



■ Fixed Telephone Service (FTS)

This chapter shows the state of the FTS at the end of 2007, namely describing this service's offer, its usage and consumer profile, and the evolution occurred during that year.

Following is a summary of the main items of the service's evolution during 2007

Main items of the evolution in 2007

In 2007, there was a decrease in FTS's penetration rate, which reached 39.5 per 100 inhabitants. This decrease could be connected to the phenomenon of fixed-to-mobile replacement and to tariff-related barriers. However, this decrease stood below the EU average mainly due to new FTS offers, namely offers based on GSM;

Nomadic VoIP service customers showed a considerably high growth, reaching 76.3 thousand customers by the end of the year. It should be stressed, however, that this service's weight in terms of customers and traffic is still quite low;

The number of operators in the market suffered two opposite effects: on one hand, there were several acquisition movements, namely lead by Sonaecom, which acquired Tele2 and Onitelecom's residential business; on the other hand, several operators, namely cable TV network operators, launched offers using VoIP;

There was also a decrease in the service's usage: traffic with origin in the fixed network decreased 7 per cent in 2007, mainly influenced by the migration of dial-up Internet access traffic to broadband; voice traffic dropped 1.5 per cent, in line with the latest years. This decrease trend in voice traffic is mainly connected to the phenomenon called fixed-mobile replacement; service revenues decreased about 14 per cent; Also in 2007, prices practiced in Portugal regarding the low, medium and high consumption baskets stood below the European average, since the price increases registered in the other considered countries was above the price increase recorded in Portugal, and also because the new more attractive tariff plans launched by the Portuguese incumbent operator were taken into account.

Mention should also be made to the FTS's overall high satisfaction levels. According to ICP-ANACOM's most recent electronic communications consumer survey, 89 per cent of users were satisfied with the overall quality of the service. As for consumer satisfaction regarding the prices charged in the FTS, the appraisal is less positive, with 52 per cent of those questioned stating that they are dissatisfied with prices.

Regarding the development of competition, the stake of alternative operators on offers with no monthly fee (namely, based on GSM, cable television distribution networks, or *multiple play*) resulted in a 6 per cent drop of Portugal Telecom Group's (PT) access share versus 2006, which reached 72 per cent in 2007. It should be mentioned that, according to the European Commission, the direct access customer share of alternative providers in Portugal is the second highest one among the considered countries.

Regarding voice traffic and the rate of customers that use alternative providers to make calls, Portugal ranks 4th and 5th in the ranking, for national and international calls, respectively.

FTS offer

FTS is the offer to the general public of voice routing, in real time, between fixed locations, giving any user with a device that is connected to a terminal point of a network the chance to communicate with another terminal point.

The service is provided by entities with a general authorization for the provision of the service, and by the universal service provider.

Below is a more detailed description of the services and the entities providing these services in Portugal.

Changes occurred in the provision of the FTS

Traditionally, telephone services were offered together (bundled) with the access to the public telephone network at a fixed location. The service was provided over the

fixed telephone network and the local access network was made up of copper wire pairs. The digits that made up the telephone number given to each subscriber line made it possible for the service user to associate that line to a given geographical area and a given service provider.

From the tariff viewpoint, two-part tariffs were normally charged, with a clear separation of the access item (installation and subscription) from the usage item (price of calls). Regarding call prices, there was the *peak-load pricing* and call prices were proportionate to their distance.

This situation was modified due to changes occurred during the latest years, of a regulatory, technological and commercial nature.

Indirect access

With the implementation of the so-called "indirect access", the offer of access to the public telephone network at a fixed location was split from the telephone services provided to the general public at a fixed location.

As from 1 January 2000, the users of publicly available telephone services at a fixed location began being served by the indirect access service in the call-by-call selection mode. This function allows FTS users to make telephone calls using the services of other FTS providers besides their access provider, further to dialling the 10xy code of each operator. Initially, only long-distance and international calls were eligible for the provision of this indirect access service.

As from 1 July 2000, a new indirect access mode was launched: provider pre-selection. This function makes it possible for the calls made by any user to be routed to the provider that they prefer with no need for dialling the selection codes. Initially, pre-selection was implemented through the installation of an auto-dialler device at the customer's phone. On 1 October 2000, pre-selection ended its interim stage on the networks of Porto and Lisbon, the installation of an auto-dialler no longer being needed; pre-selection started being programmed at the operators' exchanges. At that same date, calls with origin in the fixed networks and destined to a mobile network (fixed-to-mobile

calls) became eligible for indirect access, both in the call-by-call selection mode and in the pre-selection mode. On 15 November 2000, pre-selection became available for customers of the remaining areas of the country in its final format (without the installation of auto-diallers).

After 1 January 2001, local and long-distance connections also became eligible for use via indirect access.

Indirect access was the way that most alternative operators initially favoured to enter the market of telephone services provided at a fixed location, giving them the chance to reach considerably important shares in terms of national and international traffic.

Portability

The possibility to keep the telephone number after changing operator, in a framework of competition, is another modification to the traditional way of providing the service that was imposed by sectoral regulation.

Portability, the function giving subscribers of publicly available telephone services requesting it the possibility to keep their number or numbers, within the scope of the same service, regardless of the company offering it, at a given location in the case with geographic numbers, and all over the country with the remaining numbers, was introduced on fixed networks on 30 June 2001, and on mobile networks on 1 January 2002.

Law no. 5/2004 of 10 February - Electronic Communications Law (no. 5 of article 54 and no.1 of article 125) - empowers ICP-ANACOM to set the rules regarding the implementation of portability, which should take the form of a regulation.

In this context, ICP-ANACOM prepared Regulation no. 58/2005, published on 18 August, establishing the principles and rules applying to portability in the public telephone networks, which is mandatory for all companies with portability obligations.



Change is only possible within the same service, i.e., it is possible to change the provider of the telephone service at a fixed location and keep the same number, it is possible to change the provider of the mobile telephone service and keep the same number and, also, it is possible to change the provider of a given non-geographic service (e.g. 800) and keep the same number. But it is not possible, for example, to carry a number from a provider of the telephone service at a fixed location to a mobile telephone service provider, or vice-versa.

Alternative physical means of access

Another change in the provision of the FTS was the emergence of alternative infrastructure to access the service. The highlight goes to the cable television distribution networks which, during the first years of the service's liberalization, made it possible for some operators to get a considerable share of accesses to the public telephone network at a fixed location, and the radio means. The latter include the Fixed Wireless Access (FWA) and, later on, a solution supported on the frequencies associated to the provision of the Mobile Telephone Service.

The latter is a telephone service provided at a fixed location, based on GSM technology and its network, General Packet Radio Service (GPRS) and Universal Mobile Telecommunications System (UMTS), to access the final customer, and with access via mobile terminals. Mobile terminals make and receive calls within a given geographic area, corresponding to the customer address.

Through a determination of ICP-ANACOM of 14/09/2006, access to the service must be ensured via a terminal connected to a sole pre-determined Base Transceiver Station (BTS) whenever it makes, receives or maintains calls. In exceptional cases, technically justified and recognized by ICP-ANACOM, it is possible to associate the terminal to two - three, at the most - pre-determined BTSs. The provider should also inform end users of the service's features, namely by clarifying that access to the service is exclusively assured at the address stated by the end user, and that there are restrictions to caller location in calls made to the European emergency number (112).

These solutions have fostered the market of access to the public telephone network at a fixed location since the end of 2004, and with full development in 2005 and 2006.

Tariff changes and changes to the marketing of the service

Regarding tariffs, there are constant innovations revolutionizing traditional tariff models. On one hand, there is a trend to create tariff packages with merged access and usage items, by elimination of the access item, with usage prices subsidising the access, or by creating access prices that are convertible into calls or with an associated calling credit.

Multiple-play package offers merging voice services, Internet access, television (TV) distribution and contents are sometimes associated to these tariff changes. These offers are provided over cable TV distribution networks or over the LLU -regulated offer.

In cases where usage prices still exist, there is a phenomenon called 'postalization', which is the elimination of the proportionality between the price and the distance, and to a lesser extent, the elimination of the peak-load pricing. At the same time, optional tariffs and promotional offers have multiplied.

Apparently, these changes are contrary to the tariff principles proposed by economic theory, which would guarantee greater productive efficiency. However, the changes correspond to users' needs, namely the simplification of tariff structures, the existence of a single invoice, cost control and the elimination of fixed components, items that are also relevant in tariff theory. On the other hand, in a context of a greater competition and decreasing usage of the service, and in an industry characterized by a high level of fixed costs and of operational leverage, this type of tariff offers will assure the most proper level of revenues.

Single invoice

With the introduction of indirect access, users began

receiving two telephone invoices: one on access and sent by the incumbent operator, another regarding communications and charged by the alternative providers.

As per determination of 14 December 2004, the alternative providers were given the possibility to present the end customer with one sole invoice and one joint offer of access service and telephone services. This possibility comes from the regulatory obligation of the SLRO – Subscriber line resale offer.

SLRO is available to companies that, duly licensed by ICP-ANACOM, provide the following services over a given PTC's subscriber line:

- I) Telephone service at a fixed location under a pre-selection regime, regardless of the type of pre-selected traffic; and/or
- II) Broadband Internet access services, including services based on unbundled lines in the Shared Access mode.

Voice over Internet Protocol Services (VoIP)

Lastly, mention should be made to the introduction of voice services based on broadband Internet access offers, in the scope of the already mentioned multiple-play offers. These offers based on the Internet Protocol (VoIP) mainly have very low price levels.

VoIP technology enables users to establish telephone calls through a data network such as the Internet, converting an analogue voice signal into a set of digital signals, under the form of IP address packages, which can be sent, namely, through an Internet connection (preferably broadband).

The increase of broadband accesses for Internet use, together with the emergence of ever more stable protocols at the standardization level, enable the current development of applications supporting video and voice interactive services, such as VoIP, assuring a voice quality perceived by the user

as close to that of the traditional telephone service. Thus, the VoIP service is increasingly demanded by end users.

There are currently several types of terminals [personal computers - PC, IP telephone, Personal Digital Assistants - PDA, etc...] enabled to make VoIP calls, while the physical access should preferably be broadband, since currently it is not yet viable to guarantee an adequate bandwidth for the operation of VoIP over a narrow band connection to the public Internet. Broadband access may be based on wire-line technology suites, such as Asymmetric Digital Subscriber Line (ADSL), cable, optical fibre, and power line, or on wireless technologies, such as 3G, satellite, Fixed Wireless Access (FWA), Wi-Fi (Wireless fidelity) or WiMax (Worldwide interoperability for microwave access).

In the scope of FTS, these publicly available VoIP services, regulated by Law no. 5/2004, may be offered by an access provider, namely broadband:

I) At a sole fixed location and under conditions perceived by the user as being equivalent to those of the traditional fixed telephone service.

