OTE's turnover fell by 10.9% (attributed to various factors such as the reduction in the domestic and foreign mobile telephony revenues, the decrease in interconnection rates, the reduction in the sales of telecommunications equipment etc.), while the gross profits declined by 65.7% (the 4.7% drop in the company's operating expenses was partly offset by the increased cost of the early retirement plan) and its assets by 15%. On the contrary, alternative telephony operators posted higher revenues (up to 1.5%) and gross profits (up by more than 75%), an improvement attributed mainly to the good financial performance of the larger companies.

Fixed Telephony

The fixed telephony market is still characterized by intense competition between OTE and alternative providers and this is evident by the continued decrease in the former's share. At the same time the share of the three largest (based on 2012 data) alternative providers cumulatively doubled in 4 years, climbing from 18% in 2009 to 35.9% in 2012. The number of fixed telephony lines in Greece fell between 2010 and 2013 from 5.3 million to 4.7 million. OTE's share in the fixed telephony market fell from 72.7% at the end of 2010 to 62.4% at the end of 2012 and to 60.9% in mid 2013.

Mobile Telephony

The increasing trend in the number of mobile telephony connections continued within 2013. Connections amounted to 16.5 million compared to 15.9 million at the end of 2012 and 14.6 million at the end of 2011; 13 million of those are active.

Broadband

Broadband penetration in the population increased by 2%, reaching 25.8% as compared to 23.8% at the end of 2012. The number of fixed broadband connections was 2,913,191 lines at the end of 2013, as compared to 2,689,428 at the end of 2012. This continuous increase shows that Greece is on a convergence path towards the rest of Europe. As regards the transition to the NGAs and following the review of the Reference Offer for the provision of the Virtual Partial Unbundled Loop (VPU), consumers enjoy quality service and alternative operators are able to offer VDSL products in fair and competitive terms as compared to OTE. At the end of 2013, VDSL connections were 48,878 compared to 3,165 at the end of 2012. Potential VDSL coverage is based on 187 local exchanges, which correspond to more than 69% of the fixed telephony subscribers nationwide.

Furthermore, by the end of 2013, the Local Loop Unbundling (LLU) lines amounted to 55.9% of all broadband lines in Greece, while ADSL lines (both wholesale and retail) were 43%. The respective shares for 2012 were 55.4% for LLU lines and 43.3% for ADSL lines.

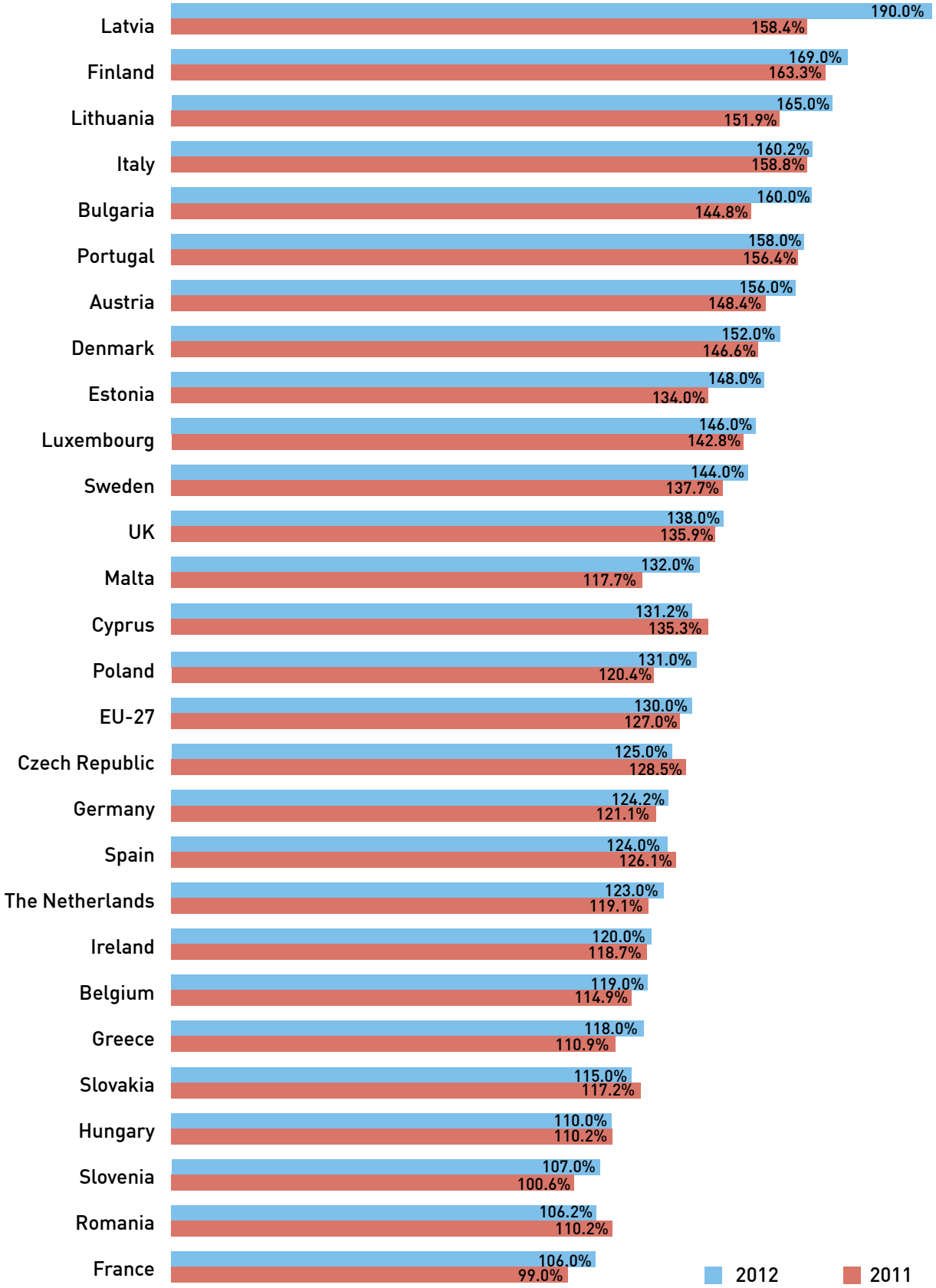
The main figures of the electronic communications market are presented in the following tables. It should be noted though that figures for 2013 will be included in the Markets Review Report published by EETT in the second semester of the year, after the publication of the Digital Agenda Scoreboard for the year 2013 by the European Commission and the annual balance sheets of the companies.

Table 6.1: Development of Electronic Communications Operators Financials (in billion EUR)			
Turnover	**2010**	**2011**	**2012**
OTE	2.17	1.91	1.70
MTCs	3.58	3.23	2.99
Alternative Fixed Telephony Providers (*)	0.57	0.62	0.63
Other Operators (**)	0.58	0.63	0.60
Total	**6.90**	**6.39**	**5.92**
Gross Profits			
OTE	0.14	0.20	0.07
MTCs	0.73	0.75	0.65
Alternative Fixed Telephony Providers (*)	0.01	0.05	0.09
Total	**0.89**	**1.00**	**0.80**
Total Assets			
OTE	7.95	7.76	6.60
MTCs	7.11	6.81	6.94
Alternative Fixed Telephony Providers (*)	1.41	1.12	0.85
Total	**16.47**	**15.69**	**14.39**

** Includes all licensed fixed telephony operators.*
***Includes all remaining licensed operators.*

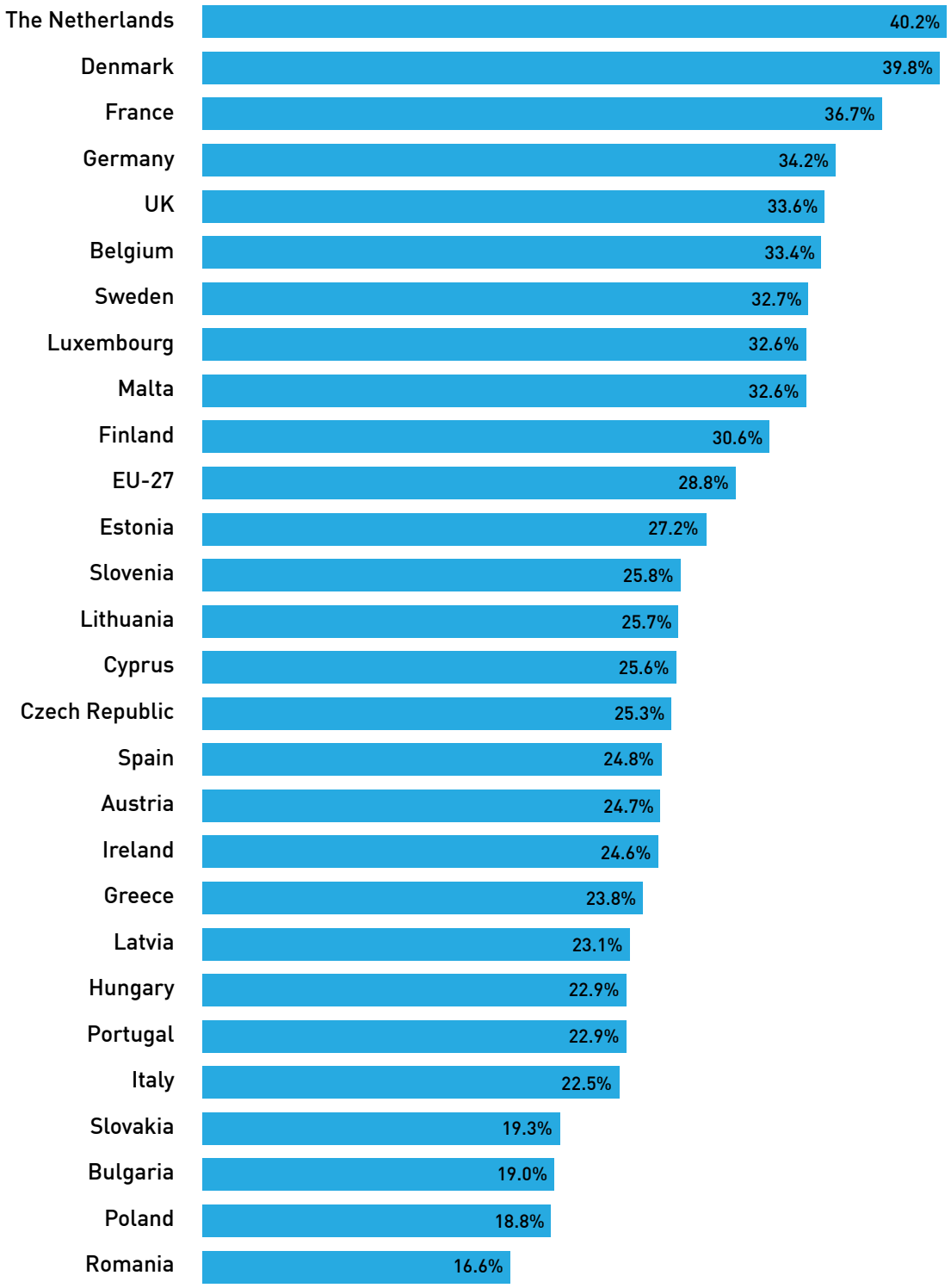
Source: EETT (based on published balance sheets)

Chart 6.1: Mobile Telephony Penetration in the EU



Source: European Commission (Digital Agenda Scoreboard 2013)

Chart 6.2: Broadband Penetration in the EU



Source: European Commission (Digital Agenda Scoreboard 2013)

6.2. Competitive Growth of the Greek Electronic Communications Market

6.2.1. Market Analysis based on the European Regulatory Framework

According to the regulatory framework for the provision of electronic communications and networks services, EETT is responsible for carrying out both a definition and analysis of the relevant markets in Greece, as well as for imposing any necessary regulatory obligations when it ascertains that a certain market is not adequately competitive. During this process, EETT took into particular consideration the new Recommendation on the relevant product markets[24] as well as the Guidelines on market analysis and assessment of significant market power of the European Commission.[25]

The fixed telephony retail voice call market for calls within Greece

In the context of the third round of electronic communications market analysis, EETT examined the retail call market, taking into account the national market conditions shaped by the second round of analysis. The proposed draft measures were placed under a public consultation[26] in the period 29 April - 29 May 2013. EETT replied in detail to the main comments made by the consultation participants[27] and in June 2013 notified[28] the Draft Measures to the European Commission, the Body of European Regulators for Electronic Communications (BEREC) and the National Regulatory Authorities (NRAs) of the European Union (EU) member states. Taking into consideration the comments submitted by both the participants in the public consultation and the European Commission,[29] EETT issued a relevant decision[30] in July 2013. The conclusion of the decision regarding calls within Greece for residential and business customers was that, there is a retail calls market for fixed telephony retail calls, which includes local and long distance calls, calls to mobiles and calls to service providers via short codes or numbers starting with 7, 8 or 9. Moreover, in accordance with EETT's analysis, managed VoIP services based on network provider, offered together with a broadband connection are part of the above market, as they have all the features of traditional telephony and may even be considered as its substitute.

Following the definition of the relevant market, EETT performed the three criteria test, which has been established by the European Commission, in order to decide on whether there is a need for ex ante regulation, by imposing regulatory obligations on the operator with Significant Market Power (SMP) in the defined market. Specifically, the Regulator examined whether: (a) there are high and non-transitory barriers to entry, (b) the structure of the market in question does not tend towards effective competition within the relevant market analysis time horizon and (c) the implementation of competition law alone does not suffice to adequately address the market's failures. Despite the fact that the said market is still characterised by high entry barriers, EETT concluded that there are clear indications that the market is tending towards effective competition (failure of the second criterion) and therefore there is no need for ex ante regulation in the retail voice market in fixed telephony. Therefore, it decided to lift all the relevant regulatory obligations imposed on OTE in the context of the previous round of market analysis, namely the obligations to control prices, submit information on cost and cost accounting, accounting separation, transparency, non discrimination and retail bundling.

Interconnection Markets

In the context of the third round of electronic communications markets analysis, EETT examined the wholesale interconnection markets[31] taking into account the national market conditions shaped by the second round of analysis. The proposed draft measures were placed under a public consultation[32] in the period from July 25th to October 4th 2013. According to EETT's initial conclusions, the following interconnection markets continue to exist:

- Wholesale call origination in the public telephone network provided at a fixed location.
- Wholesale call termination in individual networks at a fixed location.

24. European Commissions Recommendation of December 17th, 2007, on relevant product and services markets within the electronic communications sector amenable to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, (EU L 344/65, (2008/879/ EC), 28-12-2007).
25. Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (2002/C 165/03).
26. EETT Decision no. 689/49/29-04-2013.
27. EETT Decision no. 693/06/04-06-2013.
28. EETT Decision no. 693/07/04-06-2013.
29. Letter of the European Commission (C (2013) 4356 final) with protocol no. 4712/GG 960/04-07-2013 on the subject "The Commission's Decision on case EL/2013/1467: the market for publically available local or domestic telephone services provided at a fixed location for residential and non residential customers in Greece - article 7 paragraph 3 of Directive 2002/21/EC".
30. EETT Decision no. 696/125/11-07-2013, GG 1865/B/30-07-2013.
31. Markets 2 and 3 in Recommendation 2007, Market 10 in the older Recommendation of 2003.
32. EETT Decision no. 698/25/25-07-2013.

• Wholesale transit in the public telephone network.

One of the most important developments compared to the previous round of market analysis is the change in the demarcation point for interconnection services depending on technology. Specifically, with respect to the traditional Time Division Multiplexing (TDM) interconnection architecture, EETT proposed the single tandem node of OTE's network as the demarcation point for origination and termination services, whilst with respect to the NGA, the respective point will be their central node. Based on this approach the transit services in the traditional TDM network are limited between the current simple transit switches (i.e., the double transit of the second round of market analysis), whilst in the NGA, this transit is missing if there is only one interconnection switch or it is limited to the route between switches, if there are more than one.

By applying the three criteria test for the Wholesale Transit market, as set out above, EETT ascertained that there are clear indications that there are no longer high entry barriers in the market (failure of the first criterion) and thus there is no need for ex ante regulation. Subsequently, upon examining OTE's relative power, based on its market share both in relation to other operators and the progress of the market, the possibility of potential competition and the lack of offsetting purchasing power, EETT concluded that: (a) the wholesale origination and wholesale termination markets continue to be characterised by lack of competition, (b) OTE must be designated as an operator with SMP in the defined relevant markets and (c) each wholesale termination services provider must be defined as having SMP in its network. In order to address the current and potential competition problems, EETT in its final decisions retained and in certain cases amended the regulatory obligations imposed on OTE and the operators, which were: access provision and use of network related facilities, transparency, non discrimination, cost orientation, cost accounting and accounting separation (only for OTE).

A major change with respect to the regulatory obligations of OTE and the operators relates to the obligations of price control and cost accounting and particularly the fixing of the call termination rate. In more detail and by implementing the relevant Recommendation of the European Commission,[33] EETT proposes that the termination rates should be set on the basis of the expenses of an efficient operator and should be symmetrical, whilst the expenses' evaluation should be based on the current cost and use of the bottom up approach of the Long-Run Incremental Cost models (LRIC Bottom-Up) (see section 6.2.3).

6.2.2. Interconnection

In order to ensure fair competition in networks and services, EETT examined a series of submitted requests for dispute resolution according to the procedure set forth in its relevant decision[34] and mainly pertained to issues of non adherence to the negotiation terms foreseen. Furthermore, a dispute settlement request between OTE and HELLAS ON LINE was examined, concerning the application of the provisions of the Reference Interconnection Offer, and specifically, cost sharing issues for interconnection links. EETT decided[35] that OTE was obliged to pay interconnection fees for those links that HELLAS ON LINE is responsible for. The fees must be similar to those charged by OTE for the links under its responsibility.

6.2.3. Bottom-Up Fixed Telephony Model

Following the process of creating and structuring the bottom up approach of the LRIC Bottom-Up for calculating the wholesale termination rates in fixed networks, EETT placed under public consultation a text on the methodological principles governing the model. Taking into consideration both the observations and the comments of the participants in the consultation as well as the conditions in the Greek market, EETT developed a relevant model, finalised the methodology and its principles and began implementing it. Table 6.2 present the rates derived from implementing the model for the time period up to 31-12-2017.

6.2.4. Local Loop Unbundling (LLU)

After the growth of the previous years, the Local Loop Unbundling (LLU) figures tend to stabilise. Specifically:

• The number of OTE's local exchanges (L/E), in which physical collocations of the entitled pro-

33. European Commission Recommendation of May 7th, 2009, on the regulatory treatment of fixed and mobile termination rates in the EU (EU L 124/67, 20-05-2009).

34. EETT Decision no. 506/37/13-01-2009 "Regulation on the determination of terms and conditions for providing Access and Interconnection pursuant to articles 41 par. 3 and 42 par. 3 of L. 3431/2006" GG 369/ B/03-03-2009.

35. EETT Decision no. 695/59/27-06-2013 "Decision on the dispute resolution proceeding of 20 September 2012 between the companies "HELLAS ON LINE" and "OTE S.A.", pursuant to article 34 of L.4070/2012, with respect to the procedure for sharing the cost of interconnection links".

viders operate, are still 173 as of December 2013, without expecting any further increase, as all commercially interesting L/Es have been covered.

- The number of OTE's local exchanges (L/E), which provide distant collocations remained at 789 in December 2013.
- The number of local loops operating in the entitled providers' networks increased in December 2013 to 1,908,000 as compared to 1,760,000 in December 2012.

Virtual Partial Unbundled Loop (VPU)

The Virtual Partial Unbundled Loop (VPU) wholesale service – enabling the operator to provide the end-user with VDSL connections via OTE's respective equipment (DSLAM OTE) and voice services via the respective Full Local Loop (FLL) – stems from a combination of the existing wholesale FLL services and ADSL lines in the street cabinets of the copper-KV networks (V-DSL[KV]). The service is provided only at the points where VDSL equipment is installed in street cabinets as these are gradually rolled out in the context of delivering the existing service V–DSL [KV]. There are two types of VPU:

A) BRAS (Broadband Remote Access Server): A local loop from which the voice services are provided to the operator through the loop service and VDSL services through V-DSL.BRAS [KV] service.

B) DSLAM (Digital Subscriber Line Access Multiplexer): A local loop from which the voice services are provided to the operator through the loop service and VDSL services through V-DSL.DSLAM [KV] service.

EETT in its relevant decision[36] in November 2012, permitted the launch of the VPU wholesale service by OTE to third operators for the development and retail launching of competitive VDSL products. At the same time and aiming at the best delivery of the aforementioned product, EETT invited OTE to formulate in collaboration with the operators the following within six months from the decision entering into effect:

- A proposal for the implementation of Quality of Service (QoS) levels.
- The procedure for receiving orders/delivering a single product.
- Measurement procedure for the stage of the order/delivery and the failure handling.
- Single procedure for failure handling/restoring.
- Specification and procedure for calculating penalties as a single procedure.

In April 2013 and following the collaboration between the interested parties, OTE submitted to EETT a proposal on the above points. After holding the public consultation and meetings both with the alternative operators and OTE, EETT, in July 2013, amended the Reference Offer for LLU[37] and specifically the annex pertaining to the VPU product. In more detail, the following changes were introduced:

- Introduction of a single procedure for the processes of order and failure handling for the wholesale product.
- Setting times for delivery and failure restoration, as well as penalties in the event of delays.
- Specification of a procedure for measuring and implementing Quality of Service (QoS) levels.

At the same time, operators and OTE were summoned to jointly formulate a proposal on optimizing the technical implementation of the VPU service. These changes aim at continuously improving the service, so that its technical specifications will provide to operators the opportunity to offer combined voice services and VDSL, as does OTE, fostering competition in broadband access services through NGA services.

Information on the gradual roll–out of the VDSL [KV] network is provided through the Wholesale–LLU and Wholesale–VDSL information systems, with updates provided at least four months prior to

Table 6.2: Fixed Telephony Termination Rates up to 2017

	EETT's decision entering into effect until 31-12-2014	From 01-01-2015	From 01-01-2016	From 01-01-2017
Termination Rates (eurocents/minute)	0.0735	0.0695	0.0665	0.0545

36. EETT Decision No. 673/02/20-11-2012, GG 3090/B/22-11-2012.

37. Decision no. 697/20/18-07-2013, GG 1889/B/01-08-2013 "Amendment of the terms for the company "Hellenic Telecommunications Organisation (OTE SA) to provide the wholesale service with the name Virtual Partial Unbundled Loop (VPU), under OTE's obligation arising from article 4 of EETT Decision No. 673/02/20-11-2012 (GG 3090/B/22-11-2012) and amendment of the relevant provisions of EETT Decision no. 675/09/11–12–2012 (GG 3402/B/20–12–2012) on the subject "Approval of OTE's Reference Offer 2012 Local Loop Unbundling and Related Services, implementing EETT Decision with protocol number 614/013/28–07–2011 (GG 1908/B/30–08–2011)", as amended.

DSLAM activation in street cabinets in new L/Es in accordance with OTE's Reference Offer for Wholesale Broadband Access (WBA) services[38] (GG 1846/B/13-06-2012). The said service is provided by OTE in the form of the following speed packages:

Service/Bundle	Access Speed Down/Up
VPU-Standard	up to 30 Mbps/up to 2.5 Mbps
VPU-Premium	up to 50 Mbps/up to 5 Mbps

6.2.5. Leased Lines

EETT, upon taking into account the comments submitted in the context of the relevant public consultation held between March 15th to May 10th 2013, decided[39] to approve OTE's Reference Offer for the provision of wholesale leased lines, which includes, inter alia, the terms and procedures for providing Ethernet leased lines to the interested operators.

6.2.6. Universal Service

Performance targets

EETT approved[40] the reduction in the density of public telephones provided as an Universal Service Provider (USP) obligation from 0.7 to 0.45 per 200 inhabitants. This decision was reached after a relevant request filed by the USP, taking into account on the one hand the European practice and on the other hand the answers of the interested parties participating in the relevant public consultation held between May 29th to June 28th 2013.

Compensation Request

EETT, taking into account the cost data submitted by OTE as an USP in order to calculate the Net Cost of Universal Service (NCUS) for the year 2010[41] as well as the results of the relevant cost audit conducted by an independent auditor that lasted four months, issued a decision[42] where the approved findings were outlined. Afterwards, EETT summoned OTE to re-submit the NCUS calculation for 2010, in full compliance with the recommendations of the said decision. EETT used an independent auditor to carry out the audit again, a process that lasted two months, in order to ascertain OTE's degree of compliance. The audit's results are expected in the first six months of 2014.

6.2.7. Examination of OTE's Bundled Services/ Economy Programs

EETT's scrutiny of OTE's economy programs aims at deterring practices of price margin squeeze. This examination is carried out by EETT in accordance with the methodology and the model set out in Appendix I "Methodological Definition and General Principles for the Examination Model of Individual and/or Bundled Services Tariff Plans of Companies with Significant Market Power, set forth in EETT's relevant decision.[43] During 2013, OTE submitted 86 economy programs of which 66 were approved, 4 were rejected and 16 were still being processed as of 31-12-2013.

6.2.8. Cost Accounting Audit

EETT, in cooperation with independent chartered auditors has carried out and completed the 2013 cost accounting audit with actual data for 2011 and forecasted data for 2012 and 2013. The audit started at the end of September 2012 and was completed on March 26th 2013.
EETT approved[44] the results of OTE's cost accounting audit, stipulating the pricelists for the services with respect to the regulated wholesale markets for which OTE is subject to regulatory obligations for price control, cost accounting and accounting separation on the one hand, and relating to the regulated retail markets for which OTE is subject to the obligation for cost-oriented price control, on the other. This cost accounting audit referred to a range of services,[45] whose cost has been defined

38. EETT Decision no. 654/11/31-05-2013, GG Issue 1846/13-06-2012.
39. EETT Decision no. 697/21/18-07-2013, "Approval of OTE's Reference Offer for the provision of Wholesale Leased Lines, in implementation of EETT's Decision no EETT 674/09/29-11-2012 "Definition of the Wholesale Leased Lines markets, Definition of Operators with Significant Market Power in the said Markets and their Obligations (2nd Market Analysis Round)" GG 1875/B/31-07-2013.
40. EETT Decision no. 697/15/18-07-2013 "Amendment of EETT Decision no. 472/170/21-03-2008" Regulation on determining performance targets for delivering Universal Service, determination of the content and the form of the information for publication, as well as the manner of its publication by companies under the obligation of Universal Service", GG 885/B/14-05-2008
41. According to the applicable regulatory framework MD 28120/974/11-05-2007 "Conditions, selection criteria and procedure for designating the Universal Service Provider", GG/B/25-05-2007.
42. EETT Decision no. 687/271/11-04-2013, "Findings from the audit of OTE's calculation of the Net Cost of Universal Service (NCUS) for the year 2010".
43. EETT Decision no. 595/013/10-03-2011, "Definition of the national retail markets of publicly available telephone services at a fixed location, identification of operators with significant market power in the said markets and their obligations (2nd round of market analysis)", GG Issue 533/B/06-04-2011 and EETT Decision No. 614/11/28-07-2011 "Definition of national markets: (a) retail access to the public telephone network at a fixed location through PSTN, ISDN BRA and managed VOIP access lines, for residential and non residential users and (b) retail access to the public telephone network at a fixed location through ISDN PRA access lines, definition of operators with significant market power and their obligations (2nd round of market analysis)." GG 1907/B/30-08-2011.
44. EETT Decision no. 686/021/26-03-2013, GG 870/B/10-04-2013.
45. Interconnection, LLU (including collocation services), WBA, leased interconnection lines, wholesale and retail end-to-end leased lines and number portability.

on the basis of the following two cost accounting methods: (a) Long Run Average Incremental Cost (LRAIC) and (b) Fully Distributed Cost (FDC).
Furthermore, pursuant to the 2012 cost accounting audit and in compliance with EETT's respective decisions,[46] OTE posted in April 2013 on its website,[47] the cost accounting data and in particular the reference models of the LRAIC cost accounting system (LRAIC tables). This contributes to greater transparency in the electronic communications market, as other operators are able to gain an insight into the individual costs comprising the wholesale price of the most significant regulated services, for which OTE has the obligation of cost orientation.
At the same time, at the end of October 2013, EETT began the 2014 cost accounting audit of OTE with actuals for 2012. The results of the audit are expected to be announced within the first months of 2014.

6.2.9. Regulated Prices Control

EETT - as part of its competences to check OTE's price lists in the markets where it holds a Dominant Position and its compliance with its related obligations - sets the following price caps for the retail access services and regulated telephone services:

Retail access services

The cap for OTE's average retail price was set at 13.75 euro (not incl. VAT), for the following fixed access products:

- One off connection fee for PSTN (Public Switched Telephone Network).
- Monthly rental.
- One off connection fee for BRA-ISDN (Basic Rate Access-Integrated Services Digital Network).
- BRA-ISDN monthly rental.

Retail services of publicly available local and long-distance telephone services for fixed telephony

Taking into account the percentage change of the average annual general consumer price index for 2012 (1.5%), the following caps were determined for the publicly available local and national telephone services:

Local calls within OTE's network (on-net).	3.03 eurocents/minute
National calls within OTE's network (on-net).	5.71 eurocents/minute
Dial-up calls by OTE subscribers to the Internet (including the Greek Single Access Number) when the Internet Service Provider (ISP) is hosted by and/or is interconnected to the OTE network.	1.50 eurocents/minute

Note: The above prices do not include VAT.

Retention fee for local calls by OTE subscribers to subscribers of other operators.	2.08 eurocents/minute
Retention fee for national calls by OTE subscribers to subscribers of other operators.	4.00 eurocents/minute
Retention fee for calls by OTE subscribers to subscribers of mobile telephony network operators.	3.79 eurocents/minute
Retention fee for dial-up calls by OTE subscribers to the Internet (when the ISP service operator is hosted by and/or is interconnected to the network of other operators) and are delivered by OTE to a Local Tandem level.	1.34 eurocents/minute
Retention fee for dial-up calls by OTE subscribers to the Internet (when the ISP service operator is hosted by and/or is interconnected to the network of other operators) and are delivered by OTE to a Single Tandem level.	1.66 eurocents/minute
Retention fee for dial-up calls by OTE subscribers to the Internet (when the ISP service operator is hosted by and/or is interconnected to the network of other operators) and are delivered by OTE to a Double Tandem level.	1.91 eurocents/minute

Note: For the above six services, the rate is given per second from the first second of the call, whilst VAT is not included.

46. EETT Decisions no. 482/051/24-06-2008 (GG 1151/B/24-06-2008), no. 562/029/22-04-2010 (GG 668/B/18-05-2010) and no. 573/11/22-07-2010 (GG 1348/B/01-09-2010).

47.https://www.ote.gr/web/guest/corporate/important-info/details/-/asset_publisher/H8pLvwB7jkNd/content/υποδειγματα-αναφορας-lraic-ετους-2013.

6.2.10. Accounting Separation

Fixed Telephony

Pursuant to EETT's decision,[48] OTE specified various matters related with the implementation of accounting separation in those electronic communications market that has SMP. In the context of the 2013 cost accounting audit based on the 2011 actual data and in compliance with EETT's respective decisions,[49] OTE submitted its accounting separation statements for audit and posted the statements and methodology of the accounting separation on its website in April 2013.[50]

Mobile Telephony

In accordance with its decision,[51] EETT proceeded to find common cost allocation keys, so that the information submitted by the mobile telephony network operators in the accounting separation reference models was comparable, whilst it also selected a third party advisor via the relevant procedures. The three operators have completed the accounting separation reference models in a trial format for 2012 according to the proposed methodology and submitted them to EETT. The models shall be the point of reference for determining the methodology and finding common cost allocation keys.

6.2.11. Competition Case Hearings

• VODAFONE vs COSMOTE

The hearing regarding VODAFONE's complaint[52] about COSMOTE infringing the rules of fair competition in the Greek prepaid mobile telephony market and EETT's relevant decision[53] took place on January 29th 2013.[54] The two companies expressed their views in detail on events and information related to the complaint.

In June 2013 and after certain extensions that were granted following relevant requests, COSMOTE and VODAFONE submitted their written statements and answers with respect to the hearing. In July 2013, EETT sent copies of the (non-confidential form) written statements and relevant attachments to the companies, in order to exercise their right for submitting supplementary statement/note. On September 30th, 2013, the procedure for submitting additional written statements by both companies was completed. In February 2014 and in light of its new administration, EETT decided to repeat the hearing, which was rescheduled, following extension requests by the companies for June 2014.

• VODAFONE-WIND Partial Infrastructure Sharing

Pursuant to EETT's relevant decision, VODAFONE and WIND were allowed to mutually share 2G/3G mobile telephony apparatus and infrastructure (network sharing), after the relevant application that was submitted by the two companies. Furthermore, EETT reserved its right to intervene in the event that the aforementioned agreement proves to infringe the electronic communications legislation or limit competition given that it is the first time that there is a similar network sharing agreement (in the form of a RAN Sharing agreement) between competitors in the Greek electronic communications market.

6.2.12. Issue of the Number Portability Regulation

During 2013, number portability increased approximately 18.6% as compared to 2012. Particularly, out of the 1,169,445 total numbers that were ported, 580,077 pertained to fixed telephony numbers (10.2% increase as compared to 2012) and 589,368 pertained to mobile telephony numbers (28.1% increase as compared to 2012). By the end of 2013, a total of 7,437,526 fixed and mobile telephony numbers had been ported. Table 6.3 presents the evolution of the fixed and mobile telephony ported numbers on an annual basis and accumulatively.

These increases, in combination with the decrease in portability applications rejections, as compared to 2012, are attributed to EETT's effective exercise of its monitoring competences during 2013.

48. EETT Decision no. 482/051/26-05-2008, GG 1151/B/24-06-2008.
49. EETT Decisions no. 482/051/24-06-2008 (GG 1151/B/24-06-2008), no. 562/029/22-04-2010 (GG 668/B/18-05-2010) and no. 573/11/22-07-2010 (GG 1348/B/01-09-2010).
50. https://www.ote.gr/documents/10280/7123890/oikonomikes_katastaseis_logistikou_diaxorismou_2011.pdf/0035308e-0288-401f-8440-12401da3ba35
51. EETT Decision no. 660/04B/12-07-2012 "Application of the Accounting Separation obligation by the three Mobile Network Operators (COSMOTE, VODAFONE, WIND) in the context of EETT Decision no. 498/046/15-10-2008, (GG 2260/B/05-11-2008)", GG 2426/B/03-09-2012.
52. EETT Prot. no. 12073/26-03-2012.
53. EETT Decision no. 671/10/08-11-2012.
54. After both companies requested an adjournment.

At the same time in May 2013, EETT conducted[55] a public consultation on amending and codifying in a single text the Number Portability Regulation in order to take into account the views and comments of the interested parties with respect to:
a. The proposed amendments, following those stipulated in L.4146/2013 (which amended article 68 of L.4070/2012 on number portability).
b. Issues that have arisen during the application of the existing regulatory framework with respect to number portability.
In July 2013, EETT issued the new number portability Regulation.[56] The most important changes introduced were the following:

- Certain of the existing reasons for rejecting portability applications, such as rejection due to temporary service disconnection due to financial debits are eliminated.
- The procedure and the amount of compensation to subscribers due to the delayed porting or the abusive porting of their number are set out.
- The time for considering portability applications by the current provider is reduced.
- Procedures are improved based on the gained experience up to date.

EETT, taking into account that its present contract with the company handling the National Reference Database on Number Portability (NRDNP) expires in the beginning of 2014 initiated the procedure for an open public tender in order to find a new contractor to handle the implementation of the new portability procedures, as well as NRDNP operation and management for the next five years. In the context of preparing the tender documents, it carried out a series of meetings with the electronic communications services operators and took note of their comments on the NRDNP technical specifications and the terms of the bidders' financial offer. The tender was completed in the beginning of 2014 resulting in a 50% reduction in the cost paid by operators, a development that is expected to also benefit consumers.

6.2.13. Issue of the International Roaming Regulation

In 2013 international roaming charges continued to decline both at a wholesale level (rates charged between mobile telephony operators) as well as at a retail level (rates charged to international roaming users) due to the implementation of the international roaming Regulation.[57] As of July 1st, 2013 an international roaming services user travelling to one of the EU countries, as well as to Iceland, Lichtenstein or Norway, will be charged at a retail level, as follows:

- Outgoing calls: up to 0.24 euro/minute plus VAT.
- Incoming calls: up to 0.07 euro/minute plus VAT.
- Sending SMS: up to 0.08 per SMS plus VAT.
- Data services use up to 0.45 euro per MB plus VAT.

Furthermore, as of July 1st, 2014 international roaming users will be able to receive services from alternative operators, besides their domestic ones, using the same SIM.
Finally, EETT examines the compliance of mobile telephony operators with the Regulation and monitors the developments on the international roaming market in collaboration with BEREC and the European Commission.