In matters of numbering and portability, ICP-ANACOM believes that VoIP offers provided at a fixed location could be granted geographic numbering, being the VoIP provider's responsibility to ensure the fulfilment of this requirement (use at one single location);

II) Through nomadic use offers, able to be used on several locations, supported on third party accesses, i.e., without control of the access network (Skype-OUT/IN is an example of this kind of service), and being able to make and receive calls.

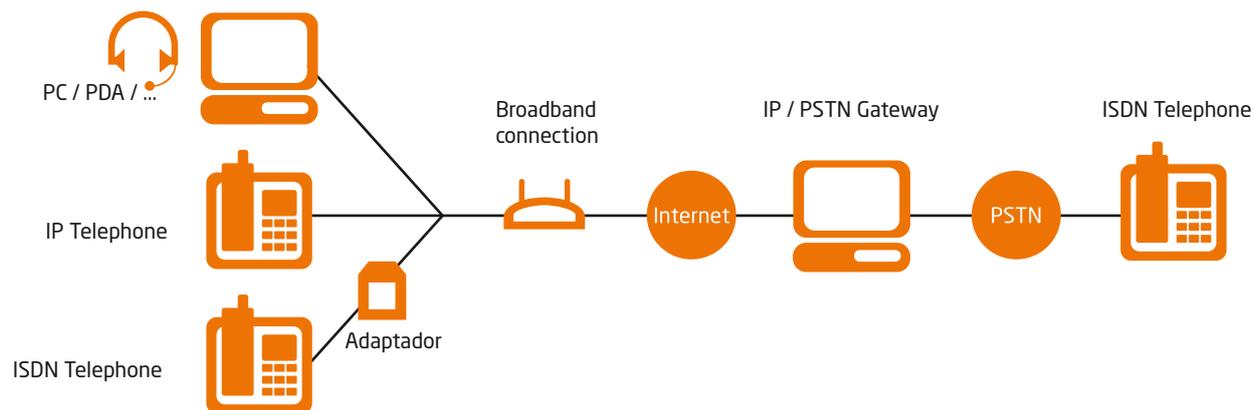
III) It was considered adequate to grant this nomadic VoIP mode a new range of non-geographic numbering² - "30" - distinguishing it from the telephone service provided at a fixed location.

² It was decided, under article 17 no. 2, paragraph b) of the Electronic Communications Law (Law no. 5/2004 of 10 February), to open range "30" to host VoIP nomadic use services by ranges of 10,000 numbers to the providers entitled to provide nomadic VoIP services, under the terms defined by ICP-ANACOM. Taking into account paragraph g) of no. 1 of article 3 of the Portability Regulation, range "30" was included in the scope of portability.



Configuration of a typical network using VoIP as the publicly available electronic communications service

Graph 2.



Accesses to the public telephone network at afixed location

- Copper wire pairs - this medium is mostly used by PTC, the incumbent operator, and is the one currently ensuring a greater geographical and population coverage. With the implementation of the RUO, alternative operators started to provide access to the public telephone network at a fixed location using the incumbent operator's unbundled local loops;
- Coaxial cable - cable made up of a central copper wire, enclosed by a belt of intertwined copper wires, and separated by an insulating material. This type of cable is used for carrying electrical signals at higher frequencies than those carried by a simple pair of metallic wires. It is one of the main elements of hybrid cable television (CATV) distribution networks;
- Fixed Wireless Access (FWA) - Access technology enabling operators to provide to their customers a direct connection to their telecommunications network, using a fixed radio link between the customers' premises and the operator's local switchboard. There are five active operators [AR Telecom, Novis, Vodafone, Onitelecom and PTC] with fixed wireless access licences³. Radio connections are used as a complement to their non-radio access networks, usually for non-residential customers;
- Power Line Communications (PLC) - Access technology using energy cables for broadband voice and data routing. This technology enables the use of a local household voice and data network, from any electrical socket, to provide high speed Internet access, telephone and fax services. Onitelecom was the only fixed telephone service provider to offer fixed access using PLC. However, it suspended the offer in October 2006;
- Fibre optics - physical transmission means (usually a cable with several pairs of fibreglass) in which data is routed as light impulses. It is a broadband medium that can provide the capacity to carry large amounts of data at long distance and with small distortion, if connected to the proper device. Both the new operators (Onitelecom, Novis, Coltel, AR Telecom, Refer telecom, Cabovisão), and PTC have installed fibre optics in their access networks, particularly to be used by the non-residential market;
- Radio-relay - transmission system that disseminates radio waves in the atmosphere using dish antennas. The use of radio-relay connections is negligible, considering the large investment needed to maintain them.

³ The rights of use were reconfigured by ICP-ANACOM in 2006. The reconfiguration of the system was achieved by transforming a national coverage system into a system made up of several geographic areas.

- Access using the frequencies granted for the provision of MTS. ICP-ANACOM authorized the use of frequencies granted to GSM and UMTS networks for the provision of FTS, imposing limitations to the mobility of the devices used to provide this service, as mentioned previously;

It should be mentioned that, possibly, all the main means of access to the public telephone network at a fixed location are present in Portugal, with the exception of PWC, which offer was terminated.

The following types of access are provided over these physical media:

- Analogue accesses - corresponding to accesses using a single 64kbit/s channel, in principle to carry voice and data up to 56 Kbit/s;
- Basic rate digital accesses [basic ISDN (Integrated Services Digital Network) accesses] - corresponding to accesses using two 64kbit/s channels, carrying voice and data, and a 16 Kbit/s signalling channel;

- Primary rate digital accesses (primary ISDN accesses) - corresponding to accesses using 30 64kbit/s channels for carrying voice or data, one 64kbit/s signalling channel and one synchronism channel, with a global bit rate of 2 Mbit/s;

Telephone services provided to the general public at a fixed location

The FTS enables the user to make and receive national and international voice calls, and is usually provided together with several applications, characteristics and optional services.

The following table summarizes the main services (traditional voice services, characteristics, associated services, etc.) that FTS providers can offer.

Due to the increased network convergence, integrated solutions offered by providers may include other types of service, namely the provision of voice, data and video in one single fixed access, with the proper equipment. These solutions are usually fitted to the segments they target (residential, self-employed professionals, companies, etc.).

Products and services provided by FTS providers

Table 1.

Products/services	Brief description
Analogue telephone line (only for direct access ⁴)	Corresponds to the traditional telephone service, for making and receiving voice calls at fixed locations. With the use of a modem it gives access to further services, namely data transmission and fax.
Service features (only for direct access)	Features that modify or increase the basic features and characteristics of the basic telephone services (e.g.: call waiting, call re-routing, SMS - short message service - and MMS - multimedia messaging service, etc.)
Tariff services	Detailed invoicing
Digital telephone line – ISDN (Integrated Services Digital Network) services (only for direct access)	Service also provided using a public telephone network enabling the integration of voice and data services into one single access. Currently available ISDN connections are as follows: - basic ISDN access: access to the ISDN with two 64kbps voice and/or data channels and one 16kbps signalling channel, which can be used for packaged-mode data; - primary ISDN access: access to the ISDN with 30 64kbps voice and/or data channels and one 64kbps signalling channel, and one 64kbps synchronism channel, with a total throughput of 2Mbps. Other supplementary services can be provided over ISDN lines, such as caller ID or its suppression, call re-routing, etc.
Operator services	Information and telephone directory services, operator assisted communications services, collect call services, SMS and MMS, etc.
Access to public services	Access to emergency services and other services.
Call-by-call selection and pre-selection	Feature making it possible to select an FTS provider other than the one owning the local loop. This choice is made by dialling a short code (the provider's 10xy prefix) when making the call - call-by-call selection - or further to a pre-selection contract.
Operator portability (only for direct access)	Feature enabling a subscriber of a given service to choose to keep their telephone number when changing to another operator of the same service.
Public payphones for access to the fixed telephone service	Terminal equipment for access to the FTS (telephone booths), installed at public locations, including the conditioned access ones, available to the general public as a paid service.

Source: ICP-ANACOM.

⁴ Depending on whether the local access is held by the FTS provider or not, it can be direct access FTS, or indirect access FTS.



The FTS providers

Below is a list of the FTS providers. Nomadic VoIP and public payphone providers are also listed.

FTS providers

At the end of 2007 there were 24 entities authorised to provide FTS.

The following table contains the list of entities that were legally authorized to provide FTS in 2007. This table includes data on the state of each operator at the beginning and end of the year, as well as information on the market entries and exits during this period.

At the end of 2007 there were 17 active providers in the FTS markets, 4 more than in the previous year.

FTS providers in 2007

Table 2.

Name	Beginning	Entries	Exits	End
ADIANIS - Telecomunicações & Multimedia, S.A.	NA			NA
AR Telecom - Acessos e Redes de Telecomunicações, S.A.	A			A
Broadnet Portugal, S.A.	NA			NA
BT Portugal - Telecomunicações, Unipessoal, Lda.	NA			NA
CABO TV Açoreana, S.A.	-	X		A
CABO TV Madeirense, S.A.	NA			A
Cabovisão - Televisão por Cabo, S.A.	A			A
CATVP - TV Cabo Portugal, S.A.	NA			A
COLT Telecom - Serviços de Telecomunicações, Unipessoal, Lda.	A			A
Equant Portugal, S.A. (ORANGE) ⁵	A			A
G9 SA - Telecomunicações, S.A.	A			A
Media Capital - Telecomunicações, S.A.	NA			NA
NEUVEX - Telecomunicações, Marketing e Informática, Lda. (RedvoTelecom)	NA			NA
OniTelecom - Infocomunicações, S.A. ⁶	A			A
Optimus Telecomunicações, S.A. ⁷	NA		X	-
PT Comunicações, S.A.	A			A
PT Prime - Soluções Empresariais Telecomunicações e Sistemas, S.A.	A			A
Radiomóvel - Telecomunicações, S.A.	A			A
Refer Telecom - Serviços de Telecomunicações, S.A.	A			A
Sonaecom - Serviços de Comunicações, S.A. ⁷	A			A
T - SYSTEM ITC IBERIA, S.A. (Sociedade Unipessoal) - (Sucursal em Portugal)	-	X		NA
Telemilénio - Telecomunicações, Sociedade Unipessoal, Lda (Tele2) ⁸	A			A
TELSOCOMM - Telecomunicações, Marketing e Informática, Lda.	NA			NA
TMN - Telecomunicações Móveis Nacionais, S.A.	A			A
Vodafone Portugal - Comunicações Pessoais, S.A.	A			A
TOTAL ACTIVE	14	1	-	17
TOTAL NON-ACTIVE	9	1	1	7
TOTAL	23	2	1	24

Source: ICP-ANACOM.

Legend: A - Active; NA - Not Active

⁵ In Portugal, the provision of EQUANT's (ORANGE) fixed telephone service is made by Novis.

⁶ It should be mentioned that ONI's residential business was bought by Sonaecom.

⁷ Further to the Novis/Optimus merging process, Novis Telecom, S.A. Change its name to Sonaecom - Serviços de Comunicações, S.A.

⁸ Tele2 was bought by Soanecom.

Of the seventeen entities operating by the end of 2007, five provided the service exclusively by direct access, and the remaining ones provided the service using both access types (Table 3).

FTS providers

Table 3.

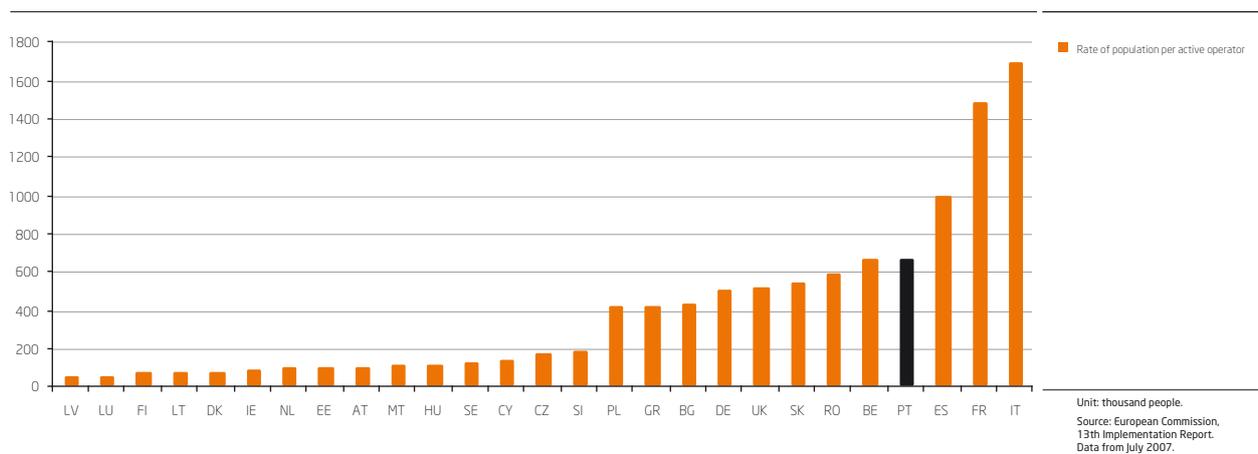
	2003	2004	2005	2006	2007
Authorised providers	26	21	22	23	24
Active providers	13	13	14	13	17
Providers with direct access and indirect access traffic	8	8	10	9	11
Providers with direct access traffic only	2	2	1	2	5
Providers with indirect access traffic only	3	3	3	2	1

Source: ICP-ANACOM.

Regarding the ratio of population per number of active FTS providers, Portugal had one of the EU's highest ratios, only behind Italy, France and Spain. Latvia, Luxembourg, Finland and Lithuania are among the countries with better performances regarding this ratio.

International comparison of the amount of active FTS providers

Graph 3.





Nomadic VoIP providers

Regarding VoIP, there were 19 providers authorized to provide VoIP services in 2007. 14 of these providers were entitled to provide nomadic VoIP services.

Only 6 of the 14 authorised providers were active. Most of the remaining operators expect to start their commercial operations during 2008.

Nomadic VoIP providers⁹

Table 4.

Name	Beginning	Entries	Exits	End
AR Telecom - Acessos e Redes de Telecomunicações, S.A.	-	X		NA
CABO TV Açoreana, S.A.	-	X		NA
CABO TV Madeirense, S.A.	NA			NA
CATVP - TV Cabo Portugal, S.A.	NA			A
EPORTEL - Prestação de Serviços em Telecomunicações, Lda	-	X		NA
G9 SA - Telecomunicações, S.A.	A			A
NETCALL - Telecomunicações e Tecnologias de Informação, S.A.	A			A
NEUVEX - Telecomunicações, Marketing e Informática, Lda.	NA			NA
PT PRIME - Soluções Empresariais de Telecomunicações e Sistemas, S.A.	-	X		A
PT.Com - Comunicações Interactivas, S.A.	-	X		A
RADIOMÓVEL - Telecomunicações, S.A.	NA			NA
SIPTELNET - Soluções Digitais, Unipessoal, Lda. ¹⁰	NA			NA
VOXBONE, S.A.	-	X		NA
WEBMEETING - Internet e Consultoria Informática, Lda. (TNTVOIP)	A			A
TOTAL ACTIVE	3	2	-	6
TOTAL NON-ACTIVE	5	4	-	8
TOTAL	8	6	-	14

Source: ICP-ANACOM.

Legend: A - Active; NA - Not Active

⁹ Companies allocated with range "30".

¹⁰ The company did not start its commercial offer. It only has a VoIP service pilot-project

Public payphone providers

Below is the list of public payphone service providers.

Public payphone service providers in 200

Table 5.

Name	Beginning	Entries	Exits	End
ADIANIS - Telecomunicações & Multimedia, S.A. (*)	NA			NA
BLUE CARD - Serviços de Telecomunicações e Informática, Lda.	A			A
CHOUHARY - Comércio de Equipamentos de Telecomunicações, Lda.	A		X	-
EPORTEL - Prestação de Serviços em Telecomunicações, Lda.	NA			NA
FLASHAD - Electrónica e Comunicações, Unipessoal, Lda.	A			A
FREQUÊNCIA ÚNICA - Comunicações, Lda.	-	X		NA
G9 SA - Telecomunicações, S.A.	A			A
GLOBEVOX - Serviços de Telecomunicações, Lda. (*)	A			NA
MONEYCALL - Serviços de Telecomunicações, Lda.	A			A
Mundial - Agência de Câmbios, Lda.	-	X		A
NETCALL - Telecomunicações e Tecnologias de Informação, S.A.	A			A
OPTION 1 - Serviços de Telecomunicações, Lda.	A			A
PHONE ONE - Serviços de Telecomunicações, Lda.	A			A
PT Comunicações, S.A.	A			A
Seye & Bari, Lda.	NA		X	-
UNO CALL NOW - Comunicações e Serviços, Lda.	NA		X	-
WORLD FUN TELECOM - Redes de Telefonia, S.A.	A			A
XALAT - Electronic communications , Unipessoal, Lda. (*)	NA			NA
TOTAL ACTIVE	11	1	1	10
TOTAL NON-ACTIVE	5	1	2	5
TOTAL	16	2	3	15

Source: ICP-ANACOM.

Legend: A - Active; NA - Not Active

* Companies with post return to sender.

At the end of 2007 there were 15 public payphone providers in operation, with the entry of 2 new operators, 1 of which was active, and the exit of 4 operators, 1 of which was active.



Offer's structure and operator switching

In 2007, the share of accesses installed at the request of PT Group customers decreased 6 per cent. (It should be mentioned that the accesses benefiting from the SLRO were counted as alternative provider direct accesses).

Since the end of 2003, PT Group lost 22.2 per cent of the overall access share.

PT Group access shares

Table 6.

	2003	2004	2005	2006	2007
Total main accesses	94,4	93,3	89,3	78,6	72,2
Accesses installed at customer request	94,3	93,2	89,0	78,1	71,6
Analogue accesses	94,6	93,9	91,3	81,5	76,8
Equivalent digital accesses	93,2	90,5	81,1	68,1	59,1

Unit: %.
Source: ICP-ANACOM.

The evolution of the direct access customer share had a similar behaviour as the access share. (It also assumed that customers with active SLRO were alternative operators' direct customers). It should be stressed out that, in practical terms, indirect access is only provided by alternative operators.

PT Group customer shares

Table 7.

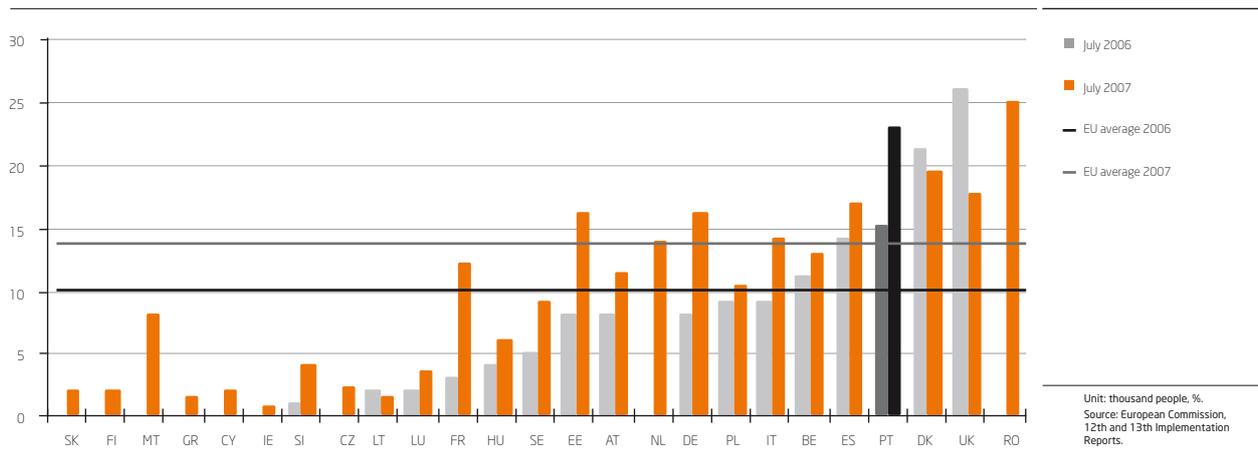
	2003	2004	2005	2006	2007
Direct access customers	94,6	93,8	88,9	76,5	68,9
Indirect access customers					
Pre-selection	0,7	0,7	0,9	1,3	2,2
Call-by-call selection	0,4	0,3	0,4	0,6	1,1

Unit: %.
Source: ICP-ANACOM.

It should be mentioned that, according to the European Commission, the direct access customer share of alternative providers in Portugal is the second highest one among the considered countries.

Alternative providers' direct access customer share in the EU

Graph 4.



Together with the evolution of access and customer shares, number portability has also been fostered. During 2007, ported geographic numbers maintained the growth trend,

with a 49 per cent growth. In absolute terms, the volume of ported number reached 665 thousand numbers, a figure that is equivalent to 16 per cent of all accesses.

Ported numbers

Table 8.

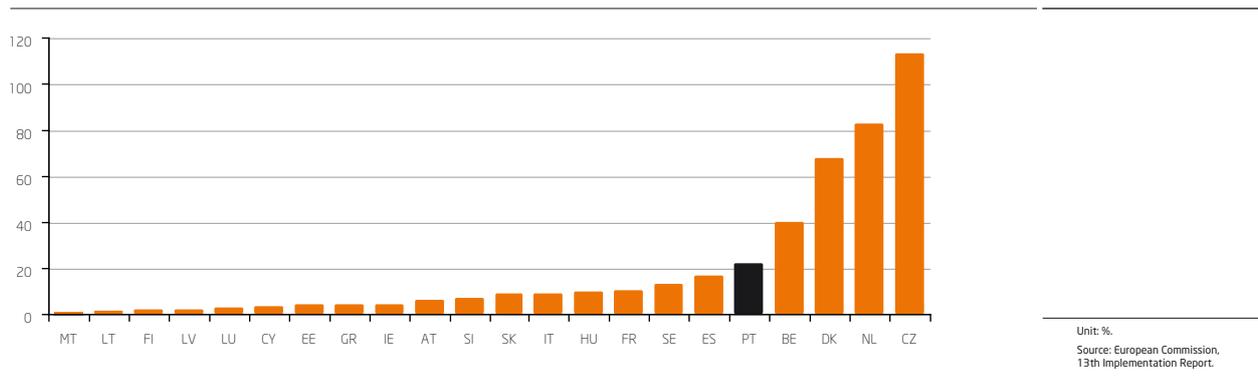
	2003	2004	2005	2006	2007
Geographic numbers	118.017	158.623	265.077	446.371	664.684
Non-geographic numbers	214	277	351	571	739

Unit: 1 number.
Source: ICP-ANACOM.