6.2.14. Issue of the [.gr] Domain Names Assignment Regulation

The assignment of Domain Names is increasing steadily. Table 6.4 presents all Domain Names, including sub-domains (com.gr, net.gr, org.gr, edu.gr, gov.gr), whilst Table 6.5 shows the number of assignments compared to applications per month, for the time period January - December 2013. The 2013 average assignment percentage in relation to applications was 74% compared to 66% in 2012. For reasons of comparability between the figures appearing in the Tables of Domain Names assigned and applied for, the time reference set corresponds to the date the application was submitted rather than the date on which EETT reached a decision on assignment/rejection.
It should be noted that almost all applications were examined through an automated process (358,815 out of a total of 358,924 applications) thus allowing for EETT to significantly reduce the waiting time for assigning a Domain Name. Moreover, the Regulator, within 2013, inspected the companies registering Domain Names in order to make certain that they are complying with their obligations towards both EETT and the registrants. Specifically, 48 inspections were carried out on com-

55. EETT Decision no. 689/47/29-04-2013 "Public consultation on the amendment and codification of the Regulation on number portability in the Greek Market into a single text".
56. EETT Decision no. 696/115/11-07-2013 "Amendment and codification of the Regulation on number portability in the Greek Market into a single text," GG 1873/B/31-07-2013.
57. Regulation (EU) no 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the EU. (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:172:0010:01:EL:HTML).

Table 6.3: Evolution of Fixed and Mobile Telephony Ported Numbers (2004-2013)						
Year	Mobile telephony		Fixed Telephony		Total	
	Numbers	Accumulatively	Numbers	Accumulatively	Numbers	Accumulatively
2004*	16,123	16,123	1,156	1,156	17,279	17,279
2005	49,641	65,764	27,403	28,559	77,044	94,323
2006	117,767	183,531	44,798	73,357	162,565	256,888
2007	358,517	542,048	300,909	374,266	659,426	916,314
2008	362,601	904,649	562,961	937,227	925,562	1,841,876
2009	486,815	1,391,464	544,039	1,481,266	1,030,854	2,872,730
2010	648,074	2,039,538	631,611	2,112,877	1,279,685	4,152,415
2011	506,413	2,545,951	622,834	2,735,711	1,129,247	5,281,662
2012	459,941	3,005,892	526,478	3,262,189	986,419	6,268,081
2013	589,368	3,595,260	580,077	3,842,266	1,169,445	7,437,526

** Pertains to data as of 01-03-2004, at which time the NRDNP was launched, which is the special database used in facilitating the implementation of number portability in Greece.*

panies registering domain names, without finding any important infringements.

It should be noted that in June 2013, EETT issued a new Regulation on the Management and Assignment of [.gr] Domain Names,[58] which simplifies the legal documents required for submitting a registrar's notification, whilst EETT permits non EU persons as well to submit a registrar's notification.

6.2.15. National Numbering Plan

Following the public consultation held in October 2012, EETT amended[59] the Regulation for managing and assigning Numbering Resources of the National Numbering Plan (NNP). Moreover, EETT amended[60] the procedure for assigning portability prefixes, taking into account the scarcity of numbering resources, the need for the optimum management of portability prefixes and the results of the public consultation held in the context of amending the Portability Regulation.

6.3. EETT's Monitoring and Supervisory Actions in Electronic Communications Market

6.3.1. Inspections over the Implementation of the Code of Practice and General Authorisation Regulation

During 2013, EETT conducted extensive inspections on operators concerning their compliance with their obligations towards consumers stemming from the Code of Practice and the General License Code. In total, 240 on-site investigations were carried out at points of sale (stores) of fixed telephony, mobile telephony and Internet services providers within Attica.

The purpose of the inspections was to ascertain the degree to which the providers' personnel that comes into contact with consumers in order to promote or sell services and to serve them, is adequately informed and respectively provide information to consumers in an accurate and clear manner:

58. EETT Decision no. 693/09/04-06-2013, GG Issue 1564/B/21-06-2013.
59. EETT Decision no. 677/03/08-01-2013 "Amendment and codification of EETT Decision no. 441/121/21-06-2007 "Regulation on the Management and Assignment of Numbering Resources of the National Numbering Plan"" GG 170/B/31-01-2013.
60. EETT Decision no. 698/24/25-07-2013, "Amendment of EETT Decision no. 677/03/08-01-2013 "Amendment and codification of EETT Decision no. 441/121/21-06-2007 "Regulation on the Management and Assignment of Numbering Resources of the National Numbering Plan"" (GG 170/B/31-01-2013), as in effect", GG 2233/B/10-09-2013.

- On the terms of a contract, the features of the provided services, the charges and the users' rights prior to the contract being signed.
- On issues such as reporting failures, the procedure for submitting a complaint or an allegation, the charges for calls to customer care short codes, billing information and the Code of Practice.

Following these inspections and in cases of infringements of the Code of Practice and the General License Regulation, EETT called upon the operators to comply. Operators, inter alia, were obliged to increase the size of their font in their contracts making them easier to read by consumers and improving the application submission procedure for cancelling a portability request. Moreover, the store personnel was informed about providing a form for submitting an application along with the relevant deadline, as well as the obligation to give the consumer a receipt.

In addition, EETT inspected the operators listed on its Registry in order to update it. Specifically, 213 inspections on operators were made at their reported address/headquarters and 45 via the web service of the General Secretariat of Information Systems. The result was the removal of 213 ope-

Table 6.4: Number of Assigned [.gr] Domain Names (2007-2013)

	2007	2008	2009	2010	2011	2012	2013
.gr	194,307	239,623	283,643	318,852	351,307	372,757	397,360
.com.gr	8,283	10,142	12,029	13,169	14,041	15,030	15,933
.net.gr	749	841	895	852	855	1014	1165
.org.gr	413	533	599	590	638	733	797
.edu.gr	631	746	902	1016	1131	1266	1392
.gov.gr	105	473	605	651	673	689	684
Total	**204,488**	**252,358**	**298,673**	**335,130**	**368,645**	**391,489**	**417,331**

Table 6.5: Number of Assigned [.gr] Domain Names compared to Applications (2013)

Months	Applications	Assignments	Rejections
January	16,471	9,349	7,122
February	22,446	8,466	13,980
March	42,872	7,771	35,101
April	14,643	8,433	6,210
May	25,256	9,669	15,587
June	22,724	10,970	11,754
July	20,324	8,019	12,305
August	18,356	4,612	13,744
September	26,330	6,381	19,949
October	33,004	7,186	25,818
November	55,263	7,080	48,183
December	61,235	6,023	55,212
Total	**358,924**	**93,959**	**264,965**

rators from the Registry, as it was impossible to contact them and they had not submitted a statement amending their address.

6.3.2. On-site Inspections at Local Exchanges and Infrastructures of OTE

In the framework of its supervisory and monitoring role, EETT conducts on-site technical inspections in order to ascertain OTE's compliance with the procedure for delivering and receiving Inactive Local Loops (ILL) and failure handling concerning other operators. Specifically, within 2013, 17 on-site inspections were performed at the L/E of OTE in the areas of Pedion tou Areos, Ilion, Ilissos, Patisia, P. Faliro (Kalamaki), Peristeri and Holargos. EETT's inspection teams visited, besides OTE's L/E, its respective subscriber network terminals as well. Measurements were taken at the subscriber end, as well as at OTE's L/E, in the physical collocation (PC) of the operator.
Based on the results, EETT is able to determine whether a failure should be attributed to OTE or to the operator. Also, in each case, EETT checks whether the loop was delivered to the operator in a full operation mode and assesses the implementation of the failure management and local loop delivery procedures, so that it can take appropriate actions in order to ascertain the operator's compliance with their obligations. In this way, EETT's inspections ensure not only the competition in the fixed broadband access market but also the scope and quality of broadband service options for the benefit of consumers.

6.3.3. VDSL Infrastructure Inspections

EETT continued its inspections on the responsible operator's (OTE) VDSL infrastructure (street cabinets and new generation access cabinets) by using special measuring apparatus[61] in order to ascertain the compliance with the Access Network Frequency Plan.[62] Moreover, the inspections were extended to include other operators (CYTA, FORTHNET, HELLAS ON LINE, WIND) as well. During this procedure, information was gathered on:

- Active apparatus for providing broadband services via xDSL that is installed by operators in major L/Es (e.g., Peristeri, Halandri).
- The levels of the total infused power that needs to be within the applicable limits.

6.3.4. Inspections on the Implementation of the Number Portability Regulation

Within 2013, EETT carried out a series of systematic on-site inspections of the facilities of fixed and mobile telephony operators in order to ascertain the implementation of the Number Portability Regulation. The main focus of those inspections was the rejection of subscribers' portability applications by the current operators and particularly the justification of those rejections in a random sample of portability applications.[63]
According to the results, most of the checked portability applications were rejected in violation of the Regulation, as the justification provided by the companies was poor. Therefore, EETT summoned CYTA, FORTHNET, HELLAS ON LINE, ON TELECOMS, OTE and WIND to a hearing to investigate this specific matter. The hearings are expected to be conducted in the beginning of 2014.
EETT's systematic on-site investigations resulted in the gradual reduction of such infringements by the fixed and mobile telephony operators which is confirmed by the respective reduction of the number portability rejections during 2013.

6.3.5. Controls on Premium Rate Services (PRS)

Consumer protection from unfair or illegal practices related to Premium Rate Services (PRS) was a top priority for EETT in 2013. To this end, systematic inspections of operators were performed and at the same time information was provided and issues reported by PRS consumers were addressed.
The increasing use of (terminal) devices that allow for the provision of wireless or wired broadband services (smartphones, tablets, etc.) makes it imperative for EETT to continuously supervise the market for the smooth operation of PRS.
Specifically, the inspections conducted by EETT in order to ascertain PRS operator compliance with the provisions of the relevant Code of Practice, resulted, inter alia, in:

- Revoking the right to provide electronic communications under a General License and use numbering resources, from a company that provided PRS through two short codes of the 54XXX series, following a hearing. Details with respect to the specific case have already been described in section 5.2.

61. The equipment enables the measurement of power spectral density in active loops and is passively connected to the loop without in any way affecting the broadband service provided to the end user for the duration of the measurements.
62. EETT Decision no. 636/37/19-01-2012, GG 729/B/13-03-2012.
63. Reasons for rejection are specific and are strictly specified in the Number Portability Regulation (e.g. the Tax Registration Number (TRN) of the subscriber requesting number portability is different than the TRN of the holder of the number in the current operator).

- Imposing a fine on a company, which provided PRS services through a short code of the 54XXX series, following a hearing.

EETT was particularly attentive to PRS operators' compliance with their obligations during promotional or advertising activities. In this context, informational letters were sent to the media and issues related to PRS operators were investigated pursuant to either complaints or ex officio audits conducted by EETT. Moreover, great attention was given to the illegal promotional and/or advertising activities related to PRS, which appear on illegal TV programs.

Additionally, EETT:

- Sent letters to PRS operators, with the purpose of ensuring better compliance with the EETT's Code of Practice.
- Urged PRS operators on the one hand to facilitate the provision of new innovative services and on the other hand to encourage further collaboration between all interested parties and especially among operators, aiming at the effective regulation of the sector.
- Continues to participate and assist at meetings or actions related to PRS on a European and international level.

6.3.6. Inspections at Companies Registering Domain Names with respect to their Management and Assignment of [.gr] Domain Names

During 2013, EETT carried out inspections in order to ensure the compliance of the registrars with their obligations towards both EETT and the registrants, in the context of implementing the new Regulation on the Management and Assignment of [.gr] Domain Names.[64] Specifically 48 inspections of registrars were carried out without finding important infringements.

6.3.7. Hearings on Local Loop Unbundling Issues

With respect to LLU, EETT held the following hearings (in chronological order), in order to investigate legally:

- The dispute resolution request by FORTHNET, on the subject of defining the amount and conditions for OTE imposing a fee for a crew's unnecessary visit on FORTHNET.[65]
- The complaint of ON TELECOMS[66] against OTE for infringing provisions of the LLU Reference Offer during the local loop failure restoration process and especially the illegal charges for the unnecessary visit of OTE technicians.[67] EETT imposed a fine of 96,300 euro[68] on OTE.
- CYTA's complaint for infringments of the applicable electronic communications legislation by OTE and in particular the Access Network Frequency Plan. EETT imposed a fine of 100,000 euro[69] on OTE.
- The complaint of FORTHNET[70] against OTE for infringing provisions of the LLU Reference Offer and charging fees for the unnecessary visit of OTE technicians. EETT imposed a fine of 149,200 euros[71] on OTE.
- The complaint of FORTHNET[72] with respect to OTE rejecting its requests for providing a local loop, on the justification of "lack of local loop copper cable". EETT issued a preliminary ruling[73] requesting the submission of critical information in order to complete the case file.
- The complaint of FORTHNET[74] against OTE for infringing provisions of the LLU Reference Offer during the local loop failure restoration process and especially the illegal charges for the unnenecessary visit of OTE technicians.[75] EETT imposed a fine of 331,600 euro[76] on OTE.
- The complaint of FORTHNET[77] against OTE for infringing provisions of the LLU Reference Offer and especially the obligation to give advance notification about the time that OTE technicians will visit and restore the local loop failure (repeated infringement). EETT imposed a fine of 125,000 euro[78] on OTE.
- The complaint of CYTA[79] with respect to OTE rejecting its requests for providing a local loop, on the justification of "lack of local loop copper cable". EETT issued a preliminary ruling[80] requesting the submission of critical information in order to complete the case file.
- The complaint of WIND[81] against OTE for infringing provisions of the LLU Reference Offer during the local loop failure restoration process and especially the illegal charges for the

64. EETT Decision no. 693/09/04-06-2013, GG 1564/B/21-06-2013.
65. EETT Decision no. 690/021/14-02-2013.
66. Prot. no. 5039/08-02-2010.
67. According to EETT Decision no. 600/47/14-04-2011 (imposing fees for technicians' unnecessary trips out to restore failures of local loops).
68. EETT Decision 684/31/01-03-2013.
69. EETT Decision 690/22/14-05-2013.
70. Prot. no. 35572/14-09-2011.
71. EETT Decision no. 692/36/30-05-2013.
72. Prot. no. 42998/08-11-2011.
73. EETT Decision no. 695/061/27-06-2013.
74. Prot. no. 42998/08-11-2011.
75. According to EETT Decision no. 600/47/14-04-2011 (imposing fees for technicians' unnecessary visits out to restore failures of local loops).
76. EETT Decision no. 695/60/27-06-2013.
77. Prot. no. 37772/11-10-2012.
78. EETT Decision no. 695/62/27-06-2013.
79. Prot. no. 47139/07-12-2011.
80. EETT Decision no. 697/058/18-07-2013.
81. Prot. no. 30341/20-07-2010.

unnecessary visit of OTE technicians.[82] EETT imposed a fine of 624,200 euro[83] on OTE.

- The complaint of HELLAS ON LINE and the reports of CYTA, FORTHNET and WIND against OTE for infringing legislation on electronic communications and fair competition, particularly with respect to delays in delivering the local loop and the respective failure handling. EETT imposed a fine[84] of 1,000,000 euro (300,000 euro for infringements detected with respect to electronic communications legislation and 700,000 euro for infringements detected with respect to free competition legislation) on OTE.

Finally, EETT issued a decision[85] with respect to a hearing of CYTA and OTE that was held in December 2012, in order to investigate legally any infringements of the applicable electronic communications legislation[86] by the latter and imposed a fine of 125,000 euro on OTE.

6.3.8. Hearings on Electronic Communications (overview)

In the course of 2013, EETT conducted 80 hearings regarding infringements of electronic communications or competition law in relation to market operation. As a result of these hearings, 15 fines were imposed.

Table 6.6: Monitoring and Supevisory Actions in the Electronic Communications Market (2013)

Subject	Number of Hearings	Fines	Recommendations	Other Sanctions/ Decisions
Numbering/Premium Rate Services	10	1	4	5
Local Loop Unbundling	12	9	1	3
Interconnection	4	-	-	4
Domain Names	41	-	-	41
Competition	1	1	-	-
Other	12	4	1	7
Total	**80**	**15**	**6**	**60**

82. According to EETT Decision no. 600/47/14-04-2011 (imposing fees for technicians' unnecessary visits to restore failures of local loops).
83. EETT Decision no. 700/16/29-08-2013.
84. EETT Decision no. 700/019/29-08-2013.
85. EETT Decision no. 699/094/27-08-2013.
86. Specifically EETT Decision no. 573/015/22-07-2010 "Approval of the 2010 OTE Reference Offer for Local Loop Unbundling and Related Facilities, pursuant to EETT Decision 531/065/23-07-2009 (GG 1550/B/28-07-2009) as amended and in effect", GG 1338/B/31-08-2010.

Administration Executive Summary Annual Financial Report Internal Organisation Management of National Resources Focusing on Consumers Electronic Communications Sector Analysis

Radiofrequency Spectrum Sector Analysis

Postal Services Sector Analysis Strong International Presence Action Plan for 2014 Appendix

7. Radiofrequency Spectrum Sector Analysis

As regards the radiofrequency spectrum sector, EETT improved the Electronic System for the Antenna Construction Application Submission (SILYA), developed the System for Measuring and Presenting the Electronic Communications Indicators, upgraded the Radiofrequency Spectrum Management Information System and granted or amended a large number of rights to use radiofrequencies for fixed, mobile and satellite service, as well as rights of use in television stations. All of the Regulator's actions in the radiofrequency spectrum sector throughout the year, are discussed in the following sections.

7.1. Spectrum Management and Monitoring

7.1.1. "Digital Convergence" Operational Program Projects (NSRF 2007-2013)

In line with the "Digital Convergence" Operational Program and specifically the target for further disclosure in electronic services for the benefit of the citizen, co-financing has been approved for two projects in the Spectrum Directorate. An outline of these projects and their state of play are presented below.

Radiofrequency Spectrum Management Information System with an incorporated Electronic Request Submission System Platform

In 2013, EETT launched an open international tender for the procurement of a new Spectrum Management System aiming to:

- Improve service to companies through the electronic submission and processing of requests for granting radiofrequency rights of use and antenna construction licenses.
- Provide access to the public services/agencies that the involved in the antenna construction license granting procedure.
- Automate EETT's Spectrum Directorate's operational processes.
- Provide reliable and transparent information on the geographical locations of the antenna constructions for electronic communications wireless networks.

The adoption and use of the new Spectrum Management Information System is expected to greatly improve the Regulator's operational capacity, permitting more effective management of the National Radiofrequencies Registry, optimum use of the radiofrequencies spectrum and faster granting of radiofrequencies right of use and antenna construction licenses. The tender was declared barren and will be relaunched in 2014.

System for Measuring and Presenting the Electronic Communications Quality Indicators

Following a relevant consultation, EETT launched an international tender in July 2013 for the "System for Measuring and Presenting the Electronic Communications Quality Indicators." The purpose was to develop a web platform that will enable (fixed and mobile) telecommunication system users or investors to obtain in a valid and objective manner comparable information on (fixed and mobile) network quality in Greece, as well the quality of telecommunication services delivered. The project is co-financed by the Operational Program "Digital Convergence" of the NSRF, the European Regional Development Fund (EU participation) and national funding (national participation).

Information will come from different sources depending on the technology of the telecommunications network. The quality indicators provided through the project have been chosen after public consultation and are included in EETT's respective Regulation[87]. Indicators are classified into three main categories: (a) indicators for the quality of fixed communications system services, (b) indicators for the quality of mobile communications system services and (c) indicators for the quality of consumer service and directory enquiries.

The information system will support the storage and presentation of results through two mechanisms:

- Measurements carried out by EETT on mobile communications systems with tools acquired in the framework of the project.
- Measurements by fixed communications services system operators on consumer ser-

87. EETT Decision no. 621/011/27-09-2011 "Amendment and codification of EETT Decision no. 480/017/13-05-2008 "Designation of the quality indicators for the electronic communications services provided to the public and determination of the content and the form of the information for publication, as well as the manner and time of its publication by the electronic communications services operators (GG 1153/B/2008)", GG 2417/B/01-11-2011.

vices and directory enquiries, in accordance with the methodology indicated by EETT in the Regulation on Quality Indicators.

The system will be designed to depict results in a comprehensible manner, even for users that are not so well acquainted, as well as the option to search for information based on various quality indicator categories, geographical regions and time periods.

The implementation of the project is expected to contribute in:

- Providing the end user with the possibility to (a) compare and choose an operator on the basis of quality characteristics, as well as (b) assess the services of the users' current operator.
- Reinforcing competition between electronic communications providers aiming at improved quality of services delivered, availability and geographic coverage of their networks.
- Increasing the available information on EETT.

The tender is currently in the bid evaluation phase and is expected to be completed by spring 2014, in a total duration of 15 months.

7.1.2. Fixed Service

Fixed Service includes wireless electronic communications networks between specified fixed locations which: (a) provide electronic communications services to the public and (b) cover own telecommunication needs.

Radio links of Fixed Service are widely used, on the one hand by mobile communications networks operators to support their infrastructure and on the other hand by fixed telephony and Internet and data service providers for the wireless interconnection of their networks, mainly in areas where it is not easy to build a wired network (copper or fibre optics). Moreover, they are used by radio and television stations for broadcasting from the location of program production to the transmission centre.

In the majority of cases, granting of a relevant radiofrequency right of use is needed before operating these networks. During 2013, the following were granted:

- 818 new radiofrequency rights of use for two-way point-to-point links, concerning mainly backbone networks of electronic communications service providers.
- 320 amendments of radiofrequency rights of use for two-way point-to-point links, concerning backbone networks of electronic communications service providers.
- 32 radiofrequency rights of use for serving own electronic communications needs, mainly for the transfer of radio or television programs from the production point (studio) to the transmission centre.

In addition, during the year a new radiofrequency right of use was granted in the 28GHz band in the Attica Prefecture to develop electronic communications networks and services.

In 2013, in the framework of the Fixed Service, EETT took action to tackle increasing problems in the availability of many frequency bands, particularly in large cities, due to widespread use of Adaptive Modulation equipment in combination with a large number of schemes [e.g., 256-QAM (Quadrature Amplitude Modulation)]. These actions included recording the problem (description, identification of cases with serious problems, both in terms of frequencies and from a geographical standpoint), putting forth alternatives and proposals based on official reports and contact with operators in order to discuss their views. EETT's final proposal in this matter, has been put to public consultation in the context of the future review of the Regulation on the Terms of Use of Individual Radiofrequencies or Radiofrequency Bands. The public consultation ended on February 27th, 2014, whilst the Regulation review will be completed towards the end of March 2014.

With regard to legality checks and interference problems in Fixed Service systems, EETT received a total of 39 complaints:

- 20 for legality checks and interference problems in wireless access systems (Wi-Fi and Wi-MAX),
- 16 for legality checks of radio links and
- three for interference inspections in licensed radio links.

Additionally, following ex officio inspections conducted by EETT's Regional Offices (ROs) (in Thessaloniki, Patras and Heraklion) in areas within their jurisdiction, 52 non licensed radio link transmissions concerning radiotelevision station signals were verified in frequency bands that have been allocated either to GSM/DCS/UMTS mobile telephony services, or for the development of defence systems and aeronautical radionavigation. Following the inspections, recommendations were made to those stations, in order to discontinue the operation of the said radio links and to apply for rights of use radiofrequencies.

7.1.3. Satellite Services

The installation and operation of terrestrial satellite stations requires national and international co-

ordination with existing mobile and satellite service networks in order to avoid interference, as well as to ensure that safe distances are kept from airport runways.

In this framework, in 2013:

- Four new rights for use of radiofrequencies were granted to terrestrial satellite stations. In a couple of cases, international coordination was required, in compliance with the procedures set by the International Telecommunication Union (ITU).
- An existing right for use of radiofrequencies for a terrestrial satellite station was amended.

During 2013, EETT was notified of interference problems concerning the satellite system for Soil Moisture and Ocean Salinity (SMOS) of the European Space Agency (ESA), from terrestrial signals broadcasting in the 1400-1427MHz band. After conducting research, the problem was attributed to terrestrial fixed service radiolinks, as well as spurious emissions. EETT resolved the aforementioned problems immediately, ensuring the uninterrupted operation of the SMOS system.

During 2013, there were two more complaints about interference related to the Hellenic Positioning System (HEPOS), which provides positioning services – based on the global satellite positioning system (GPS)- and is extensively used for the National Cadastre, as well as by a multitude of professionals in the field of earth sciences. One complaint concerned the Andravida station, situated in the prefecture of Ilia and the second concerned the Kleitoria station in the prefecture of Ahaia. EETT immediately took the appropriate actions to resolve the above problems ensuring the uninterrupted operation of the HEPOS system.

7.1.4. Mobile Service

Mobile Telephony Networks

Mobile telephony networks are wireless digital sound and data transfer systems, which use cellular technology (GSM/DCS/UMTS/LTE), whose operation requires the granting of rights of use radiofrequencies.

In 2013, EETT received 138 complaints related to interference in reception frequencies of base stations that communicate with mobile telephones. To investigate the said complaints, the Regulator used its fixed and mobile monitoring stations. The order of priority was based on their importance to the smooth operation of the mobile telephony networks. All problems were investigated and resolved. The main sources of interference were:

- Fixed telephony wireless DECT 6.0 (Digital Enhanced Cordless Telecommunications) devices.
- Spurious emissions from fixed telephony wireless DECT devices.
- Mobile telephony repeaters.
- Systems preventing the use of mobile telephones ("Jammers").
- Radio link systems for sound, image and/or data transmission.
- Spurious emissions from radiotelevision broadcasting systems.
- Spurious emissions from television signal amplifier systems.
- Wireless alarm systems.

It should be noted that DECT 6.0 technology is used outside the EU and requires the use of 1920-1930MHz frequency band, which the EU uses for mobile telephony services. The harmonized band, which is foreseen for DECT wireless telephony in Europe, is exclusively the 1880-1900MHz band. Moreover, the above devices do not have the "CE" mark and therefore according to the Presidential Decree (PD) 44/2002 they cannot be sold or operated in the European market. All the illegal devices had been bought outside the EU, whilst from market controls no DECT 6.0 devices were found to be sold in the domestic market.

Monitoring the Fulfilment of Mobile Telephony Operators' Obligations

The owners of radiofrequency rights of use for mobile service are required to submit a six-month report to EETT on network expansion. These reports include data on the terms of the relevant rights of use, such as the percentage of radio coverage (geographical and demographic) that the provider must fulfil, the quality specifications for the provision of the services network, the development of a network within this semester, as well as technical information on the radio network, the transmission network and the switching network. In 2013, EETT examined the network expansion reports that mobile operators submitted in the second half of 2012 and the first half of 2013. With regard to the key parameter of radio coverage, the reports demonstrated that all mobile telephony operators have fulfilled their obligations with respect to both 2nd (2G) and 3rd generation (3G) networks.

Private Mobile Radio Networks

Private Mobile Radio (PMR) Networks are used to meet the communication requirements of

various professional users group such as radio taxi companies, security service providers, search and rescue volunteer groups, as well as forest protection volunteer groups etc. EETT grants radiofrequency rights of use, mostly in VHF and UHF bands. These rights pertain to networks of broad or limited areas for which EETT receives the corresponding fee. According to the L.4070/2012, the installation and operation of special radionetworks is subject to a General Authorisation, but no longer requires a notice of registration at EETT's registry of electronic communications networks and service providers.

In 2013, EETT issued 154 decisions, 53 concerning new rights or the amendment of existing rights, 18 revoking of existing rights upon the request of their owners, 12 granting of temporary rights for covering events and 71 revoking of existing rights due to overdue debts to EETT.

During 2013, EETT received 41 complaints about interferences related to private mobile radio networks of radio taxis, municipalities and private companies. The majority of the problems were caused by the use of non authorized fixed and mobile service frequencies, as well as spurious emissions. In addition, 18 complaints were submitted concerning interference in remote control systems and electronic devices at home, as well as the legality of radio network antenna systems. EETT performed a technical inspection in all cases and resolved the problems.

7.1.5. Ancillary Services to Broadcasting and Program Making

Examples of such services are the broadcasting of a radio television program from the production point to the transmission network, the coverage of sports events, outdoor performances or other special events and "live" interconnection to cover a newsworthy event. Radio equipment, such as wireless cameras and microphones, as well as portable microwave links, is required for the coverage of these events. EETT grants permanent radiofrequency rights of use to meet the needs of radio or television stations (signal transmission links) or temporary radiofrequency rights of use to cover scheduled events with a maximum duration of two months.

In 2013, following relevant requests, temporary radiofrequency rights of use were granted to five satellite news stations. These mainly concerned portable satellite stations for image and sound transmission by international users for TV coverage of sports events. Moreover, following the relevant applications, in the framework of covering the Champions League 2013 qualifiers, temporary rights of use were granted for private mobile radio networks, wireless microphones and sound return systems.

7.1.6. Radio and Television

Granting Rights of Use to Television Stations

Since 2007, EETT has been responsible for monitoring the radio television spectrum and for granting radiofrequency rights of use to analog national television stations, at locations not declared to the Greek National Council for Radio and Television (NCRTV)[88,89], and analog local and regional television stations[90] upon application by the interested party. The competence of granting rights of use is temporary and ends upon the entry into force of the Frequency Maps for analog and/or digital television[91]. In 2013, EETT with regard to the implementation of the aforementioned:

- Updated its database, maintained since 2008, in which all the broadcasts of legally operating national, regional and local television stations are registered. This database now includes over 5,522 registrations.
- Received[92] 31 new applications by television stations for granting rights of use to new broadcasting sites. Moreover, 30 rights of use for television channels have been granted in response to the relevant requests submitted, while 13 applications were not processed because granting the requested broadcast sites does not fall within the scope of L.3548/2007. In addition, 22 requests were rejected on grounds of interference with licensed television stations, or with the then Greek Radio Television (ERT), or with a digital broadcasting television network. In addition, EETT renewed 10 rights of use for television channels.
- EETT received seven notification letters by terrestrial digital broadband network providers regarding digital broadcasting in the

88. As set forth in article 9 of L.3548/2007 "Publication of announcements of Government agencies in the prefectural and local Press and other provisions."
89. According to the provisions of article 4 of L.1866/1989.
90. That fulfil the terms and conditions of article 17 of L.2644/1998.
91. With the publication of Joint Ministerial Decisions by the Minister of Infrastructure, Transport and Networks and the Minister who has been assigned the responsibilities of the Minister for the Press and the Media.
92. In the context of the implementation of the "Regulation on granting channel rights of use to national television stations holding a license of establishment and operation according to the provisions of article 4 of L.1866/1989 and to regional and local television stations fulfilling the terms and conditions of article 17 of L.2644/1998 and the framework of their use pursuant to L.3548/2007."

respective television channels. It should be noted that before starting their digital transmission, national, regional or local television stations are obliged[93] to submit to EETT the technical parameters of this transmission as well as specifications about the power volume and the antenna system used.

- EETT gave its opinion[94] on the amendment to Joint Ministerial Decision (JMD) 21161/12-08-2008[95], pertaining to the addition of the "Parnitha" transmission centre to the existing single frequency network of Attica.

Complaints

As regards radiotelevision monitoring, in 2013, EETT received 1,163 complaints related to interferences, illegal broadcasts and illegal radiotelevision station and antenna installations.

Thereafter, a total of 972 complaints were examined, out of which 247 concerned Attica, 14 the rest of Greece, three international interferences, 192 cases the broader area of the Athens headquarters' jurisdiction, 385 the RO of Thessaloniki, 55 the RO of Patras and 76 the RO of Heraklion.

From these complaints and EETT's ex officio inspections and documentation, 724 new cases have emerged. Specifically:

- 389 concerned radio station issues: 36 in the Attica prefecture, 55 in the Thessaloniki prefecture, 48 within the jurisdiction of the Athens office, 190 within the jurisdiction of the RO of Thessaloniki, 31 within the jurisdiction of the RO of Patras and 19 within the jurisdiction of the RO of Heraklion. In addition, four cases concerned international interferences and six concerned interferences within Greece.
- 265 concerned TV station issues: 63 in the Attica prefecture, 46 in the Thessaloniki prefecture, 35 within the jurisdiction of the Athens office, 75 within the jurisdiction of the RO of Thessaloniki, 25 within the jurisdiction of the RO of Patras and 16 within the jurisdiction of the RO of Heraklion. In addition, two cases concerned international interferences and three concerned countrywide interferences.
- 70 concerned inspections of antennas and broadcasting centres: 24 in the Attica prefecture, six in the Thessaloniki prefecture, 10 within the jurisdiction of the Athens office, 13 within the jurisdiction of the RO of Thessaloniki, 15 within the jurisdiction of the RO of Patras and two within the jurisdiction of the RO of Heraklion.

EETT investigated the majority of the above complaints, sending a team of technicians on the spot with the necessary equipment, whilst the assistance of the local authorities was requested when deemed necessary. The results were evaluated on the basis of the decisions and the technical data provided by the NCRTV, whilst stations in violation were called upon to comply.

Upon relevant letters of compliance being sent, the following cases were subjected to administrative control:

- 31 illegal occupations of analog television channels in the jurisdiction of Athens, 24 in the jurisdiction of the RO of Thessaloniki, 16 in the jurisdiction of the RO of Patras and 17 in the jurisdiction of the RO of Heraklion.
- three illegal occupations of digital repeaters in the jurisdiction of Athens and two in the jurisdiction of the RO of Patras.

Out of these channels, 28 analog repeaters in the jurisdiction of Athens, four within the jurisdiction of the RO of Thessaloniki and 17 in the jurisdiction of the RO of Patras, as well as three digital repeaters within the jurisdiction of the office of Athens have been verified as having been established and operated by local authorities and one digital terrestrial television program transmission network provider. Additionally, a digital repeater with illegal content was found in the jurisdiction of the RO of Patras.

Moreover, the following cases were also subject to administrative control by EETT:

- 36 (21 radio and 15 for antennas) within the jurisdiction of the office of Athens.
- 55 (32 radio and 23 for antennas) within the jurisdiction of the RO of Thessaloniki.
- 26 (25 radio and one for antennas) within the jurisdiction of the RO of Patras.
- five radio in the jurisdiction of the RO of Heraklion.

In six cases of radiotelevision stations (one of which concerned digital broadcasting) falling within the jurisdiction of Athens, 28 cases within the jurisdiction of the RO of Thessaloniki, three cases within the jurisdiction of the RO of Heraklion and eight cases within the jurisdiction of the RO of Patras - for which the NCRTV verified that they were operating illegally - EETT notified in writing the competent public prosecutors and police authorities about the implementation of the prescribed criminal procedures.

93. As set forth in L.3592/2007, "Merger and licensing of media businesses and other provisions", GG 161/A/19-07-2007.
94. EETT Decision no. 686/05/26-03-2013.
95. Joint Ministerial Decision no. 21161/12-08-2008 of the Ministers of Transport and Communications and State "Creating the Frequencies Map for the switch over to digital television broadband", GG 1680/B/20-08-2008.

In cooperation with the competent prosecutors and the police authorities, 51 operations were carried out to terminate illegal transmissions. During those operations broadcasting equipment was confiscated from:

- Four radio, two analog and three digital television broadcasts, as well as a wireless camera in Attica.
- Six radio, five analog and four digital television broadcasts in the jurisdiction of Athens.
- Eight radio, one analog and one digital television broadcasts in the jurisdiction of the RO of Heraklion.
- 12 radio and one analog television broadcasts in the jurisdiction of the RO of Thessaloniki.
- Two radio and one digital television broadcasts in the jurisdiction of the RO of Patras.

Recording of the Radio and Television Stations throughout Greece

In the absence of licensing, mapping the broadcasting centres throughout the country, as well as the frequencies used by radio and television stations, is a critical tool for the management and monitoring of the radiotelevision spectrum.

In 2013, EETT's technical teams conducted 57 operations outside Attica, 52 outside Thessaloniki, 44 outside Patras and proceeded to conduct registrations in 28 prefectures and islands overall. The results were reported to the NCRTV, which is the competent Regulatory Authority for investigating the legal operation of the radiotelevision stations. Based on recorded findings, the number of privately owned radio stations operating in each prefecture is on average three to four times higher than the number of broadcasts stipulated in the Frequency Maps. This means an increased risk of interference to legal spectrum users, as well as a corresponding deterioration in service quality.

In addition to the aforementioned controls, EETT continued updating the map of radiotelevision broadcast infrastructures in broadcasting centres throughout Greece. The purpose of this update was to notify EETT and all competent bodies regarding the state of play in the broadcasting centres both in Athens and Thessaloniki, as well as in other major broadcasting centres. Thus, EETT will be able to deal with the problems caused by illegal broadcasts in a more direct and effective manner. In the same context, in border areas, EETT continued to record the broadcasts from neighbouring countries and notified the Ministry of Infrastructure, Transport and Networks regarding the findings in order to undertake action at international level.

EETT, continued to co-operate with the involved public agencies in an attempt to tackle once and for all the issue of illegal radiotelevision broadcasting stations infrastructures in the area of Pirovolia of Mount Egaleo, on Mount Pikilo, on Mount Hymettus and in the area of Tourkovounia. With the final analog television signal switch off, EETT in collaboration with operating television stations, fully recorded the facilities for television transmission at Petalidi in Messinia, Rogdia in Heraklion and Malaxa in Chania. Afterwards, it attended to the removal of any television station installations that were no longer used for legal broadcasting. The relevant procedure was completed in 2013 with the removal of all the antenna systems not used for digital television transmission, whilst in 2014, the corresponding procedure will be completed for the transmission site in Chortiatis, Thessaloniki.