At the EU level, Portugal ranks fifth regarding ported numbers.

Percentage of ported fixed numbers (October 2007)

Graph 5.





Regarding traffic shares, there has been, since the beginning of liberalization, a constant decrease in the share of voice traffic routed by the incumbent operator. In line with this,

2007 recorded a 2.2 per cent decrease in the share of voice traffic routed by the incumbent operator in terms of minutes, and a 2.5 per cent one in terms of calls.

PT Group's traffic shares (minutes)

Table 9.

	2003	2004	2005	2006	2007
Total traffic (voice + Internet)	88,5	83,7	78,2	73,4	69,9
Voice traffic	82,4	78,1	74,1	71,0	68,8
National traffic (voice)	82,4	78,1	74,2	70,6	68,4
National fixed-to-fixed traffic	82,6	78,3	74,4	71,0	69,1
National fixed-to-mobile traffic	81,4	76,8	72,9	68,3	64,7
Outgoing international traffic	82,1	77,4	73,0	76,4	74,2
Internet access traffic	99,5	99,4	96,3	92,9	91,5

Unit: %
Source: ICP-ANACOM.

PT Group's traffic shares (calls)

Table 10.

	2003	2004	2005	2006	2007
Total traffic (voice + Internet)	83,0	78,2	74,8	71,2	68,5
Voice traffic	81,7	77,3	74,2	70,9	68,4
National traffic (voice)	81,7	77,3	74,3	70,8	68,3
National fixed-to-fixed traffic	81,5	77,2	74,3	71,3	69,1
National fixed-to-mobile traffic	82,7	78,0	74,3	69,2	65,7
Outgoing international traffic	80,1	75,4	72,1	72,5	70,3
Internet access traffic	99,0	97,7	93,8	84,0	69,0

Unit: %
Source: ICP-ANACOM.

Regarding national voice traffic destinations (mobile and fixed geographic), alternative providers were responsible in 2007 for about 32 per cent of traffic, both in terms of minutes and of calls.

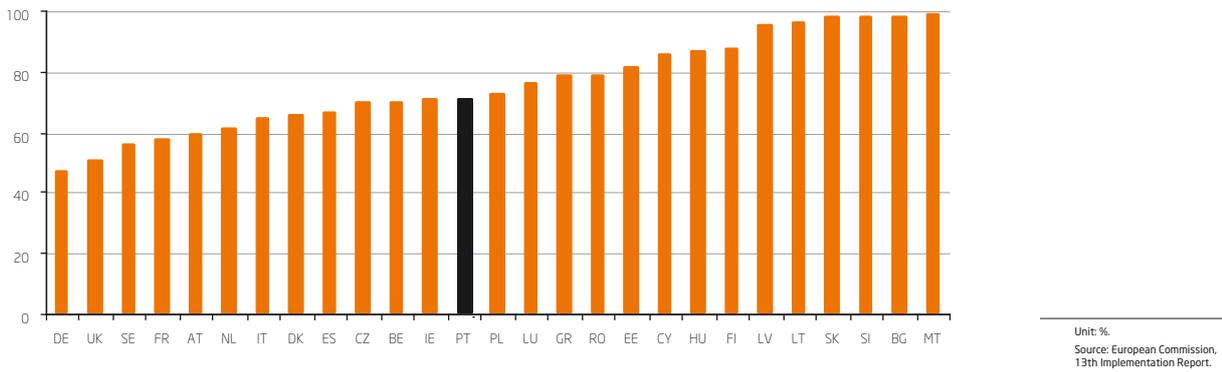
Regarding outgoing international traffic, in 2007 the alternative providers' share was about 25.8 per cent of the routed minutes, and 29.7 per cent of the originated calls.

Concerning Internet access traffic, in 2007 the alternative providers' share was about 8.5 per cent of the routed minutes and 31 per cent of the originated calls. It should be highlighted that the alternative providers increased their Internet access traffic share by about 15 per cent, in terms of calls.

Within the EU, Portugal stands in a median position regarding the incumbent operator's traffic share

Traffic share of the incumbent operator in December 2006 (minutes)

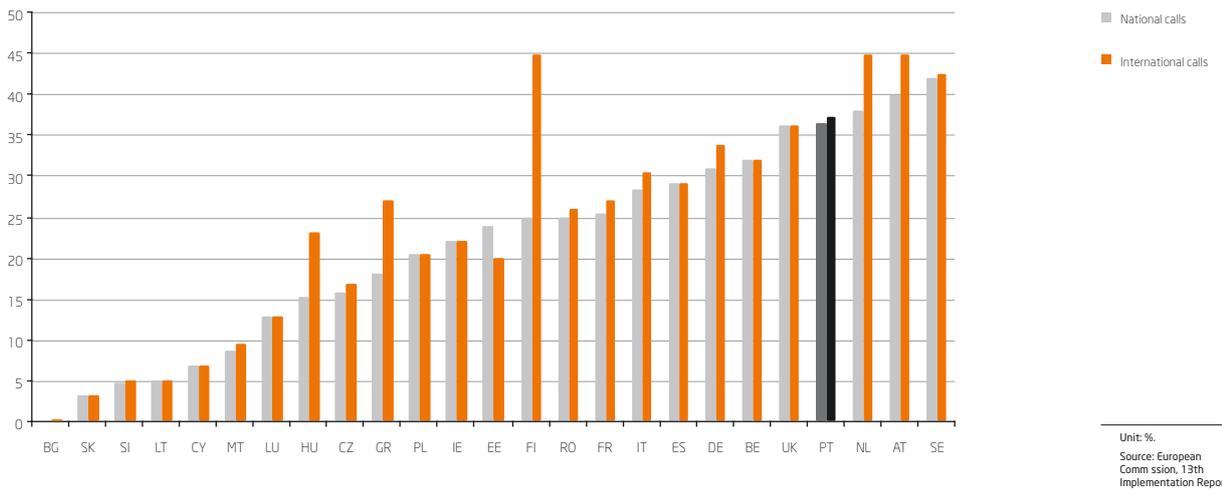
Graph 6.



Regarding the proportion of customers using alternative providers to make calls, and in comparison with the remaining EU countries, Portugal stands in the 4th and 5th positions, in terms of national and international calls, respectively.

Percentage of subscribers using alternative providers to make fixed voice calls (July 2007)

Graph 7.





Regarding revenues, PT Group's share reached 77.2 per cent in 2007, 2 per cent below the figure that was recorded the year before. This reduction results namely from the constant increase of the subscription and installation shares

of alternative providers, which stood in 2007 at 15 per cent, versus only 0.3 per cent in 2004.

Revenue shares of PT Group's FTS

Table 11.

	2003	2004	2005	2006	2007
Total revenues	89,5	87,7	86,4	79,3	77,2
Revenues from subscription and installation fees	99,7	98,3	96,7	85,9	85,0
Revenues from calls and SMS originated in the fixed network	82,3	79,6	77,4	72,3	68,8

Unit: %.
Source: ICP-ANACOM.

In international terms, in December 2006, the revenue share of the incumbent operator in Portugal was close to the average of the incumbent operator of the EU countries taken into account, which stood at 75.8 per cent.

The evolution of the shares that are shown above results from the previously mentioned factors explaining the subjacent variables. However, it is important to stress consumer motivation concerning operator switching.

Revenue share of the incumbent operator in December 2006 (revenues)

Graph 8.



Unit: %.
Source: European Commission, 13th Implementation Report.

In this context, it should be noted that the main reasons, pointed out both in 2006 and in 2007, for switching operator are related to the service's price level or to tariff issues (no monthly fee).

Reasons for switching fixed operator

Table 12.

	Dec-06	Dec-07
Dissatisfaction with prices	48,9	51,7
New operator charges no monthly fee	19,0	18,3
Interest in trying new products/services	9,9	6,1
The previous operator did not offer a package with Internet and TV access	5,7	5,3
Dissatisfaction with the quality of the service	5,6	7,2
The previous operator did not offer a package with Internet access	2,9	2,6
Most people with whom they contact are customers of this new operator	2,4	1,3
Other replies	3,3	5,2
N.A.	2,2	2,3
Total	100	100

Unit: %.

Source: ICP-ANACOM, Electronic communications consumer survey - 2006 and 2007.

And, in fact, operators that launched offers with no monthly subscription (namely based on GSM, cable TV distribution networks, or *multiple play*), and the providers, namely of indirect access, that claim that their offers are cheaper than the incumbent operator's, are the main responsible parties for the decrease in the incumbent operator's access and traffic shares (another relevant factor in this scope is the decrease in the use of the service in its traditional form).

On the other hand, these consumer motivations and the offers launched by alternative operators to satisfy the needs resulting thereof also justify PT Group's relative share regarding revenues. percentuais.

FTS usage profile

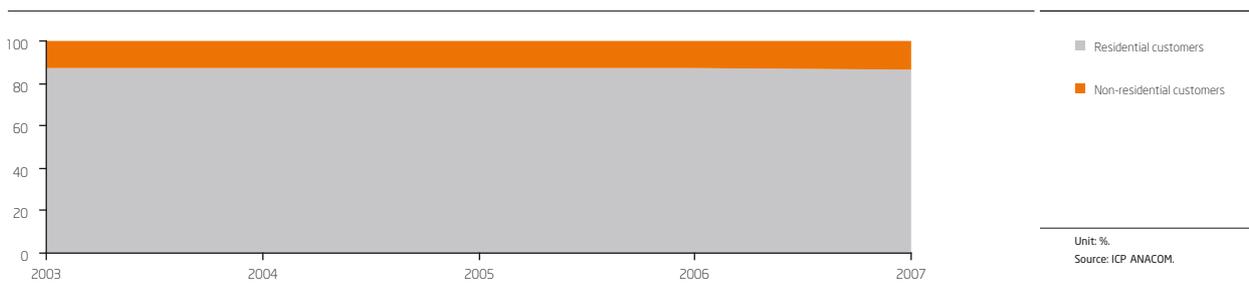
Below are the main characteristics of FTS users, the characteristics of the service's accesses and traffic, and the main barriers invoked by users for not subscribing to the service.

FTS user's profile

FTS users are mostly residential. Only about 13 per cent of FTS customers are non-residential. As the following graph shows, these proportions have not varied greatly throughout the period under review.