7.1.7. State Services Networks

The smooth operation of wireless networks that are related to the protection of human life, as well as public and national safety is a top priority for EETT. This category includes the state networks of emergency services –Hellenic Police (ELAS), the Hellenic Fire Service and the National First Aid Service (EKAV)– of the transport safety networks (air navigation, sea navigation and railways), as well as of the Armed Forces.

Among the state networks, the Civil Aviation Authority (CAA) faces the most problems, as the spectrum that has been granted to the air navigation networks (108-137MHz) is contiguous with the radio broadcast band (87.5–108MHz). Most of the interferences appearing in these networks are due to the lack of technical specifications both with respect to operation frequency and other important broadcasting parameters, which in turn is due to the absence of licensing for radio stations. In 2013, interference problems were encountered in the following wireless systems of the CAA: (a) area control service communication systems (telecommunication centres), (b) airport communication systems and (c) radio aids.

EETT carried out 43 operations to deal with written complaints regarding interferences in the wireless systems of CAA. Out of these complaints, 40 were related to terrestrial communication receivers, whereas three were related to radio aids. EETT acted promptly and resolved all cases of interference related to terrestrial communication receivers and radio aids. It is noted that the interference problems of the CAA are

expected to be limited only when countrywide licensing of radio stations is implemented and regional planning rules and inspection of the antenna constructions at the broadcasting centres are imposed accordingly.
Moreover, EETT examined as a matter of priority and promptly resolved six complaints concerning interferences in operating frequencies of other public safety and emergency networks. Specifically, it received three complaints from the Greek Air Force, one from the Hellenic Fire Service, one from the National First Aid Service and one from the Hellenic Police.

7.1.8. Radio Amateurs

In 2013, EETT received 46 complaints over radio amateur interference in communication systems and 29 complaints concerning legality inspections of the relevant antenna systems. EETT carried out technical inspections for all these cases and promptly scheduled the actions required for resolving the problems. The majority of the problems investigated were caused by spurious emissions from electromechanical, electrical or electronic devices, as well as by unauthorised use of frequencies.

7.2. Antenna Constructions

7.2.1. Electronic System for the Antenna Construction Application Submission (SILYA)

2013 was essentially the first year of operation for SILYA, the system for antenna construction licensing, which was developed by EETT and launched in November 2012. This is an innovative electronic system that improves and speeds up the process for licensing the construction of antennas, whilst introducing new e-governance services to Greek public administration. SILYA's operation was a precondition for the implementation of the one stop shop for licensing antenna construction with the participation of all stakeholders.
Within 2013, EETT greatly improved and extended the capabilities of the SILYA electronic platform. Now, it is possible to manage and electronically file documents that are not necessarily part of the comprehensive application folder, but pertain generally to the licensing procedure and/or operation of the antenna constructions. Moreover, the way has been paved for the data kept in the old electronic information system to be transferred to SILYA and the interfaces have been developed for entering and managing relevant complaints to the extent that this affects the licensing process.
For 2014, EETT aims at continuously supporting and further expanding SILYA in order to deliver better services to operators, state agencies that are also involved in the process and citizens.

7.2.2. Evolution of the Licensing Process

Throughout 2013, 5,294 applications for new or amended antenna construction licenses were submitted to SILYA. Out of these, 3,734 concerned the electronic transfer of applications submitted to EETT before L.4070/2012 entered into effect and before SILYA was launched and in their majority fall under the provisions of article 31 of L.4053/2012. In 2013, EETT by using SILYA, its web based application:

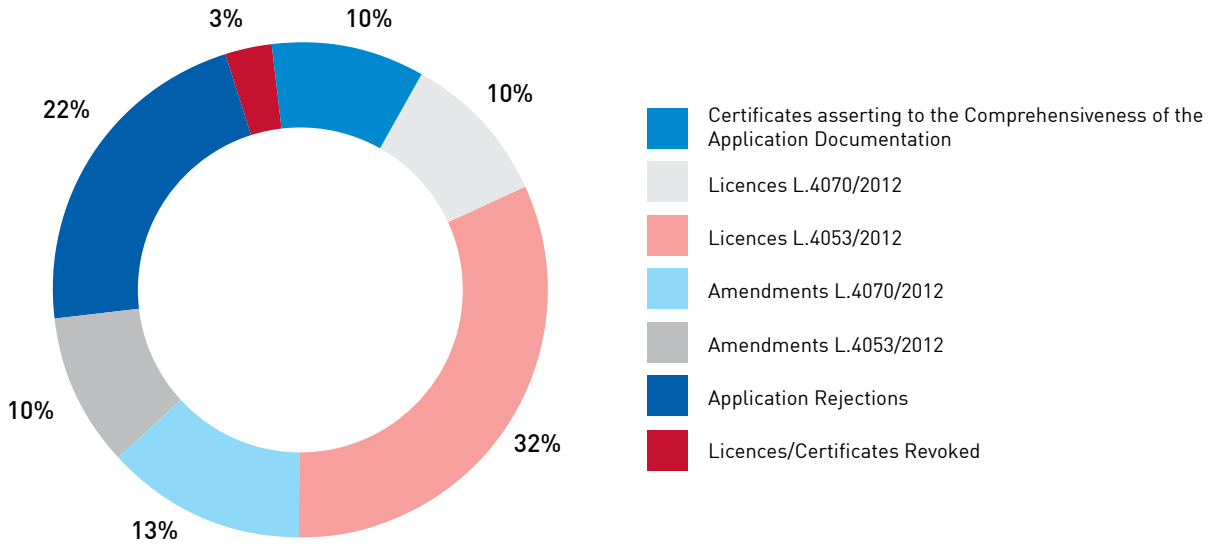
- Granted 103 compliance certificates, based on article 30 of L.4070/2012.
- Granted 418 licenses for antenna constructions, 98 based on article 30 of L.4070/2012 and 330 based on article 31 of L.4053/2012.
- Amended 233 licenses, 130 based on article 30 of L.4070/2012 and 103 based on article 31 of L.4053/2012.
- Rejected 228 applications for antenna construction licenses.
- Revoked 30 licenses.

Chart 7.1 illustrates the distribution of the relevant administrative acts issued within 2013, classified per type.
Some licensing requests related mainly to antenna constructions falling under article 31 of L.4053/2012, in other words that have legal operation status, remain pending. These requests concern antenna constructions that are pending from previous years (since 2006) and which could not be processed by EETT because they lacked of the necessary environmental term approval from the competent services. By virtue of the new legal framework on environmental licensing for antenna constructions (May 2012), most of these applications can fall under Standard Environmental Commitments. Therefore, they are gradually completed and filed through SILYA, so that they can be processed by EETT.

7.2.3. Illegal Mobile Telephony Antenna Installations

In 2013, 981 complaints were submitted to EETT relating to mobile telephony antenna construc-

Chart 7.1: Distribution of Administrative Acts for Antenna Constructions (2013)



Source: EETT

tions. Out of these, 619 fell under the jurisdiction of the Spectrum Supervision and Monitoring Department in Athens and 362 pertained to areas within the jurisdiction of the RO of Thessaloniki. Following a thorough investigation, it was found that 548 cases within the jurisdiction of Athens were related to licensed and legally operating antennas, and the complainants/applicants were informed of the legality of those antennas, whilst 213 cases fell within the jurisdiction of the RO of Thessaloniki. In addition, 71 cases in Athens and 149 in the jurisdicition of the RO of Thessaloniki concerned non licensed constructions. In the cases of non licensed antenna constructions, for which on–site inspections had been performed, EETT proceeded to impose administrative sanctions.

Teams of technicians from EETT's Spectrum Monitoring Department conducted in total 496 on–site inspections at mobile telephony base stations, out of which 250 were performed in Attica and 56 outside. In addition, 16 on-site inspections were conducted by teams of technicians from the RO of Patras and 15 from the technical teams from the RO of Heraklion. Furthermore, 159 on-site inspections were conducted by teams of technicians from the RO of Thessaloniki, out of which 88 were conducted within the Prefecture of Thessaloniki and 71 outside.

7.2.4. Standardized Antenna Constructions

The concept of the Standardized Antenna Construction is based on the formulation of a specific technical specification that exactly describes all the characteristics of the antenna construction with the purpose of this being used repeatedly. The license for the Antenna Construction Type is issued by EETT after the assent of the Ministry of Environment, Energy and Climate Change (MEECC) and the Greek Atomic Energy Commission (GAEC).

For 2013, 19 requests were submitted to EETT for such licenses by mobile communications operators. In cases, where inconsistencies and errors were found in the attached plans, their re-submission was requested along with all necessary changes. EETT issued two such licenses in the first week of 2014 and decided to reject two cases that did not meet the respective requirements.

7.3. Radio and Telecommunications Terminal Equipment

7.3.1. Market Surveillance

EETT conducts regular inspections in the Radio and Telecommunications Terminal Equipment (RTTE) market to protect users from illegal equipment and prevent potential harmful interference. In this context, EETT monitors the compliance of the RTTE that is available and used in the Greek market, in accordance with the requirements set by PD 44/2002.

In 2013, EETT performed regular controls in stores selling RTTE on various equipment categories (such as mobile phones, PMR, short range devices, wireless games), stepping up checks on a technical dossier level.

It should be noted that EETT exceeded the goal of 150 samples set for 2013 in specific RTTE categories and managed to check administratively and/or technically in total 161 RTTE samples in:

- 46 companies operating as distributors or responsible for the sale of RTTE on the Greek market (either directly in distribution stores, or in e-shops). In these checks, 61 import companies responsible for selling RTTE in the Greek and/or European market, were involved.
- Three cases of complaints.

Following the above controls, EETT found that:

- 132 RTTE samples do not comply with at least one of the administrative requirements of PD 44/2002 and EETT took all the actions set forth in law.
- In one case, technical measurements were performed based on European standards and the investigation is still ongoing.

7.4. EETT's Monitoring and Supervisory Actions in the Radiofrequency Spectrum

In 2013, EETT held 476 hearings regarding radio frequency spectrum issues and imposed 366 fines (Table 7.1).

Table 7.1: Monitoring and Supervisory Actions in the Radiofrequency Spectrum Sector (2013)

Subject	Number of Hearings	Fines	Recommendations	Dismissals
Mobile Telephony Antenna Constructions	329	329	-	-
Other Antenna Constructions	33	5	19	9
Radioequipment	42	8	32	2
Other (Spectrum)	1	-	1	-
Monitoring of Radiotelevision Stations	71	24	47	-
Total	**476**	**366**	**99**	**11**

Administration Executive Summary Annual Financial Report Internal Organisation Management of National Resources Focusing on Consumers Electronic Communications Sector Analysis Radiofrequency Spectrum Sector Analysis

Postal Services Sector Analysis

Strong International Presence Action Plan for 2014 Appendix

8. Postal Services Sector Analysis

EETT's objective is to ensure the smooth operation of the postal market and the compliance of postal service providers with the new postal law. In this respect, in 2013, EETT revised the Regulations of General Authorisation and Individual License, issued a new Regulation on Dispute Settlement, as well as a Code of Practice for postal services, whilst it developed an application for delivering e-governance services and upgraded the GIS tool for postal service. All Regulator's actions in the postal services market throughout the year are presented in the following sections.

8.1. The Postal Services Market

Two categories of companies operate in the postal market:

a) Postal service providers with Individual License in which the Hellenic Post (ELTA) is included and according to L.4053/2012 continues to operate as a Universal Service Provider (USP) until 2028. It should be noted that ELTA as of January 1st 2013, has no longer the exclusivity to deliver items weighing up to 50 g.

b) Postal service providers operating under General Authorisation (courier).

Over recent years, the Greek economy recession has significantly affected the postal market financials. The fierce downward trends commenced in 2009 also continued in 2012. More specifically, the number of postal items decreased by 12.5%, with a respective 10.7% drop in revenues compared to previous year. Letter post declined by 12.9% (i.e. 73.5 million letters), and parcels by 2.6% (i.e., 0.5 million parcels). The reason of postal market recession is related to both postal revenues and volume drop as well as to end-prices due to strong competition. During 2012, USP faced the strongest decline in postal revenues and volume.

At the end of 2012, 474 registered postal services providers operated in the Greek market, 466 of which were under General Authorisation (courier), while the other eight operated in the sector of Universal Service provision (USP and seven postal service providers with an Individual License). These providers operate in collaboration with 1,580 organised national networks. Early market indicators of 2013, suggest that there was a significant decrease in the number of postal service providers in the Greek market.There are 130 postal service providers operated under General Authorisation that have been removed by EETT from the postal service provider registry, due to non compliance with the terms of their authorisation.

The following tables show the main financials of the postal market. It should be noted, that 2013 figures will be included in the Market Review Report that EETT publishes in the second semester of each year, after the processing of the annual questionnaires that the postal service providers complete.

Table 8.1: Items of the Greek Postal Market (in pcs)

	2010	2011	2012	2012/11
Universal Service Provider	622,525,829	531,342,754	461,361,248	-13.2%
Operators with Individual License	6,765,362	10,933,377	8,064,947	-26.2%
Operators under General Authorisation (courier)	49,186,647	48,286,382	47,162,449	-2.3%
Total	**678,477,838**	**590,562,513**	**516,588,644**	**-12.5%**
Annual change rate (%)	**-6.8%**	**-13.0%**	**-12.5%**	

Source: EETT (based on information submitted by postal service providers)

Table 8.2: Revenues of the Greek Postal Market (in EUR)				
	2010	2011	2012	2012/11
Universal Service Provider	417,133,906	370,863,941	317,486,486	-14.4%
Operators with Individual License	2,497,758	4,066,429	3,485,885	-14.3%
Operators under General Authorisation (courier)	286,149,111	266,611,909	251,813,646	-5.6%
Total	**705,780,774**	**641,542,279**	**572,786,017**	**-10.7%**
Annual change rate (%)	**-5.0%**	**-9.1%**	**-10.7%**	

Chart 8.1: Annual Change in the Postal Market (in % of items)

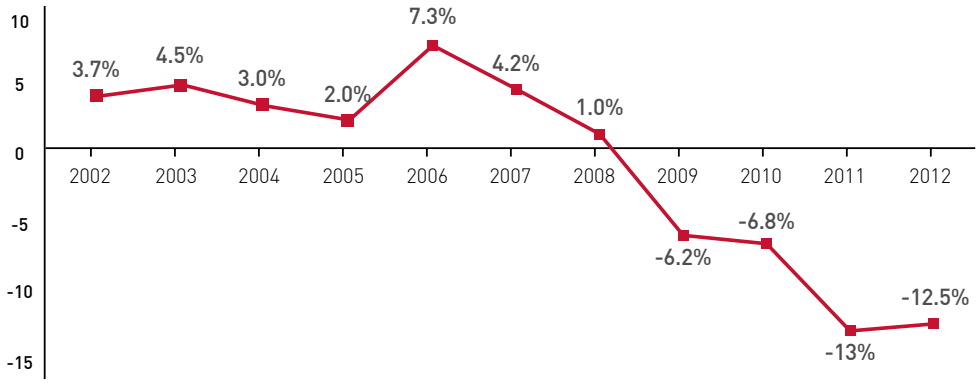
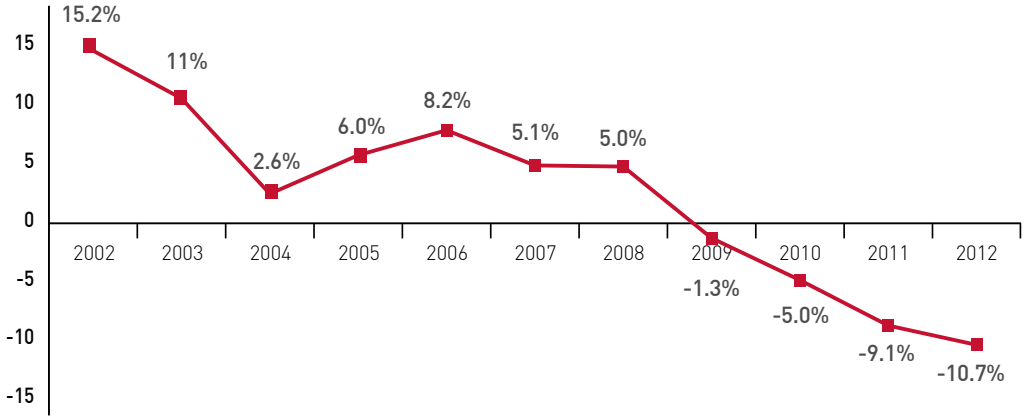


Chart 8.2: Annual Revenue Change in the Postal Market



Source: EETT (based on information submitted by postal service providers)

8.2. Competitive Development of the Greek Postal Market

8.2.1. New General Authorisation Regulation

During 2013 EETT following L.4053/2012[96], issued revised regulations and decisions. Important amendments were made to the General Authorisation Regulation,[97] aiming at simplifying the licensing procedures and the prerequisites with respect to the operation of postal service providers, consumers protection, as well as ensuring sound competition in the postal market. All the ammendments refer both to courrier companies and consumers.

8.2.2. EETT's web based application for Electronic Governance Services

EETT's web based application is part of the new General Authorisation Regulation which has improved the way of communication between the postal service providers and the Authority. This application enables current or potential service providers to submitt electronic applications or requests via EETT's website. More particularly, postal services providers sign into the application to submit the declaration on the provision of postal services under General Authorisation, in order to register in EETT's registry. The application also enables users to amend General Authorisation details, issue registration certificates on EETT's registry, obtain information on their postal network and removal from EETT's registry, as well as any other request or service that the Regulator may incorporate in the future.
The web based application keeps an electronic history of the statements submitted by the postal service provider. Postal service providers are able to print electronic certificate of registration on EETT's registry, as well as certification list of their network. These certificates are administrative documents, valid for all purposes by the postal service providers. The date on which they were issued is marked on, and it is the same as the date on and the document was downloaded via the web based application.

8.2.3. New Individual License Regulation

The new Individual License Regulation concerns postal service providers operating within Universal Service Area and involves, at least, the collection, transport, sorting and distribution of letter post weighing up to 2 kilograms and parcels up to 20 kilograms, as well as services related to registered letters and insured items.

8.2.4. Code of Practice and other EETT Decisions

Code of Practice regarding the Provision of Postal Services

In 2013 EETT published the first Code of Practice[98] regarding the provision of postal services. It provides a detailed list of procedures to be followed by postal service providers (under General Authorisation or Individual License) in order to ensure high quality of service to the consumers. The Code of Practice works additionaly to the regulatory framework, emphasising issues related to proper consumer transactions.
It should be noted, that the Code of Practice, effective as of 31-07-2013, is the outcome of substantial collaboration between EETT and the postal market regarding practical issues that affect both consumers and providers, as well as operational and procedural issues. The Code of Practice is available at EETT's website.

Regulation on Dispute Resolution Procedure

This specific Regulation[99] refers to complaints handling, as well as dispute settlement arising between public sector and postal service providers, among providers, or between providers and users. It defines the framework for complaint submission (by user, public authority or postal service provider), and the complaint handling process.
According to the Regulation, the complaints, signed and dated, are submitted to EETT in written, by mail, fax or email, within six months of the date of deposit.
Upon its receipt, the complaint is registered and forwarded to the appropriate department, where a preliminary investigation takes place. During

96. L.4053/2012 "Regulation of the operation of the postal market, electronic communications issues and other provisions", GG Issue 44/A/07-03-2012.
97. GG 1700/B/10-07-2013, "General Authorisation for the Provision of Postal Services".
98. GG 1874/B/31-07-2013, "Code of Practice for the Provision of Postal Services".
99. GG 1874/B/31-07-2013, "Regulation on settlement procedures for disputes arising among postal service providers, between postal service providers and users and user complaint investigation procedures".

the complaint investigation process, the following options could take place: (a) further investigation of the case, (b) proposals for dispute settling, (c) hearing process or on-site audit in case of poor provision of postal services and (d) archive the case.

Decision for Compensation due to Poor Postal Service

EETT issued a decision[100] regarding consumers' compensation due to poor postal service. Compensation is paid within five working days from the date of approval. In case of loss, theft or delayed delivery of a single postal item, compensation is not provided. The postal service provider may agree with the customer a higher amount of compensation, in case it is considered appropriate. The specific decision outlines the cases where postal service providers are not liable, if a postal item is totally or partly destroyed. In that case, they are not obliged to compensate the user and only the amount paid for postages is returned.

Decision on Determining the Methodology for Calculating the Net Cost of the Universal Postal Service

The decision[101] defines the methodology for Universal Service Net Cost calculation. It also provides information on the applicable framework and establishes conditions of regulatory certainty in view of the government's announcements regarding ELTA privatisation.

8.2.5. Regulation on EETT Hearings

In regards of identifying violations of L.4053/2012, EETT, in the context of its monitoring role, issued the Regulation[102] on hearings and the establishment and function of standing committees, aiming at taking prompt measures for the preservation of smooth operation of the postal market.

8.2.6. Retail Price Observatory for Postal Items

The purpose of the project is to provide digital services to citizens for the reliable, valid and user-friendly evaluation of the retail prices of electronic communications and postal services (letters, small parcels, parcels etc.) through the automated and electronic collection of data and their provision to users in a unified and standrard format. Secondary purpose of the project is to stimulate entrepreneurship in Greece, by taking advantage of the aforementioned.

In January 2013, EETT received, published and answered to comments on the public consultation on the forsaid project. Taking into account the comments and remarks from the public consultation, EETT modified, where it was considered necessary, the draft tender document for the international tender in order to award the project. The tender document, after its approval by EETT's Plenary, was published in Greece and European Union alike. The project is currently in the phase of the evaluation of prospective contractors. It should be noted that this is a co-funded programme by European Union through the NSRF 2007-2013 and is expected to be completed by 2015.

8.2.7. Study on New Technologies for Postal Services

In 2013, EETT, aiming to identify growth prospects for the postal sector through the implementation of new technologies, conducted meetings with postal service providers in order to gather valuable information on their experience and practices.

The most important conclusion is that technology penetration in postal services is high and that postal service providers actually adopt the new developing trends in the services sector. By leveraging new technologies, postal service providers have managed on the one hand to automate and enhance a large part of their procedures and on the other hand, to offer added value services. The findings of the analysis are presented in detail in the postal market annual study, which is available at www.eett.gr.

8.2.8. Study on Access to ELTA Network

The terms for Universal Service provision assigned to ELTA are defined in the contract between the Minister of Infrastructure, Transport and Networks and ELTA (L.4053/2012, article 21). According to L.4053/2012 (art. 5, par. 1, 26), EETT's competen-

100. GG 1412/B/10-06-2013, "Determination of the cases for imposing a one-off compensation for poor postal services."
101. GG 2016/B/16-08-2013, "Definition of the methodology for calculating the Net Cost of Universal Service."
102. GG 1805/B/25-07-2013, "Regulation on hearings carried out by EETT, the establishment and operation of standing committees on postal matters, taking immediate and urgent measures for ensuring the smooth operation of the postal market, as well as specification of the type and procedure for carrying out investigations or other monitoring acts by EETT in identifying violations of L.4053/2012."

ces include the issue of a Regulation on the definition of access terms of postal service providers to USP infrastructures and services, provided that, following a background study, access provision is necessary in order to ensure consumer interests, promotion of competition, and that US provision is not encumbered.
Additionally, according to Directive 2008/6/EC,[103] provided that it is required for the protection of users interests and the promotion of fair competition, member states ought to ensure transparent and without discrimination information access to postal infrastructure or services, as these are provided in the context of Universal Service (such as postal code system, address database, post boxes, letter boxes, information on address changes, forwarding service, return service). The current provision does not affect the right of member states to take measures to ensure access to postal network in conditions of transparency, proportionality and non discrimination.
In that context, EETT, in April 2013, announced the need to conduct a related study and invited interested parties to express their interest by submitting the necessary documents, so as to prove their experience to manage the project. Three companies were selected among those who expressed their interest, based on their experience in related projects. After the evaluation of bidder details, the project was awarded in June 2013 and the results are expected in 2014.

8.2.9. Supervision of Public Tenders on Postal Services

In the context of its competencies, EETT collaborates and provides information to public authorities on matters related to the provision of postal services. In 2013, EETT executives participated in the Tender and Objections Committee (Tender Notice 01/2013) for the "Provision of postal services to greek public sector," issued by the Ministry of Development and Competitiveness. EETT also consulted other public authorities in similar matters.

8.3. Universal Service Quality Assurance

8.3.1. Universal Service Quality Measurement Results

According to L.4053/2012,[104] Universal Service of a specific quality, on a permanent basis and at affordable price should be provided to postal services users, irrespective of their geographic location within Greece. As already stated, ELTA will remain the USP until 31-12-2028.
EETT, as dictated by Ministerial Decision no. 58134/2275/2010 (GG 42/B/20-01-2010), publishes Universal Service quality measurement results, regarding domestic first priority mail and international first priority mail.
The measurments demonstrate:

- The delivery percentages for domestic first priority mail within one and three days from the working day of deposit and the average delivery time, in number of days of delivery from end to end.
- The delivery percentages of international first priority incoming/outgoing mail within three and five days from the working day of deposit and the average delivery time, in number of days, of delivery from end to end.

Domestic First Priority Mail

In 2013, as regards to domestic first priority mail,

Table 8.3: Domestic First Priority Mail[105]

Semester	ELTA Obligation under Ministerial Decision (MD) 58134/2275/2010		ELTA results based on measurements					
	D+1	D+3	D+1		D+3		Average Delivery Time (in days)	
A'	87.0%	98.0%	92.5%	90.5%	99.7%	99.7%	0.99	1.02
B'			89.8%		99.8%		1.02	

103. Directive 2008/06/EC "Amending Directive 97/67/EC of the European Parliament and Council, of 15 December 1997."
104. GG 44/A/07-03-2012, "Regulation and operation of the postal market, electronic communication issues and other provisions."
105. "Measurement Results on the Time of Service for Domestic First Priority Mail", DIADIKASIA SA, February 2014.

the measurement system was implemented in complete compliance with the specifications of the European quality standard EN 13850:2012 by an internationally acclaimed third party.
Table 8.3 presents the delivery percentages achieved by the USP per semester. USP delivery obligation within one working day from the day of deposit (D+1) is 87% and within three working days (D+3), delivery obligation reaches 98%. The table also shows the average delivery time.

International First Priority Mail

International first priority mail quality measurements are conducted for all EU countries by the International Post Corporation (IPC).[106]
The following tables show the delivery percentages achieved by USP with respect to incoming and outgoing international first priority mail within three working days (D+3) and within five working days (D+5) from the date of deposit, as well as the average delivery time.
As regards international outgoing mail, in 2013 measurements were performed in 26 countries. According to the results:

- In 12 out of 26 countries (46.2%), the delivery percentage within 3 working days from the day of deposit (i.e. the speed indicator) is less than 80%, in 4 out of 26 countries (15.4%) it is between 80% and 85% (included), whilst in 10 out of 26 countries (38.5%) it is higher than 85%.
- 10 out of 26 countries (38.5%) had a higher speed indicator in 2013, compared to 2012.
- In 11 out of 26 countries (42.3%), the delivery percentage within 5 working days from the day of deposit (i.e. the reliability indicator) is less than 95%, in 2 out of 26 countries (7.7%) it varies between 95% and 97% (included), whilst in 13 out of 26 countries (50%) it exceeds 97%.
- In 17 out of 26 countries (65.4%), reliability indicator is ameliorated in 2013, compared to 2012.
- 12 out of 26 countries (46.2%) had a higher average delivery time in 2013, compared to 2012.

As regards to international incoming mail, in 2013 measurements were performed in 24 countries. According to the results:

- In 22 out of 24 countries (91.7%), the delivery percentage within 3 working days from the day of posting (i.e. the speed indicator) is less than 80%, in 1 out of 24 countries (4.2%) it varies between 80% and 85%, whilst in 1 out of 24 countries (4.2%) it is higher than 85%.
- 4 out of 24 countries (16.7%) had a higher speed indicator in 2013, compared to 2012.
- In 18 out of 24 countries (75.0%), the delivery percentage within 5 working days from the day of deposit (i.e. the reliability indicator) is less than 95%, in 5 out of 24 countries it varies between 95% and 97% (included), whilst in 1 out of 24 countries (4.2%) it exceeds 97%.
- 8 out of 24 countries (33.3%) had a higher reliability indicator in 2013, compared to 2012.
- 4 out of 24 countries (16.7%) had an ameliorated average delivery time in 2013, compared to 2012.

The targets for performance percentages for incoming and outgoing first priority mail set in M.D. no 58134/2275/2010 (GG 42/B/20-01-2010), which was extended by M.D. 9023/192/21-02-2012 (GG 613/B/05-03-2012) were 85% and 97% for delivery within 3 and 5 working days respectively for countries in Zone A and 80% and 95% for delivery within 3 and 5 working days respectively in Zone B.

8.3.2. Decision on the Determination of the Methodology for the Calculation of the Net Cost of the Universal Postal Service

According to L.4053/2012, EETT defines in a related decision the calculation methodology of US net cost. EETT is informed by the USP on the net cost derived from its obligation to provide US and verifies it.
EETT, taking into account the results of the public consultation held in 2012 on the determination of the methodology for the calculation of US net cost issued a decision,[107] in which the following are defined:

- General principles on the net cost calculation of the US obligation.
- Principles on the definition of the reference model.
- Reference model assessment.
- US net cost calculation.
- Verification of US net cost calculation.
- Reference period.

8.3.3. Cost Accounting Audit of ELTA

According to L.4053/2012, EETT evaluates and approves USP tariffs, in a related decision. In 2013, EETT issued a decision,[108] according to which, the proposed by ELTA adjustments to US tariffs are approved. In addition, based on the

106. More information on the quality of incoming and outgoing mail for the EU countries can be found on IPC's official website http://www.ipc.be.

107. EETT Decision no. 697/129/2013, "Definition of the methodology for calculating the Net Cost of Universal Service" GG 2016/B/16-08-13.

Table 8.4: International Outgoing Correspondence of the USP for 2013			
	Outgoing (D+3)	Outgoing (D+5)	Outgoing
Country of Destination (from Greece)*	Hellenic Post (ELTA) Results (%)	Hellenic Post (ELTA) Results (%)	Average Delivery Time (in Days)
Zone A**			
Austria	84.0	97.9	2.5
Belgium	93.5	100.0	2.2
Bulgaria	82.2	100.0	2.6
Cyprus	74.9	92.2	3.2
France	91.8	99.0	2.3
Italy	78.5	94.0	2.8
The Netherlands	86.3	97.4	2.6
Romania	90.7	96.1	2.4
Spain	46.1	88.4	3.6
Switzerland	94.3	100.0	2.1
UK	94.3	99.9	2.1
Zone B**			
Croatia	49.6	90.6	3.8
Czech Republic	84.6	98.1	2.6
Denmark	93.4	100.0	2.3
Estonia	27.3	79.3	4.6
Finland	67.9	94.9	3.3
Hungary	76.1	94.5	2.9
Ireland	67.4	97.9	3.3
Latvia	44.0	81.0	4.3
Luxembourg	89.8	100.0	2.5
Malta	66.2	94.9	3.2
Norway	80.4	95.9	3.0
Poland	69.4	91.1	3.2
Portugal	86.1	98.2	2.6
Slovenia	72.0	91.6	3.7
Sweden	88.7	100.0	2.5

Source: EETT

D= Day of deposit

**Countries such as Bulgaria (partly), Denmark, France, Germany, Lithuania, Malta, the Netherlands, Norway, Switzerland and the UK deliver mail also on Saturdays (2013).*
***According to MD 58134/2275/2010, Zone A includes countries with a daily direct flight. Zone B includes countries without a daily direct flight. It should be noted that classification of countries into Zones A or B may change within the year or over the years.*

Table 8.5: International Incoming Correspondence of the USP for 2013			
	Outgoing (D+3)	Outgoing (D+5)	Outgoing
Country of Destination (from Greece)	Hellenic Post (ELTA) Results (%)	Hellenic Post (ELTA) Results (%)	Average Delivery Time (in Days)
Zone A*			
Austria	75.4	96.4	3.0
Belgium	72.6	94.7	3.2
Bulgaria	21.9	71.2	5.1
Cyprus	57.6	87.1	3.7
France	74.3	94.6	3.1
Italy	41.1	85.6	4.2
The Netherlands	70.9	96.5	3.2
Romania	43.0	90.0	3.9
Spain	48.4	85.8	3.9
Switzerland	77.6	96.2	2.8
UK	77.1	95.8	2.9
Zone B*			
Czech Republic	35.0	75.9	4.5
Denmark	88.2	96.7	2.7
Finland	66.4	91.8	3.2
Hungary	27.2	75.5	4.6
Ireland	49.5	83.7	4.0
Latvia	18.1	85.3	4.4
Luxembourg	60.0	94.3	3.5
Malta	29.3	87.2	4.4
Norway	80.5	97.3	2.9
Poland	55.9	86.4	3.9
Portugal	49.8	89.4	3.8
Slovenia	42.6	81.4	4.5
Sweden	71.3	92.8	3.2

D= Day of deposit

**According to MD 58134/2275/2010, Zone A includes countries with a daily direct flight. Zone B includes countries without a daily direct flight. It should be noted that classification of countries into Zones A or B may change within the year or over the years.*

tender 12/2013 for the project "Upgrade of the Cost Accounting System for Universal Service and Development of a System for Managing Corporate Performance" EETT proceeded with comments on the section of ELTA's operational and technical specifications of the project.

8.4. EETT's Monitoring and Supervisory Actions in Postal Services Market

On December 31st 2013, EETT's Registry counted 389 postal service providers. In 2013, 48 registrations under General Authorisation and Individual

108. EETT Decision no. 697/130/18-07-2013 "Assessment of Hellenic Post's Adjustment the Universal Service Tariffs for 2013."

License were provided. EETT, in the context of its monitoring competence, performed 53 on-site audits. Specifically:

- Six letters of compliance were sent.
- Six companies were deleted from EETT's registry by the standing committee for hearings.
- One company was summoned to a hearing.
- One provider filed a request for removal from EETT's Registry.

Moreover, 202 postal service providers were summoned to hearings for issues related to their compliance within the current regulatory postal framework and competition framework. Specifically:

- 200 companies were summoned to a hearing on licensing issues, 57 received a letter of compliance, 12 cases were dismissed, 130 companies were deleted from EETT's registry, whilst one is included in the "other sanctions" category.
- One company was summoned to a hearing on US issues and the case was dismissed.
- One company was summoned to a hearing for competition issues, according to which a fine was imposed and a letter of compliance was sent.

Table 8.6: Monitoring and Supervisory Actions in the Postal Services Market (2013)

Subject	Number of Hearings	Fines	Letters of Compliance	Dismissals	Licenses Revolved	Other Sanctions/ Decisions
Licensing	200	-	57	12	130	1
Universal Service	1	-	-	1	-	-
Competition	1	1	1	-	-	-
Total	**202**	**1**	**58**	**13**	**130**	**1**

Administration Executive Summary Annual Financial Report Internal Organisation Management of National Resources Focusing on Consumers Electronic Communications Sector Analysis Radiofrequency Spectrum Sector Analysis Postal Services Sector Analysis

Strong International Presence

Action Plan for 2014 Appendix

9. Strong International Presence

EETT's collaboration with the other regulatory authorities and the European Union and the exchange of know-how and best practices constitute important and necessary tools for achieving the goals of the Authority. Throughout 2013, EETT developed a broad range of activities, participating actively in a large number of international organisations, agencies and committees representing Greece and co-shaping developments on a European and International level.

9.1. International Co-operations in the Electronic Communications Sector

9.1.1. Body of European Regulators for Electronic Communications (BEREC)

The Body of European Regulators for Electronic Communications (BEREC) constitutes the European body which contributes to the development and better operation of the internal market of electronic communications networks and services, in order to ensure the consistent application of the European Union regulatory framework.
The work of BEREC is based on the experience of the National Regulatory Authorities (NRAs) and it exercises its duties in collaboration with the NRAs and the European Commission.
During 2013, EETT held the chairmanship of BEREC, as well as the Presidency for the Independent Regulators Group (IRG). Under EETT Presidency, BEREC carried out the work programme approved by the 13th Plenary Session, following public consultation with market stakeholders. These works focused on six main lines:
1. Encouraging the development of Next Generation Access Networks.
2. Supporting and empowering consumers.
3. Reinforcing the domestic services market.
4. Domestic and international activities (BEREC and BEREC Office evaluation process; an internal study on the topic of the regulatory framework for the operation of National Regulatory Authorities in EU member states; discussions with the Stakeholder Forum, on the sidelines of the 16th Plenary Session of BEREC).
5. Contributing to the processes for re-evaluating the European Regulatory Framework.
6. Meetings and Workshops (four scheduled Plenary Sessions of the BEREC Board of Regulators and a series of workshops).

9.2. International Collaborations in the Radiofrequency Spectrum Sector

9.2.1. Radio Spectrum Policy Group (RSPG)

During 2013, the major topics handled by the Radio Spectrum Policy Group (RSPG) – in which EETT participated – were the study and provision of opinions regarding the licensing of the shared spectrum access; the effective management of interference related issues through the exchange of best practices in matters of regulation and standardisation; the spectrum requirements of basic sectors of business activities, which utilise wireless communications; the European strategy for dealing with a continually increasing demand for wireless broadband networks; the European positions regarding issues of the next World Radiocommunication Conference (WRC-15), etc.