Residential and non-residential customers

Graph 9.





Among residential customers, service penetration is quite above the average for those above 55 years old and in the case with higher educated.

FTS penetration per age group

Table 13.

Age group	Dec. 2007
15-24	42,2
25-34	37,0
35-44	47,1
45-54	59,7
55-64	66,0
65-over	82,8

Unit: %.

Source: ICP-ANACOM, Electronic communications consumer survey - 2007.

The residents of the Autonomous Regions subscribe to the FTS more intensely than those in the remaining regions of the country.

Penetração do STF por NUTII

Table 14.

Region	Dec. 2006	Dec. 2007
North	56,7	47,1
Centre	61,1	65,1
Lisbon and Tagus Valley	58,9	48,8
Alentejo	60,1	45,5
Algarve	52,3	51,5
Madeira	71,6	48,9
Azores	81,9	77,2

Unit: %.

Source: ICP-ANACOM, Inquérito ao consumo das Electronic communications - 2007.

FTS usage characteristics

Below is a characterization of the use of FTS accesses and calls

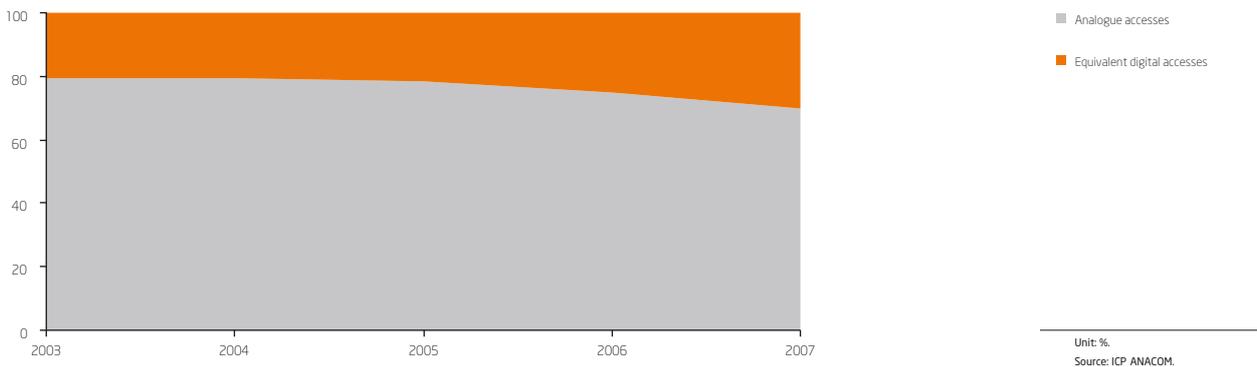
Accesses

The vast majority of direct accesses to the FTS are made up of analogue accesses. However, since the beginning of the liberalization process, the share of equivalent digital accesses grew considerably. This evolution is mainly due to the commercial strategies of the alternative operators who invested in this type of offer.

The above-described trend grew stronger in 2005-2006 as a result of the increase of accesses using GSM networks. By the end of 2007, the rate of equivalent digital accesses was about 30 per cent.

Distribution of accesses per type of access¹¹

Graph 10.



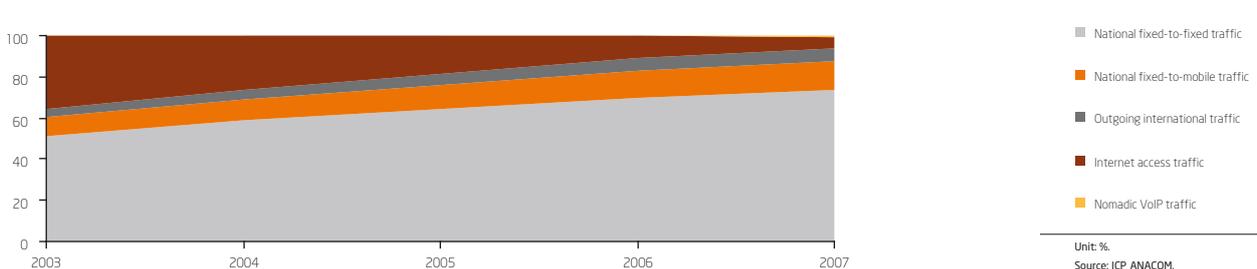
Traffic

Switched traffic routed by the fixed network, considering the amount of minutes, is mainly made up of fixed-to-fixed calls (73.6 per cent). It is followed by fixed-to-mobile traffic (13.7 per cent), outgoing international traffic (6.7 per cent), Internet access traffic, and lastly, nomadic VoIP service's traffic (1.1 per cent).

The importance of the switched Internet access (dial-up) traffic, which at an early stage gained a considerable weight regarding total traffic due to the spread of Internet and the introduction of free Internet offers by alternative operators, has suffered an accelerated drop due to the migration to broadband. This fact has contributed to the increase in the weight of the remaining traffic destinations. VoIP traffic gained some importance during 2007.

Distribution of traffic per destination (Minutes)

Graph 11.



The above-described distribution is considerably changed when the amount of calls is considered. This is explained by the fact that the amount of minutes of Internet access calls is much higher than the amount of calls (i.e. Internet access calls have a longer length than the remaining ones). Regarding the number of calls, fixed-to-fixed traffic stands for about 72 per cent of the overall traffic, while fixed-to-mobile traffic and

international calls stand for about one fifth and 4.6 per cent, respectively. Internet access calls only stand for 1.1 per cent of all calls, and nomadic VoIP service calls make up about 0.7 per cent of the overall amount of calls.

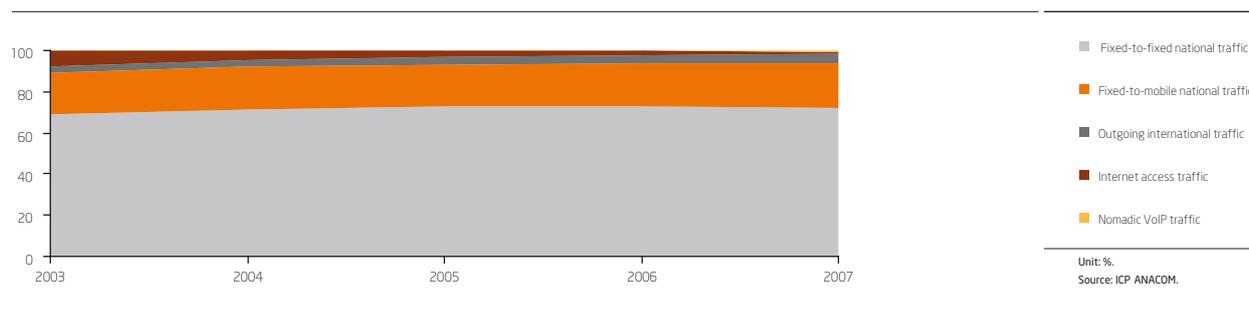
Also in this case the migration to broadband Internet access had an impact on traffic distribution along this period in time.

¹¹ Includes accesses installed at customer request and public payphones. Does not include own stock.



Distribution of traffic by destination (calls)

Graph 12.



Traffic: Average call length

Voice calls originated and ended in the fixed network have a length of about 3 minutes and 15 seconds longer than fixed-to-mobile calls. These differences are probably explained by the differences between the price levels of these calls.

On the other hand, international calls reached a length of 4 minutes and 22 seconds in 2007. The increasing length of international calls may be also explained by tariffs. In fact,

in the latest years, there has been a reduction in the prices of these calls and the launch of optional and promotional offers specifically targeted, e.g., at immigrant communities.

The average length of Internet access calls reached about 13 minutes and 40 seconds in 2007, a figure below that of 2005 and 2006. It would be expected that, as these service's intensive users migrate to broadband solutions, the average call length would decrease.

Average call length

Table 15.

	2003	2004	2005	2006	2007
Total traffic (voice + Internet + nomadic VoIP)	3,79	3,46	3,18	3,04	2,98
Voice traffic	2,64	2,66	2,68	2,76	2,85
National traffic (voice)	2,59	2,60	2,60	2,68	2,77
National fixed-to-fixed traffic	2,81	2,83	2,81	2,91	3,03
National fixed-to-mobile traffic	1,80	1,79	1,85	1,88	1,90
Outgoing international traffic	4,01	4,21	4,42	4,43	4,37
Internet access traffic	17,31	20,44	20,08	17,14	13,65
Nomadic VoIP traffic	--	-	-	n.d.	4,72

Unit: minutos.
Source: ICP-ANACOM.

Barriers to service subscription

According to the data collected for the electronic communications consumer survey - 2007¹², and as the following table shows, the main reason for not subscribing to the FTS is the use of mobile phone.

The reasons: "doesn't need, doesn't need to communicate" is stated in 2007 by 20 per cent of those questioned. The existence of a monthly fee as part of the invoice was also considered an important factor for not using the fixed telephone.

12 The Universe defined for this survey was made up of users 15 years old or older, living in Mainland Portugal and in the Autonomous Regions of Madeira and the Azores. The sample was made up of 3504 interviews, with a semi-proportional distribution by NUT II region. Households were selected randomly from a stratified matrix including the Region (7 NUT II regions) and the Habitat/Size of the population aggregates (5 groups). Crossing these variables ensured a proportional distribution of the sample by region regarding the Portuguese population in general. Results were later weighted in order to grant each region its real weight within the Portuguese population. Quotas were defined with base on the General Population Census (2001) by Instituto Nacional de Estatística (I.N.E.). Interviewees at each household were selected using the quota method, based on the crossing of variables Sex, Age (3 groups), Education (3 groups: primary education or less, more than primary education and less than higher education, and more than higher education - according to the categorization requested by ICP-ANACOM), and Occupation. Data was collected by telephone interviews, made to fixed network numbers and mobile phone numbers, using the CATI (Computer Assisted Telephone Interview) system. The fieldwork was conducted between 1 November 2007 and 17 December 2007. The results obtained for each of the four services considered (fixed telephone service, mobile telephone service, Internet access service, and paid TV service) have a maximum error of 4 per cent (for a confidence level of 95 per cent). The fieldwork and handling of data was carried out by company GFK Metris.

The fact that the service was considered too expensive reached 10% in 2007.

Reasons for not having fixed network telephone

Table 16.

	Dec. 2007
Uses mobile phone	43,6
Prefers not to pay monthly fee	19,7
It is cheaper to make calls using other means	--
Doesn't need	21,4
Other replies	1,0
Recent / rented home	3,1
Uses computer	0,4
Too expensive	9,9
N.a.	0,8
Total	100

Unit: %.

Source: Electronic communications consumer survey – December 2007.

Base: People questioned without fixed network

The motivations put forward by Portuguese consumers for not subscribing to the FTS are very similar to those stated by their European counterparts.