9.2.2. Radio Spectrum Committee (RSC)

In 2013, EETT participated in the European Union Radio Spectrum Committee (RSC) as an observer. The main issues that were discussed by the Committee in question were the effort to create a spectrum repository; monitoring the implementation of Directive 2010/267/EC for the Digital Dividend of the 800MHz band; bringing the regulatory framework for short range devices up-to-date; investigating the liberalisation of the spectrum in the 5GHz band and increasing the spectrum of the Digital Dividend (Digital Dividend 2) and investigating further bands of radiofrequency for auxiliary services related to the television programme creation etc.

9.2.3. Working Group Frequency Management (WGFM)

In 2013, EETT participated in the proceedings of the Working Group Frequency Management (WGFM), concerning the disposal of the 1452-1492MHz frequency band for mobile broadband/mobile supplemental downlink, Simple DirectMedia Layer - SDL); expanding the potential use of 2GHz unpaired bands (1900-1920MHz and 2010-2025MHz); terrestrial-based broadband communications links to aircraft (BDA2GC); emergency communications systems; the provision of radio spectrum for support applications for the production of content (television, radio, or concerning special events); as well as cognitive radiocommunications systems.

9.2.4. CEPT-ECC Project Team (PT) FM22

EETT participates in the Project Team (PT) FM22 of the European Conference of Postal and Telecommunications Administrations - Electronic Communications Committee (CEPT-ECC) almost without exception over the past nine years, with two members of staff from the Regional Office of Thessaloniki. The PT FM22 biannual meetings were held in Copenhagen, Denmark in April and September 2013, where spectrum monitoring issues were discussed, of which the most important were the following:

- A proposal by the Microsoft Corporation to create a "Spectrum Observatory" system, on which data would be recorded for processing from the measurements made by established monitoring stations.
- The formulation of a Draft Recommendation on conducting compliance measurements for BEM (Block-Edge Mask) in order to measure various technical parameters of a transmission for the purpose of avoiding interference between transmissions in neighbouring channels.
- The Revision of Recommendation of ITU-R SM-574 with respect to the protection of fixed spectrum monitoring stations from the operation of transmitters nearby.
- The collection of statistical data on cases of interference in frequencies submitted to the regulatory authorities in each country in order to draw the relevant conclusions.
- The formulation of a Reference Plan on "Spectrum Management during major events."

9.2.5. CEPT-ECC Project Team (PT) SE19

In 2013 EETT participated in three meetings that took place in Copenhagen of the Project Team Spectrum Engineering 19 of the Electronic Communications Committee (ECC), which specialises in issues of fixed service.

The main issues with which SE19 was concerned in 2013 were the study of the benefits of a more effective use of the spectrum by the use of asymmetric pairs of channels in two-way radio coupling for fixed service; a feasibility study concerning the introduction of narrow band channels into guard bands or duplex spacing of existing plans in fixed service zones between 3 and 15GHz; the plan to channelize the 90GHz band; the feasibility study on unification of Lower 6 and Upper 6GHz bands for fixed service and so forth.

9.2.6. Telecommunications Conformity Assessment and Market Surveillance Committee (TCAM)

EETT participated in the proceedings of the Telecommunications Conformity Assessment and Market Surveillance Committee (TCAM), which took part in June and November 2013 in Brussels. Topics mainly included issues of market supervision[109]; compliance with the substantive requirements; the interpretation of legal issues; categorisation of equipment into classes; and becoming up-to-date on the development of harmonised standards. It should be noted that TCAM assists the European Committee on issues relating to radio equipment and telecommunications terminal equipment.

9.2.7. RTTE Market Administrative Cooperation Group (ADCO)

Since 2002, EETT has participated in the Administrative Cooperation Group (ADCO) on topics concerning the surveillance of the Radio and Telecommunications Terminal Equipment (RTTE), which constitutes an official committee of the European Free Trade Zone (EFTZ), in which every member state participates with its representative. Three meetings of the RTTE ADCO took place in 2013 in order to gather statistical data through specialised market surveillance campaigns, the revision of the RTTE Directive, which is expected to be completed in 2014 and includes, for example, a new way to mark and monitor RTTE; the creation of a new central database for manufacturers to record the information and technical files for equipment; the use of a joint European data base by supervisory authorities and the exchange of know-how between member states concerning equipment that does not conform to Directive 99/5. This know-how is utilised when carrying out RTTE sampling controls.

In line with the above, in 2013 EETT took part in a European campaign to control Wireless Access Systems/Radio Local Area Network (WAS/RLAN) radio equipment, which is widely available in the European market and operates at 5GHz. The results of that campaign focused on achieving radio equipment compliance with the essential requirements and will be announced within 2014 with a press release on the appropriate EU website.[110]

109. In collaboration with the ADCO PTTE committee.
110. http:/ec.europa.eu/enterprise/sectors/rtte/news/index_en.htm.

9.3. International Co-operations in the Postal Services Sector

9.3.1. European Regulators Group for Postal Services (ERGP)

European Regulators Group for Postal Services (ERGP) was established in 2010 following a Decision of the European Commission. The 28 member states in ERGP are represented at the highest level (Presidents of the Regulatory Authorities). Its aim is the coordination and cooperation of all the independent Regulatory Authorities of the member states to achieve the postal reform objectives in line with Directive 2008/6/EC. ERGP formed four working groups, in 2013, regarding (a) cost issues and pricing; (b) net cost for the Universal Service Provision– the VAT as benefit/burden; (c) end-user satisfaction and monitoring the European postal market outcomes and (d) regulating access to the public postal network. EETT participated in the 4th Plenary Meeting of ERGP, which took in place in Rome in June 2013; as well as the 5th Plenary Meeting, which took place in November of the same year in Luxembourg.

9.3.2. Universal Postal Union (UPU)

EETT participated in the works of the Universal Postal Union (UPU), which took place in April and November of 2013 in Berne. The purpose of these meetings is to promote postal strategy as agreed at the 25th Universal Postal Congress of 2012. This postal congress takes place every four years and is the highest decision-making forum for postal matters on a worldwide level. The issues discussed concern the basic sectors in which UPU is active:

- Improving interoperational postal systems.
- Expanding knowledge of technical issues and experience concerning the postal sector.
- Promoting innovative products and services offered by the postal sector.
- Sustainable development of the postal sector.

9.3.3. Postal Directive Committee (PDC)

In April 2013, EETT participated in the meeting of the European Postal Directive Committee (PDC), which took place in Brussels. Within the framework of this meeting, information was provided concerning the 16 member states that have already implemented the new Postal Directive[111] particularly regarding the complete liberalisation of the postal market. Furthermore, the effect on the postal market due to the continuous mail substitution from other media of communication (such as e-mail, SMS, VoIP), while there was a general agreement concerning the necessity to upgrade consumer experience regarding the delivery of e-commerce items.
During a second meeting, in December 2013, a progress chart for the completion of a single parcel delivery market on a cross-border level, along with the trust enhancement for delivery services and the online sales motivation was presented by the representative of the European Commission. Furthermore, during the the PDC works, the actions and results of the ERGP groups were presented.

9.3.4. European Committee for Postal Market Regulation (CERP)

EETT participated in March 2013 in a working group of the European Committee for Postal Market Regulation (Comité Européen de Réglementation Postale-CERP) with the presence of an observer from the UPU. In this group, discussions were made following the topics of the 25th Universal Postal Congress, such as the need to monitor the actions of the UPU; the approval of each initiative whose purpose is to ensure and upgrade the quality of international postal services; the preparation of the budget for the UPU and the cooperation of UPU with other international organisations.
Furthermore, EETT participated in the 48th Plenary Session of CERP, which took place in Norway in May 2013. The basic topic of this session was regarding the cooperation with the UPU, on the basis of a Memorandum of Understanding executed between the two bodies.

9.3.5. Participation in Other Conferences

16th Conference on European Postal Services

EETT participated in the 16th Conference on European Postal Services, which was held in March 2013 in Madrid, in which executives of the postal markets presented practical issues and exchanged opinions.

2nd Workshop on Postal Matters

EETT participated in the 2nd Workshop on postal matters, which was conducted in Brussels, in April 2013.

111. Directive 2008/6/EC of the European Parliament and the Council of February 20th 2008 amending Directive 97/7/EC with regard to the full accomplishment of internal market of EU postal services.

Administration Executive Summary Annual Financial Report Internal Organisation Management of National Resources Focusing on Consumers Electronic Communications Sector Analysis Radiofrequency Spectrum Sector Analysis Postal Services Sector Analysis Strong International Presence Appendix

Action Plan for 2014

10. Action Plan for 2014

The six pillars of EETT's Action Plan for 2014 are: (a) the maintenance of those components that work correctly, (b) the safeguarding of the Authority's independence, (c) the improvement of its internal efficiency, (d) the maximization of the public benefit from the exploitation of scarce resources, (e) the identification and participation in e-business initiatives and (f) the contribution to the European debate on regulatory issues. In the following paragraphs, these pillars are described per sector.

As regards the Electornic Communications sector EETT has set the following objectives:

a) Promote the development of NGA networks

- Regulatory interventions through analysis of the LLU, Bitstream and Access markets and update of the reference offer of RIO, WLR, RUO and RBO for promoting VDSL networks as a means of providing superfast broadband access in urban areas and reduce the digital gap in the rural areas.
- Promotion of innovative techniques of wired and wireless access through the new Regulation on injection of power that is required due to the introduction of VDSL and possibly of vectoring in the Greek market as well as the use of scarce national resources for the country to meet the objectives of the Digital Agenda 2020 and promoting IP technologies to ensure modern and quality services for the citizens.

b) Fostering competition and promoting the growth of the regulated markets

- Preservation of regulatory stability and transparency as preconditions for enhancing competition in the regulated markets by processing major competition cases.
- Regulatory initiatives, actions and measures for competitive growth in advanced electronic communications infrastructure and innovative services to their citizens.

c) Consumer protection and enhancement of their role and choices

- Transparency, information and protection of consumers from unfair practices of providers in order to benefit from innovative products at competitive prices.
- More opportunities through the implementation of the new regulation on portability, that enables economic, fast and smooth transition between providers and services, in a way that promotes competition in the market.
- Safeguarding the universal service in the telecommunications market by ensuring reasonable access and a new procurement procedure for the appointment of the service provider that may offer quality services, efficiently and reliably, throughout Greece.
- Ensuring equal access to advanced telecommunications services for all citizens with sensitivity in vulnerable groups and people with disabilities, by reviewing their accessibility to such services.
- Launching of applications for quality control (HYPERION application for fixed and mobile networks) as well as for combined evaluation of services (application for the Price Observatory) so that consumers can make choices in products that really address their needs.

d) Improving EETT's services and internal operations to better serve the needs of providers, consumers and citizens

- Internal operation that responses to the growing challenges with greater efficiency and low operating cost by accelerating and automating processes.
- Accelerate licensing procedures for the development of wired and wireless networks that can provide quality services in the territory.
- Development of security and trust in electronic transactions using electronic signatures.
- Extraversion and further promotion of EETT's image at national and international level as a model of public service for the benefit of the citizen, the market and the state.

As regards the Radio Spectrum, EETT has set the following objectives:

a) Effective utilization of spectrum

- Completion of the tender process and supervision of the implementation (roll-out) of digital broadcast network (based on the Frequency Map of Joint Ministerial Decision [(JMD) 42800/2012)] and the termination of analog broadcasting, enabling the smooth transition to digital TV and the timely release of radio frequencies that form the so-called Digital Dividend.
- Conducting two spectrum auctions in accordance with European plan for broadband communications and more specifically:
  - Completion within the first quarter of the tender process, which began in 2013 on the

frequency band 3.4-3.8GHz, with the aim of implementing broadband access networks.
- Conducting the tendering process for the auction spectrum in the bands 800MHz and 2.6MHz to implement 4th generation networks (4G/LTE) by the summer of 2014.

b) Consumer protection

- Continue, in collaboration with the regulatory authorities of the member states, of the controls in the equipment market in order to protect consumers from inappropriate equipment that may be marketed.

c) Optimization of services and internal operations

- Enhancement of SILYA with new functions for providers, improvement of the antenna construction licensing process and reducing implementation time wireless networks. Intensification of efforts to accelerate the antenna licensing procedures. Launching of a web application that provides information to the citizens for legitimate antenna constructions.
- Update the spectrum monitoring equipment to strengthen the Authority's supervisory work ensuring its effectiveness and efficiency in protecting legitimate users of radio-frequencies.
- Conclusion of a Memorandum of Cooperation with the Civil Aviation Authority (CAA) for the installation of equipment in CAA's communication centers in order to facilitate the direct intervention in cases of harmful interference to frequencies of navigation.

Regarding the issues of Postal Service, EETT has set the following objectives:

a) Fostering competition in the postal market

- Completion of major competition cases.
- Update of the market and supervision of the secondary legislation impelementation under the new postal law.
- Conduct of a study analyzing requirements and designing information system and management processes of postal codes as a public good, in case such a jurisdiction is granted to EETT. The purpose of this study will be to meet the needs of e-commerce, improving the supply of the US in the territory, and the introduction of extensive use of postal codes that indicate even the specific building.
- Study for the design of a system for quality measurement and evaluation of courier services.
- Market research/study on user preferences regarding the package delivery of e-commerce services from ELTA and courier companies.
- Regulation regarding access to the public postal network.
- Annual study on the postal market.
- Evaluation of the Reference Model - Calculation of intangible benefits - Adoption of the Reference Model - Calculation of net cost.

b) Consumer protection and quality control services

- Measuring the Quality of US for 2014.
- Issuance of a decision for the distribution of postal items.
- Approval of the installation areas for mailboxes.
- Cost audit – Approval of ELTA's current costing system.
- Monitoring of the development of ELTA's new costing system.
- Enhancement and maintenance of GIS application for postal services.
- Compliance checks of the regulatory framework.
- Regulation for the US pricing.
- Integrated web platform for postal services and composite search engine tool.

c) Optimization of internal functions

- Increase of the web application use and extension of its possibilities for the payment of annual fees.
- Enhancement of the communication with the market.

Finally, as regards international relations, EETT has set the following objectives:

- Contribution to European developments in electronic communications, through participation in BEREC and IRG.
- Participation in European and international fora in the field of radio communications and systematic monitoring of technological and regulatory developments in the field and radio-frequency spectrum.
- Assisting the Ministry of Infrastructure, Transport and Networks, as well as representing the country in international and European organizations and also in the context of the Greek EU Presidency in the first half of 2014.
- Participation in international organizations and fora for postal services (such as ERGP, UPU, CERP).

Administration Executive Summary Annual Financial Report Internal Organisation Management of National Resources Focusing on Consumers Electronic Communications Sector Analysis Radiofrequency Spectrum Sector Analysis Postal Services Sector Analysis Strong International Presence Action Plan for 2014

Appendix

11. Appendix

11.1. Legislative/Regulatory Framework (01-01-2013 to 31-12-2013)

a) Electronic Communications

Number	Title	GG
676/41/2013	EETT's General License Regulation.	GG 298/B/2013
698/115/2013	Amendment and Codification of the Regulation on Number Portability in the greek market into a single text.	GG 1873/B/2013
693/09/2013	Regulation on the Management and Assignment of [.gr] Domain Names.	GG 1564/B/2013
677/03/2013	Amendment and codification of EETT's Decision no 441/121/21–06–2007 "Regulation for Managing and Assigning Numbering Resources of the National Numbering Plan."	GG 170/B/2013
697/15/2013	Amendment and codification of EETT's Decision no 441/121/21–06–2007 "Regulation for Managing and Assigning Numbering Resources of the National Numbering Plan."	GG 1876/B/2013
697/21/2013	Approval of OTE's Reference Offer for the provision of wholesale leased lines, in implementation of EETT's Decision no 674/009/29-11-2012 "Definition of the Wholesale Leased Lines markets, Definition of Operators with Significant Market Power in the said Markets and their Obligations (2nd Market Analysis Round)."	GG 1875/B/2013
698/24/2013	Amendment of EETT's Decision no 677/03/08–01–2013 "Amendment and codification of EETT's Decision no 441/121/21–06–2007 "Regulation for Managing and Assigning Numbering Resources of the National Numbering Plan" (GG 170/B/31–01–2013), as in effect.	GG 2233/B/2013
686/21/2013	Results of the Cost Accounting Audit of OTE S.A. for the Year 2013 (with actuals for 2011) for the regulated wholesale and retail markets for which there are obligations for price control, cost accounting and accounting separation and other provisions.	GG 870/B/2013
696/125/2013	Partial repeal of EETT's Decision no. 595/013/10-03-2011 (GG 533/B/06-04-2011), in the context of the 3rd market analysis round of the national calls market provided to residential and non residential customers at a fixed location in Greece (calls to geographic and non geographic numbers in Greece).	GG 1865/B/2013

b) Postal Services

Number	Title	GG
697/129/2013	Definition of the methodology for calculating the Net Cost of Universal Service.	GG 2016/B/2013
688/52/2013	Determination of the cases for imposing a one-off compensation for poor provision of postal services.	GG 1412/B/2013
687/328/2013	Code of Practice for the Provision of Postal Services.	GG 1874/B/2013
687/327/2013	Regulation on settlement procedures for disputes arising between postal service providers, between postal service providers and users, as well as user complaint examination procedures.	GG 1874/B/2013
686/65/2013	Individual License Regulation.	GG 1876/B/2013
686/64/2013	General Authorisation for the Provision of Postal Services.	GG 1700/B/2013
686/63/2013	Regulation on hearings carried out by EETT, the establishment and operation of standing committees on postal matters, taking immediate and urgent measures for ensuring the smooth operation of the postal market, as well as specification of the type and procedure for carrying out investigations or other monitoring acts by EETT in identifying violations of L.4053/2012.	GG 1805/B/2013
301/28/2003	Regulation determining objective ways for cost accounting applied in the internal accounting system of the Universal Service Provider.	GG 1993/B/2013
697/130/2013	Assessment of Hellenic Post's Adjustment of the Universal Service Tariffs for 2013.	GG 2282/B/2013

11.2. Glossary

TERM	EXPLANATION
Administrative Cooperation (ADCO)	Committee responsible mainly for supporting actions with regard to the joint resolution of problems and the exchange of experiences on issues of Radio and Telecommunications Terminal Equipment (RTTE) market surveillance.
Asymmetric Digital Subscriber Line (ADSL)	A technology for data transmission that operates over a traditional telephone line, but achieves higher rates of transmission than traditional modems (i.e., the equipment that converts the digital sign originating from an electronic computer signal to an analog sign).
Body of European Regulators for Electronic Communications (BEREC)	BEREC is a continuation of the European Regulators Group (ERG). Its aim is to contribute to the development of the electronic communications market in the EU through the creation of a single regulatory environment in the member states.
Broadcasting	Transmission of sound and/or optical signals (programs) to a broad number of recipients (audience or viewers).
Call Termination	The electronic communications service where one of the contracting parties (the one providing the service) terminates in its network a call coming from the network of the other contracting party.
Carrier Pre-selection	The option given to OTE subscribers, upon request, to select as a default the operator who will process one or more categories of calls (international, local, long distance calls and calls to mobile phones), not dialling the four or five - digit code as in the case of Carrier Selection in the Selection of Carrier (Provider).
Carrier Selection	The option offered to OTE subscribers to make calls through another operator by dialling a special 4-digit or 5-digit Carrier Selection Code assigned to the specific operator before the desired number.
Chart of Obligations to Consumers (COC)	The providers rendering Postal Services under a General Authorisation must prepare a COC to include (a) a description of characteristics of the provided service and the time limits within which it is provided, (b) information for users on prices, based on the data affecting them including expected improvement of service quality, (c) the Dispute Resolution Committee with the participation of a users representative and right of attendance for the interested user (consumer). The COC also contains all other necessary information in relation to the characteristics of the Postal Services providers, the obligations and commitments to users, the management of postal items, user service, and potential compensation.
Comité Européen de Réglementation Postale (CERP)	A committee established in 1992 in the framework of CEPT (European Conference of Postal and Telecommunication Administration) with the purpose to regulate the postal market.
Courier Services	Postal services providing fast and monitored, via track and trace system, postal item delivery.
Digital Video Broadcasting — Terrestrial (DVB-T)	A model for terrestrial digital TV.