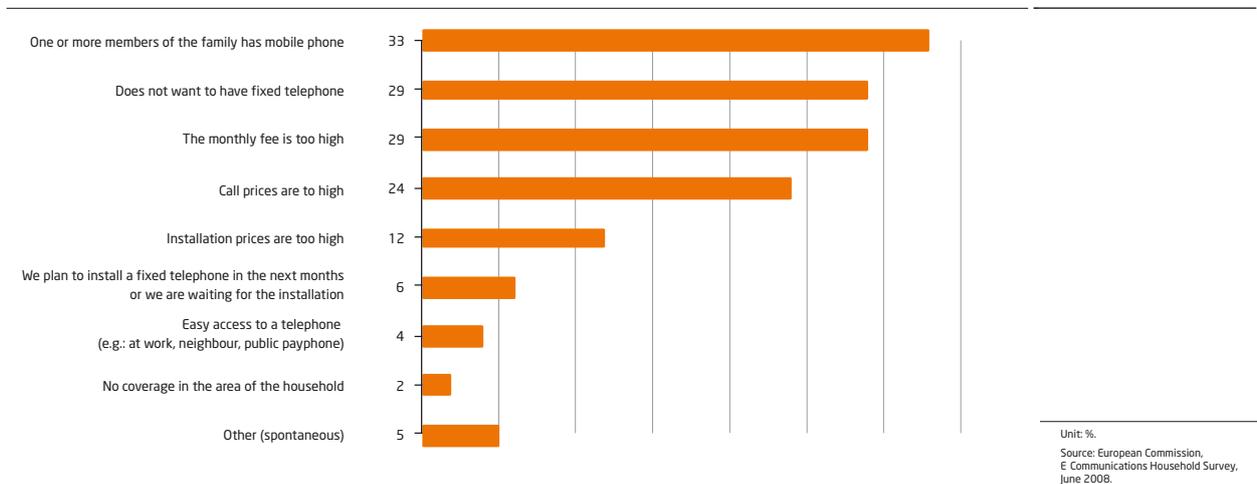
According to the European Commission¹³, the fact that one member of the family has a mobile phone is the most stated reason for not having fixed network. The costs associated to a fixed telephone line are also mentioned as a reason for not having a fixed telephone. One out of three households

without fixed telephone claims that the monthly fee is too high. One out of four considers that call prices are high and 12 per cent of those surveyed mention that they could not support the installation cost.

Apparently, service subscription barriers of an economic nature are lower in Portugal than in the EU, where they are majority. On the other hand, the influence of MTS is much greater in Portugal.

Reasons for not having a fixed telephone in the EU

Graph 13.





FTS evolution in 2007

Below is a set of items on the evolution of the FTS in 2007: service availability, penetration, service's usage intensity, evolution of access, traffic and revenue shares, and price evolution and quality perception

Service availability and penetration

As shown on the graph below, the fixed telephone network operated by the incumbent operator is available in the entire continental territory. In the autonomous regions there is also a strong presence of the fixed network, with exchanges and telephone concentrators in all the islands of the territory.

The graph also shows the distribution of MDF (Main Distribution Frames) with unbundled local loops, which are concentrated in the main urban centres of Mainland Portugal. Local loop unbundling led to the emergence of package offerings from the alternative providers.

It is also possible to access the service using the mobile networks and the networks of cable TV distribution operators providing FTS over those networks.

Regarding publicly available telephone services at a fixed location, it is possible to use the services of alternative operators in all of the national territory using indirect access and, after 2006, VoIP offerings (in the case with users with broadband Internet access).

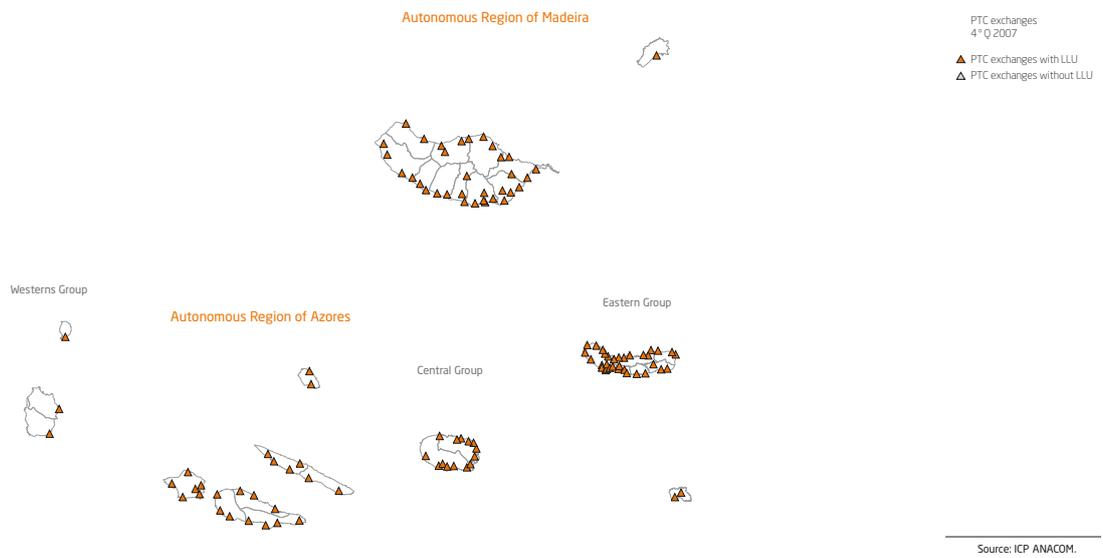
Distribution of PT's exchanges and PT's exchanges with unbundled local loops (Mainland Portugal)
Graph 14.





Distribution of PT's exchanges and PT's exchanges with unbundled local (Autonomous Regions of Madeira and the Azores)

Graph 15.

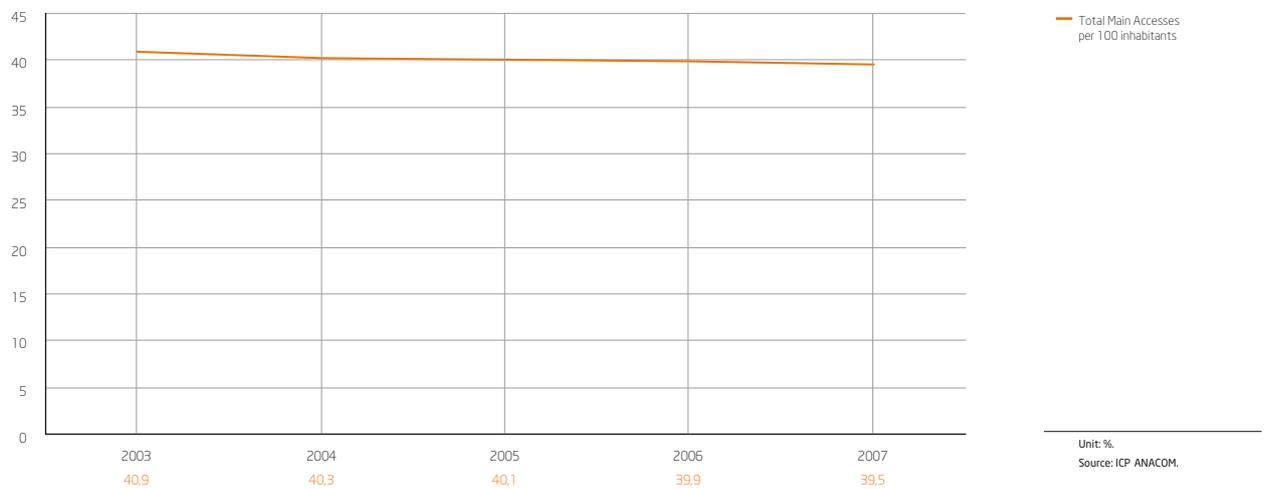


Although the service is generally available in the entire country, between 2003 and 2007 there was a drop in the

penetration rate, which could be linked to some of the factors mentioned in page 26.

Evolution of telephone penetration

Graph 16.

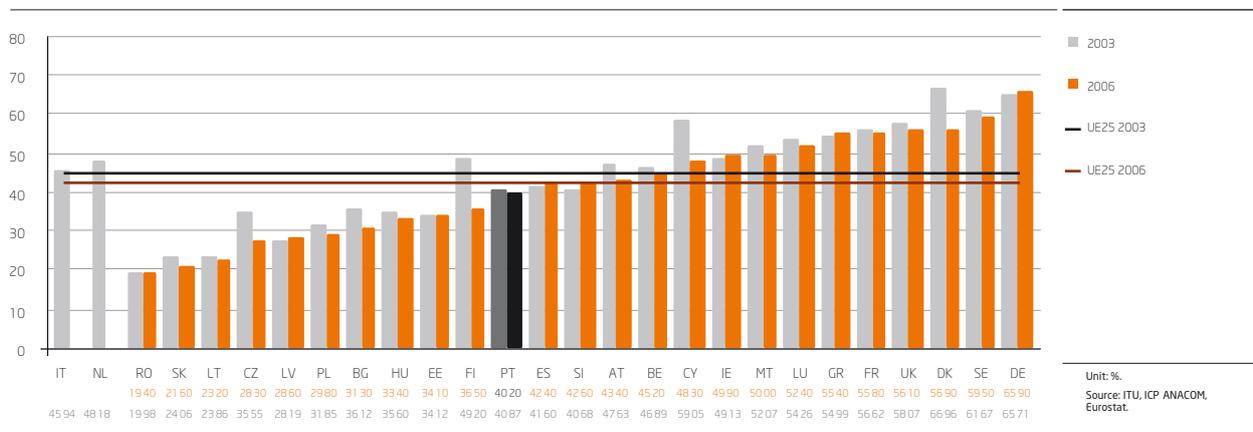


Telephone penetration in Portugal (40 accesses per 100 inhabitants) was, in 2006, below the European average (42, in 2006). It should be noted that there was also a decrease

in this service's penetration in the EU: -2.6 per cent between 2003 and 2006, a decrease above the one recorded in Portugal during that period (0.7 per cent).

International comparison of access penetration rates (no. of accesses per 100 inhabitants)

Graph 17.



Amount of service users

In 2007 there was a 0.9 decrease in direct access customers, from 2006. Indirect access customers decreased 31.9 per cent, in the case with pre-selection, and 39.68 per cent in the case with call-by-call selection.

Nomadic VoIP service customers had a considerable increase. However this FTS mode still represents a very small number of customers.

Amount of FTS customers

Table 17.

	2006	2007	2006/2007 Var. (%)	Average yearly Var. (%)	2003/2007 Var. (%)
Direct access customers	3.245.313	3.214.771	-0,9%	0,6%	2,3%
Pre-selection	429.935	292.780	-31,9%	-4,7%	-17,6%
Call-by-call selection	68.657	41.469	-39,6%	-5,3%	-19,5%
Nomadic VoIP	3.426	76.290	2.126,8%		

Unit: 1 cliente, %.

Source: ICP-ANACOM.