TERM	EXPLANATION
Distant Collocation	Form of collocation in which, in accordance with OTE's legal obligations, an electronic communications operator obtains access to OTE resources through connecting cables.
Double Play Services	The term is used in electronic communications for the provision of two different services. It may refer to any combination of the following four services: (1) fixed telephony, (2) Internet access, (3) television or video over the Internet, and (4) mobile telephony. However, it most commonly refers to the combination of fixed telephony and Internet access.
Effective Price	The price that results from dividing the revenues of a service (e.g., long distance traffic) by the volume of this service (minutes of long distance traffic).
European Competition Network (ECN)	A network consisting of the European Commission and the Competition Authorities of the member states with the aim of protecting competition. It constitutes a mechanism for consultation and cooperation in the framework of implementing the competition policy of the European Community.
European Conference of Postal and Telecommunications Administrations (CEPT)	Established in 1959 as a coordinating body for telecommunications and postal services organizations. It consists of two Committees: the Electronic Communications Committee (ECC), responsible for telecommunications and radio, and the European Committee for Postal Regulation (CERP), responsible for postal issues.
European Regulators Group for Postal Services (ERGP)	Established in 2010 by the European Commission, aiming to develop best regulatory practice in Europe on issues related to postal services. It is composed of 28 NRAs from EU member states.
Fixed Service (Radio-communications)	Radio-communications service, which includes wireless electronic communications networks between specified fixed points for the implementation of which radiofrequencies are used.
Frequency Map	Map of the available channels for use at a specific geographic location and under specific circumstances.
Fully Distributed Cost	The costing method according to which all the cost elements, including the indirect cost, are distributed to the generated products or the provided services through a set of algorithms.
Geographic Information System (GIS)	The Geographic Information System, abbreviated as GIS, is a system for spatial data and correlated properties. It is a digital system for integrating, storing, editing, analyzing and displaying geographically-referenced information. It is a "smart map" tool that enables users to search and find out the nearest postal points and all related postal information.
Geographic Numbers	The numbers whose prefix denotes the geographic location of the number holder.

TERM	EXPLANATION
Glasnost	A tool that checks whether the telecommunications operator is applying selective setting practices with respect to certain services, known as traffic shaping, which throttle the speed of the connection.
Independent Regulators Group (IRG)	A group comprising 45 European Regulatory Authorities, which was established in 1997, aiming at the exchange of views, experiences and practices among its members concerning issues of common regulatory interest. In 2008, the process of its establishment as a legal entity was completed according to Belgian Law. It is based in Brussels.
Information and Communication Technologies (ICT)	As a term, it refers to all the different ways in which computers are used and to the purpose of this use.
Interconnection	The physical and logical connection of electronic communications networks of the contracting parties in order to enable users to communicate with each other or with users of a third party, or in order to have access to services provided by a third party.
Interconnection Link	The link between OTE's switching centre (node) and the switching centre of an electronic communications provider which enables Interconnection.
Interference	The result of an unwanted action due to one or more transmissions, radiations or inductions during reception in a radio system. It appears as a loss of performance, wrong interpretation or loss of information which would have been otherwise received, had this unwanted action not taken place.
Jammers	These are devices that interfere in mobile telephony radiofrequency transmissions, thus preventing their reception.
Link	All telecommunications equipment required for the implementation of the connection between two points of an electronic communications network.
Local Loop	The circuit that connects the terminating point of each subscriber with the main distributor at OTE's Local Exchange.
Long Term Evolution (LTE)	State-of-the-art technology used for high speed wireless communication and networking of mobile devices.
Long-Run Incremental Cost	A costing methodology used to calculate the effective cost derived from producing ultimately a specific increment and is based on the assumption that the specific production has already taken place.
Mobile Service	Radio service between mobile stations and fixed stations or between mobile stations.
Multimedia Information Services (MIS)	MIS comprise value-added and premium pricing services, such as live conversation services, information services by means of recorded messages, chat services, special content provision via the Internet (Audiotex, Videotex, Premium Rate SMS-PSMS etc.).

TERM	EXPLANATION
National Numbering Plan	The set of rules defining the structure of numbers used by electronic communications operators for the provision of services to users.
Net Cost of Universal Service (NCUS)	NCUS refers to all necessary and relevant costs for providing Universal Service (US) and constitutes the difference between the net operating cost of the Universal Service Provider (USP) including US provision and the operating cost of the same provider without it (the so called reference model).
Network Diagnostic Tool (NDT)	A tool for measuring the real download and upload speed of a user's connection, round trip time (RTT) and packet loss at a specific geographical area and time (e.g., low speed at peak hours). Moreover, it allows users to compare their actual speed with the maximum speed theoretically supported by their connection, depending on the distance to the closest Local Exchange (L/E).
Next Generation Access Networks (NGAs)	Packet switching networks for the provision of broadband electronic communications services based on multiple access and backbone technologies (reaching high-quality levels). Furthermore, these technologies, if desired, could provide continuous service coverage to the user and access to more than one service operators simultaneously.
Number Portability	The option given to consumers to maintain their telephone number when changing operator.
Physical Collocation	Form of collocation in which OTE, in accordance with its legal obligations, constructs a special space in its Local Exchanges which is reserved for installing the equipment of electronic communications operators.
Postal Directive Committee (PDC)	Committee for Designing and Applying European Directives.
Premium Rate Service (PRS)	A call whose charge is higher than the maximum normal charge for Geographic Numbers within the country, with part of the increased charge going to the called party who is assigned that number.
Private Mobile Radio networks (PMR)	Professional terrestrial mobile service radio networks, which are used to meet the communication needs of various professional users, as well as for emergency services.
Quad Play Services	The term used in electronic communications to describe the combined provision of four different services which are usually the following: (1) fixed telephony, (2) Internet access, (3) television or video over the Internet, and (4) mobile telephony.
Radio and Telecommunications Terminal Equipment (RTTE)	Equipment, which includes a transmitter and/or receiver and provides communication through radio waves by means of spectrum.
Radio Spectrum Committee (RSC)	RSC was established by decision of the European Commission to define harmonized conditions for the availability and the effective use of the radio spectrum, which are necessary for the establishment and operation of the internal market in community policy fields, such as electronic communications, transport and research and development.

TERM	EXPLANATION
Radio Spectrum Committee (RSC)	RSC was established by decision of the European Commission to define harmonized conditions for the availability and the effective use of the radio spectrum, which are necessary for the establishment and operation of the internal market in community policy fields, such as electronic communications, transport and research and development.
Reference Unbundling Offer (RUO)	The reference document used as a basis for the contract signed for Local Loop Unbundling (LLU) provision by OTE to other operators. This document is released by OTE and approved by EETT.
Satellite Services	Services whose provision is based in whole or in part on the installation and operation of earth satellite station networks. These services include at least a radio link via earth satellite stations with the space part (uplinks) and radio links between the space part and earth satellite stations (downlinks).
Service free of Charge	Call for which the caller is not charged.
Shared Collocation	Refers to the capability of locating an electronic communications operator's equipment in a space within OTE's Local Exchanges where the related equipment of OTE is hosted. In the event of Shared Collocation, which OTE provides in accordance with its legal obligations, equipment maintenance and operation is carried out by the operator.
Significant Market Power (SMP)	An enterprise is considered to hold Significant Market Power when, either individually or in cooperation with other enterprises, it holds a position equivalent to a dominant position, i.e., one of financial power which allows it to operate to a great extent independently of the competition, the customers and, in the end, the consumers.
Soil Moisture and Ocean Salinity Satellite (SMOS)	A satellite used as part of the Living Planet Program of the European Space Agency (ESA) for collecting information on Earth's water cycle and climate change.
Special Postal Items Track and Trace System (SPITTS)	Information system for tracking and tracing postal items.
Telecommunications Conformity Assessment and Market Surveillance Committee (TCAM)	Committee established to assist the European Commission and consult on monitoring tasks as far as the application of Directive 99/5/EC is concerned and, if it is deemed appropriate, to issue directives for various issues.
Time Division Multiplexing (TDM)	Technique for separating signals through time. TDM is used in transmitting digital signals, where the transmission time is separated into time segments and each signal is transmitted in a specific time segment.
Transit	A service where one of the two contracting parties transmits a call to the network of a third party, coming from the network of another contracting party.
Triple Play Services	The term is used in electronic communications to describe the combined provision of three different services. Usually, the term refers to any combination of three of the following four services: (1) fixed telephony, (2) Internet access, (3) television or video over the Internet, and (4) mobile telephony.

TERM	EXPLANATION
Ultra Wide Band (UWB)	A new form of wireless technology based on low power transfer and codified impulses at a short distance environment. It is used in commercial and industrial applications to determine distances among objects, security systems and medical systems. It is also applied on television, on the Internet, on computers and on wireless local area networks (WLANs) and in encrypted communications.
UNEX	UNEX is a quality measurement system for the Universal Service of cross – border mail in European countries sponsored by the International Post Corporation (IPC). UNEX does not pertain solely to EU member states, but Europe as a whole.
Universal Postal Union (UPU)	UPU is the primary forum for cooperation between postal sector players. It helps to ensure a universal network of up-to-date products and services.
Universal Service (US) in the electronic communications sector	The provision of a fixed set of basic electronic communications services available to all users in Greece, irrespective of their geographic location, at affordable prices.
Universal Service (US) in the postal services sector	Universal Service (US) refers to the conventional postal service. It is the right granted to postal services users, irrespective of their location in Greece, to permanently and affordably enjoy high quality postal services. According to the new L.4053/2012, US includes the following individual services, for domestic and cross-border post: (a) the collection, transportation, sorting and distribution of postal items up to 2 kg, (b) the collection, transportation, sorting and distribution of postal parcels up to 20 kg, and (c) services of registered mail and deliveries with a declared value.
Universal Service Provider - USP (in the electronic communications sector)	The operator designated by the Greek state as having the obligation to ensure provision of the Universal Electronic Communications Service (US).
Universal Service Provider - USP (in the postal services sector)	The postal service provider designated by the Greek state, obliged to ensure universal service provision for the postal services. Currently, Hellenic Post (ELTA) is the Universal Service Provider (USP).
V-DSL.BRAS[KV]	Asymmetric line connection (VDSL technology) of the DVSL modem with the Broadband Remote Access Server (BRAS), to which the DSLAM belongs, located in the OTE street cabinet, for use by the end user and for traffic to and from the network of the provider.
V-DSL.DSLAM[KV]	Asymmetric Line Connection (VDSL technology) of the DVSL modem with the multiplexer, to which the DSLAM belongs, located in the OTE street cabinet, for use by the end user and for traffic to and from the network of the provider.
Very High Speed Digital Subscriber Line (VDSL)	The very high speed digital subscriber line is a technology providing faster data transmission than ADSL.

Virtual Collocation	Refers to the capability of collocating an electronic communications operator's equipment within OTE's Local Exchanges (L/Es) where the related equipment of OTE is hosted. In the event of Virtual Collocation, which is provided in accordance with OTE's legal obligations, maintenance and operation of the equipment is carried out by OTE.
Virtual Partial Unbundled Loop	Combined wholesale service of OTE, which permits the provider to offer voice services (through LLU) and VDSL high speed Internet (through Wholesale Broadband Access) to retail customers.
Wireless Fidelity (Wi-Fi)	Wireless local network which uses radiofrequencies to transmit and receive data, based on the IEEE 802.11 standards group.
Working Group Frequency Management (WGFM)	Working Group of the Electronic Communications Committee (ECC) that is responsible for the management of frequencies at the level of member states of the European Conference of Postal and Telecommunications Administrations (CEPT).
World Interoperability for Microwave Access (Wi-MAX)	Wireless local network which uses radiofrequencies to transmit and receive data, based on the IEEE 802.16 standards group.

11.3. Abbreviations

ADAE	Hellenic Authority for Communication Security and Privacy
ADCO	Administrative Cooperation Group
ADSL	Asymmetric Digital Subscriber Line
BDA2GC	Broadband Direct-Air-to-Ground-Communications
BEM	Block Edge Mask
BEREC	Body of European Regulators for Electronic Communications
BRA – ISDN	Basic Rate – Integrated Services Digital Network
BRAS	Broadband Remote Access Server
C&I	Conformance & Interoperability
CAA	Civil Aviation Authority
CE	Conformité Européenne
CEPT	European Conference of Postal and Telecommunications Administrations
CERP	Comité Européen de Réglementation Postale
CSS	Consumer Service Sector
DCS	Digital Communication System
DECT	Digital Enhanced Cordless Telecommunications
DSLAM	Digital Subscriber Line Access Multiplexer
ECB	European Central Bank
ECC	Electronic Communications Committee
EET	Hellenic Telecommunications Commission
EETT	Hellenic Telecommunications and Post Commission
EFTZ	European Free Trade Zone
E-GSM	Extended-Group Special Mobile
EKAV	National First Aid Service
ELAS	Hellenic Police
ELSTAT	Hellenic Statistical Authority
ELTA	Hellenic Post
ERGP	European Regulators Group for Postal Services
ERT	Greek Radio Television
ESA	European Space Agency
EU	European Union
FDC	Fully Distributed Cost
FLL	Full Local Loop
FWA	Fixed Wireless Access
GAEC	Greek Atomic Energy Commission
GG	Government Gazette
GIS	Geographical Information System
GPS	Global Satellite Positioning System
GSAN	Greek Single Access Number
GSM	Global System for Mobile Communications
HEPOS	Hellenic Positioning System

HFS	Hellenic Fire Service
ICT	Information & Communications Technology
IEEE	Institute of Electrical and Electronics Engineers
ILL	Inactive Local Loop
IPC	International Post Corporation
IRG	Independent Regulators Group
ISDN	Integrated Services Digital Network
ISP	Internet Service Provider
ITRE	European Parliament Committee on Industry, Research, Telecoms & Energy
ITU	International Telecommunication Union
ITU-R	International Telecommunication Union-Radiocommunication Sector
ITU-T	International Telecommunication Union-Telecommunication Standardization Sector
JMD	Joint Ministerial Decision
KEPE	Centre of Planning and Economic Research
KPI	Key Performance Indicator
KV	Kabelverzweiger
L/E	Local Exchange
LLU	Local Loop Unbundling
LRAIC	Long Run Average Incremental Cost
LRIC	Long Run Incremental Cost
LTE	Long Term Evolution
MAN	Metropolitan Area Network
MD	Ministerial Decision
MEECC	Ministry of Environment, Energy and Climate Change
MITN	Ministry of Infrastructure, Transport and Networks
M-Lab	Measurement Lab Partnership
MMS	Multimedia Message Service
MoU	Memorandum of Understanding
MTCs	Mobile Telephony Companies
NCRTV	National Council for Radio and Television
NCUS	Net Cost of Universal Service
NDT	Network Diagnostic Tool
NGAs	Next Generation Access network
NNP	National Numbering Plan
NRA	National Regulatory Authority
NRDNP	National Reference Database on Number Portability
NSRF	National Strategic Reference Framework
NTUA	National Technical University of Athens
OCECPR	Office of the Commissioner of the Electronic Communications and Postal Regulation of Cyprus
OECD	Organisation for Economic Co-operation and Development
OTE	Hellenic Telecommunications Organisation
PC	Physical Collocation

PD	Presidential Decree
PDC	Postal Directive Committee
PMR	Private Mobile Radio
POTS	Plain Old Telephone Service
PRS	Premium Rate Services
PSTN	Public Switched Telephone Network
PtMP	Point to Multipoint
PtP	Point to Point
QAM	Quadrature Amplitude Modulation
QoS	Quality of Service
RIO	Reference Interconnection Offer
RLAN	Radio Local Area Networks
RO	Regional Office
RSC	Radio Spectrum Committee
RSPG	Radio Spectrum Policy Group
RSPP	Radio Spectrum Policy Program
RTTE	Radio and Telecommunications Terminal Equipment
RUO	Reference Unbundled Offer
SDL	Simple DirectMedia Layer
SILYA	Electronic System for the Antenna Construction Application Submission
SMOS	Soil Moisture and Ocean Salinity Satellite
SMP	Significant Market Power
SMS	Short Message Service
SPEBS	System for Performance Evaluation of Broadband Connection Services
TAAS	Testing as a Service
TCAM	Telecommunications Conformity Assessment and Market Surveillance
TDM	Time Division Multiplexing
TETRA	Terrestrial Trunked Radio
TRN	Tax Registration Number
UHF	Ultra High Frequency
UMTS	Universal Mobile Telecommunications System
UPU	Universal Postal Union
US	Universal Service
USO	Universal Service Operator
USP	Universal Service Provider
VDSL	Very High Speed Digital Subscriber Line
VHF	Very High Frequency
VoIP	Voice over Internet Protocol
VPU	Virtual Partial Unbundled Loop
WAS / RLAN	Wireless Access Systems / Radio Local Area Network
WBA	Wholesale Broadband Access
WGFM	Working Group Frequency Management
Wi-Fi	Wireless Fidelity

Wi-Max	World Interoperability for Microwave Access
WLAN	Wireless Local Area Network
WLR	Wholesale Line Rental
WRC	World Radiocommunication Conference
xDSL	xDigital Subscriber Line

11.4. Index of Charts, Tables and Figures

a) Charts

b) Tables

c) Figures