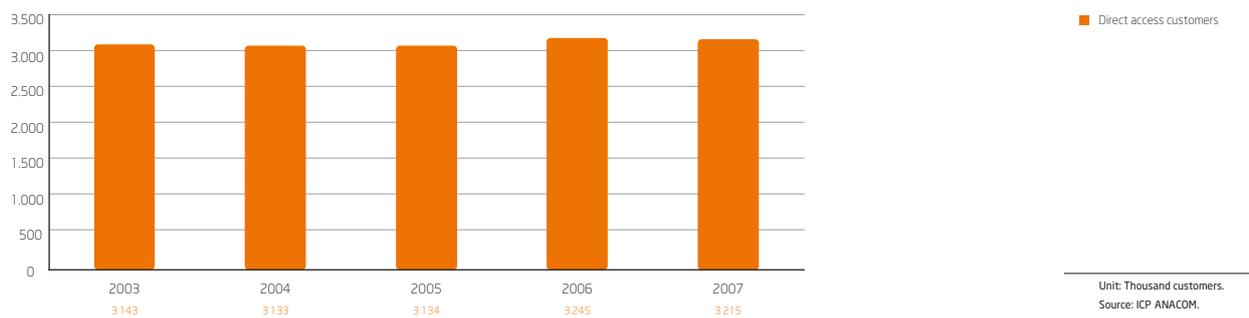
* Includes Direct Access customers with active SLRO.

In 2007 there was a reduction in the amount of direct access customers, from 2006. However, the figure recorded in 2007 is still above the 2003 figure. During the period under review, direct access customers remained over the 3.2 million mark.



Evolution of direct access customers

Graph 18.



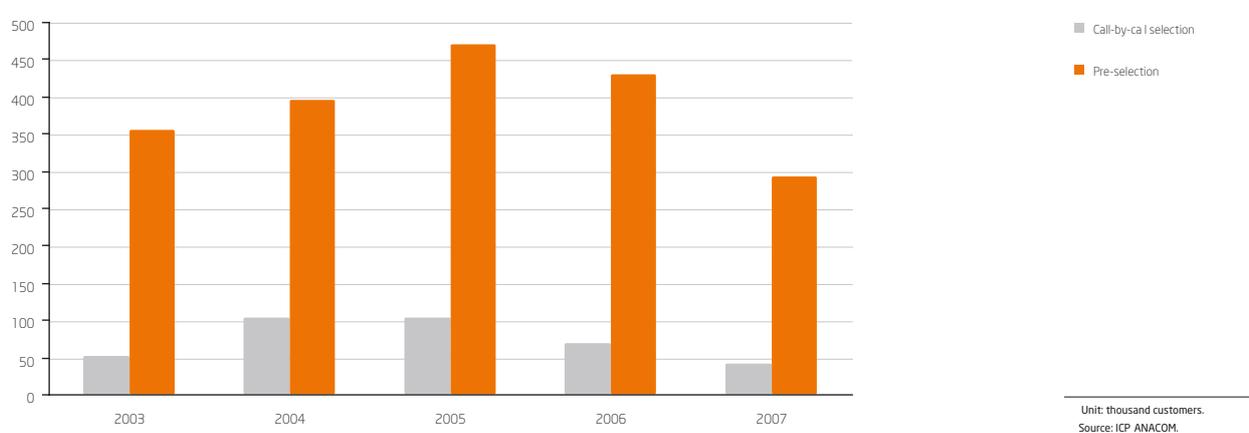
On the other hand, the amount of indirect access customers, after a considerable increase during the first two years after liberalization - when it was the main means of access used by the alternative providers to enter these markets - had an important decrease between 2001 and 2003. This evolution was explained by the new operators' investment on new business models with better profit expectations (e.g. the package offerings based on direct access, namely those based on the RU0).

2006 registered a reversion of the previously described trend and in 2007 the decrease trend in the amount of indirect access customers became stronger. These variations are justified by the increase in the offers of alternative operators in the direct access mode. The development of the SLRO (in the case of call-by-call pre-selection), and the new optional price plans launched by the incumbent operator may have affected this evolution.

A new provider entered these markets by the end of 2003, fostering the indirect access offer. The amount of customers rose considerably since then.

Evolution in the amount of indirect access customers

Graph 19.



In this context, it should be mentioned that at the end of 4Q07, more than 140 thousand customers used the SLRO. One single alternative operator is responsible for more than 89 per cent of customers with an active SLRO.

Service usage level

Below is the evolution of the service usage level concerning accesses, traffic and revenues.

Accesses

By the end of 2007, there were about 4.2 million main accesses installed, 1 per cent less than at the end of the previous year. The increase of about 16.2 per cent in the amount of digital accesses stands out. This increase in the amount of digital accesses mainly resulted from the installation, during 2007, of 154 thousand new accesses using GSM technology. This increase reduced the drop registered in the analogue accesses (-6.8 per cent) and in the amount of installed public payphones (-4 per cent).

Amount of installed equivalent accesses

Table 18.

	2006	2007	Var. (%) 2006/2007	2003/2007 average yearly var. (%)	2003/2007 var. (%)
Total main accesses*	4.233.954	4.190.997	-1,0	-0,5	-2,1
Accesses installed at customer request	4.128.011	4.085.881	-1,0	-0,7	-2,7
Analogue accesses	3.089.974	2.879.923	-6,8	-3,6	-13,6
Equivalent digital accesses	1.038.037	1.205.958	16,2	8,7	39,8
Public payphones	43.233	41.498	-4,0	0,0	-0,1

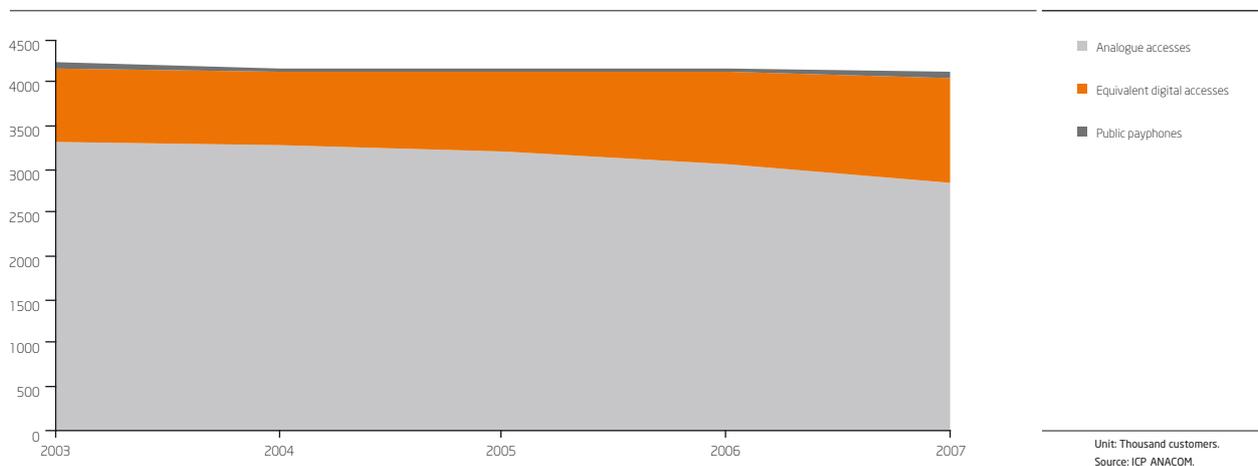
Unit: 1 access, %.
Source: ICP-ANACOM.

*Includes accesses installed at customer request, own stock and public payphones.

Since 2001 there is a reduction trend in the amount of analogue accesses installed at customer request (-2.7 per cent between the end of 2003 and 2007), which may be linked to some of the factors mentioned in page 26.

Evolution in the amount of accesses

Graph 20.





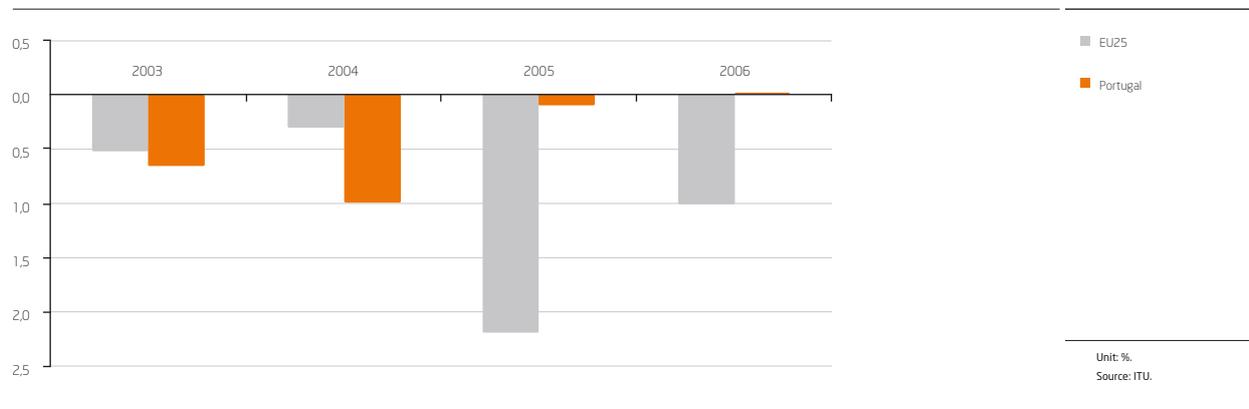
The investment made by alternative operators on the local network was not enough to reverse the described trend. New operators mostly decided to enter the market using indirect access or local loop unbundling regulated offers. Cabovisão was the exception. It invested quite early on a multiple play strategy supported on its cable TV distribution network, and become until recently the second biggest provider of the fixed telephone network access service.

The decrease in the amount of accesses in Portugal was stronger than in the remaining EU countries until 2004. However, in 2005, because of the GSM-based offers, the decrease in the amount of accesses in Portugal was quite below that of Europe. Also because of that, 2006 registered a slight increase of 0.01 per cent in the amount of main accesses in Portugal.

The successive increase of digital accesses is firstly explained by the launch of traditional digital access offers, mainly targeted at business segments, and currently by the above-mentioned offers based on GSM.

Evolution of the amount of accesses in the EU and in Portugal

Graph 21.



Traffic

2007 was characterized by a generalised drop in traffic with origin in the fixed network, with the exception of the outgoing international traffic and the traffic VoIP service traffic. The strongest decrease was recorded in the Internet access traffic (-58 per cent in minutes and -48 per cent

in calls), and was induced by the expansion of broadband Internet access. Voice traffic decreased around 5 per cent in 2007, in calls, in line with the average of the latest years.

Traffic originated in the fixed network (minutes)

Table 19.

	2006	2007	Var. (%) 2006/2007	2003/2007 average yearly var. (%)	2003/2007 var. (%)
Total traffic (voice + Internet + VoIP)	9.050	8.434	-6,8	-12,0	-40,0
Voice traffic	8.050	7.926	-1,5	-3,1	-11,9
National traffic (voice)	7.500	7.360	-1,9	-3,6	-13,5
National fixed-to-fixed traffic	6.345	6.207	-2,2	-3,7	-13,9
National fixed-to-mobile traffic	1.155	1.153	-0,2	-3,0	-11,4
Outgoing international traffic	550	566	2,9	3,9	16,7
Internet access traffic	997	415	-58,4	-46,5	-91,8
Nomadic VoIP traffic	3	93	2.635,3		

Unit: million minutes, %.
Source: ICP-ANACOM.

Traffic originated in the fixed network (calls)

Table 20.

	2006	2007	Var. (%) 2006/2007	2003/2007 average yearly var. (%)	2003/2007 var. (%)
Total traffic (voice + Internet + VoIP)	2.980	2.834	-4,9	-6,5	-23,5
Voice traffic	2.920	2.784	-4,7	-5,0	-18,4
National traffic (voice)	2.796	2.655	-5,0	-5,2	-19,3
National fixed-to-fixed traffic	2.181	2.047	-6,1	-5,5	-20,2
National fixed-to-mobile traffic	615	608	-1,1	-4,3	-16,1
Outgoing international traffic	124	129	4,0	1,6	6,6
Internet access traffic	58	30	-48,3	-43,4	-89,7
Nomadic VoIP traffic	1	20	1.328,6		

Unit: million calls, %.
Source: ICP-ANACOM.

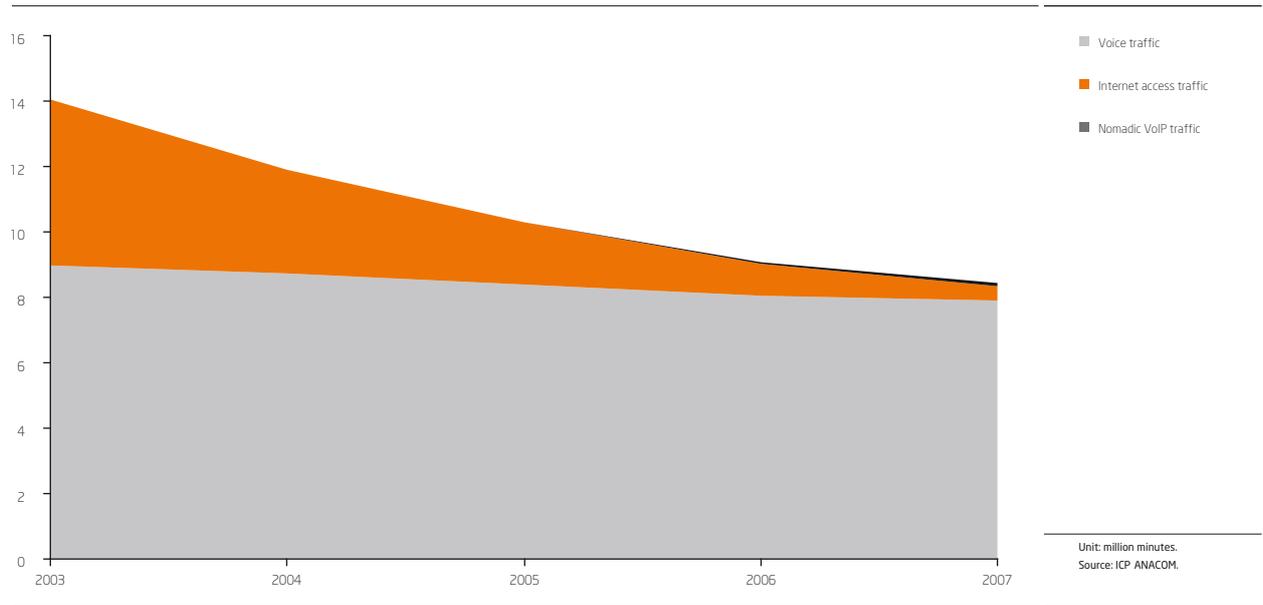
Voice traffic has been decreasing since 2000. In cumulated terms, the amount of minutes decreased 12 per cent and the volume of calls decreased about 18 per cent, between 2003 and 2007. It should be mentioned that the traffic decrease is higher than the decrease recorded in accesses and direct customers.

Traffic connected to the nomadic VoIP service has shown very high increases since it is at an early stage of its life cycle.



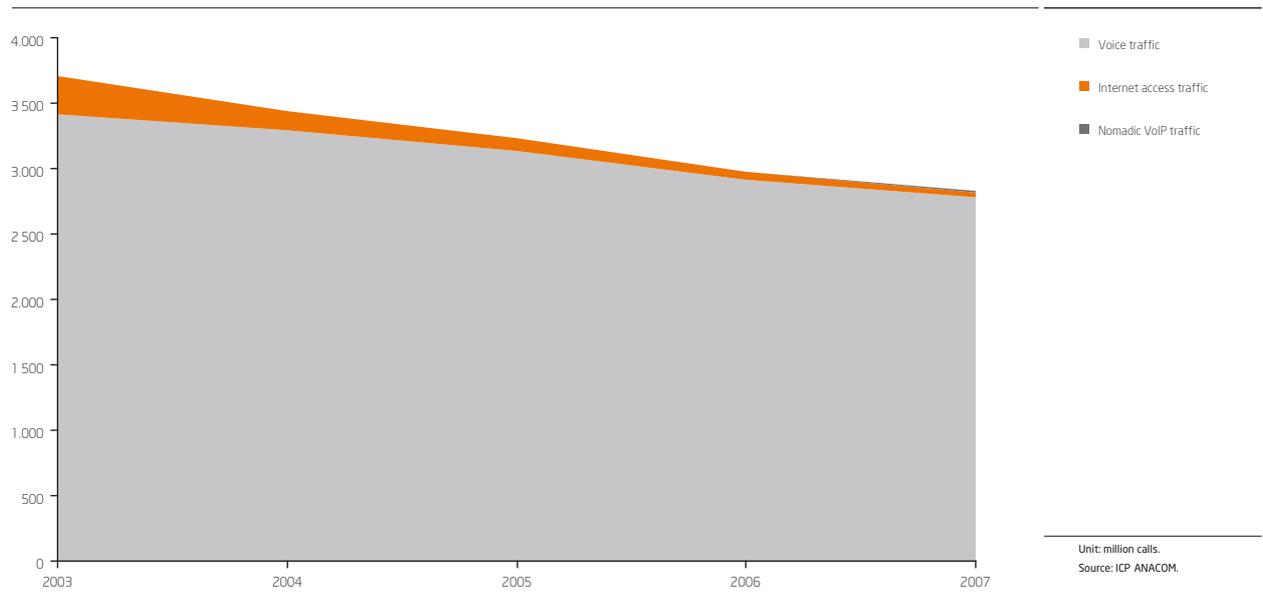
Traffic originated in the fixed network (minutes)

Graph 22.



Traffic originated in the fixed network (calls)

Graph 23.

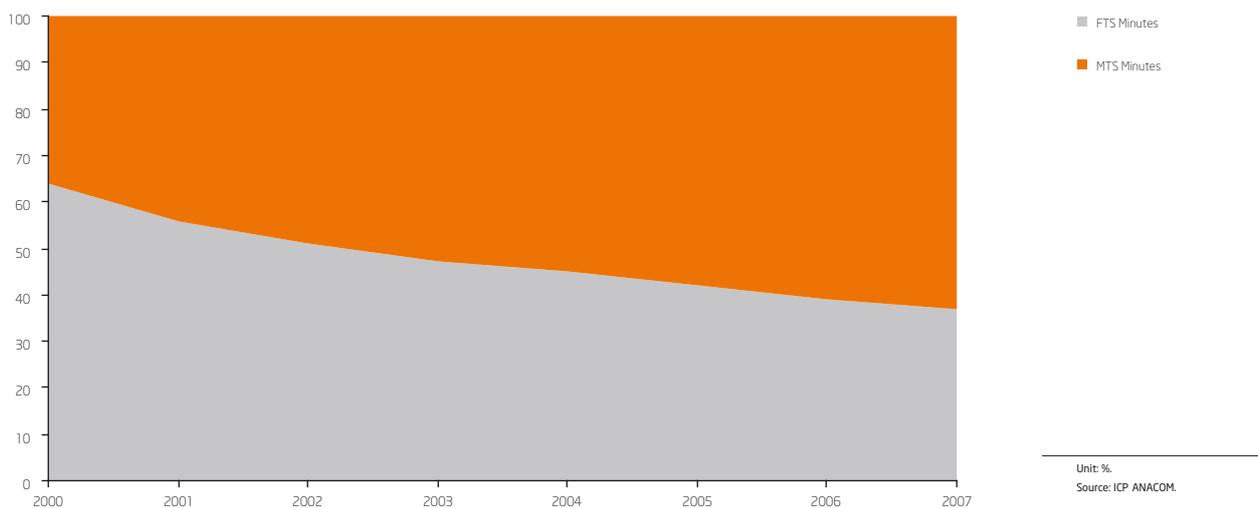


This trend of decreasing traffic is linked to the previously mentioned phenomenon named fixed-by-mobile replacement. This factor caused the intensification of voice traffic in mobile networks, to the detriment of the fixed network. Mobile traffic already stands for 63 per cent of the overall voice traffic, 27 per cent more than in 2000.

Concerning the amount of international calls originated in the fixed network, it recorded a 4 per cent increase in 2007, thus reflecting the importance of the fixed network for consumers when making this type of calls.

Distribution of the voice traffic originated on the fixed and mobile networks

Graph 24.



Indirect access traffic

2007 registered a decrease in indirect access traffic (-15.8 per cent of calls and -20.6 per cent of minutes).

The generalized drop in indirect access traffic goes together with the decrease in the amount of customers of these offers, the demand for new business models, and the strategic

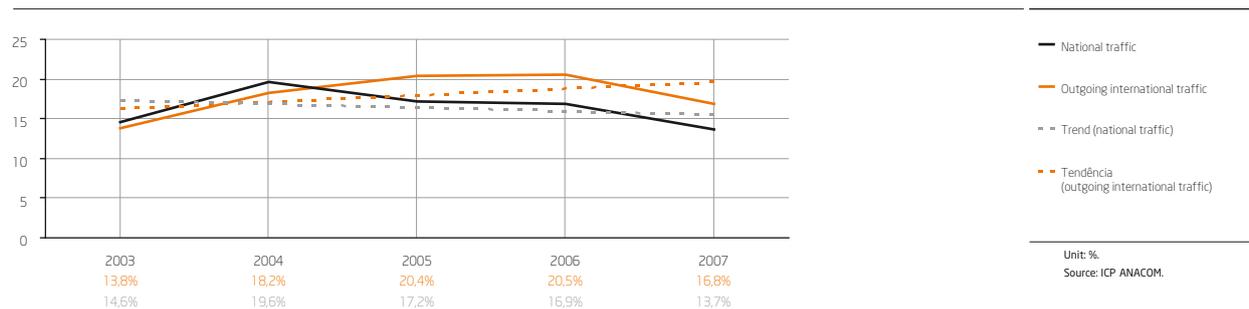
focus of some of the main alternative operators, and the incumbent operator's investment on optional tariff schemes.

Indirect access traffic stands for about 16 per cent of the overall traffic.



Evolution of the rate of traffic routed using indirect access modes (minutes)

Graph 25.



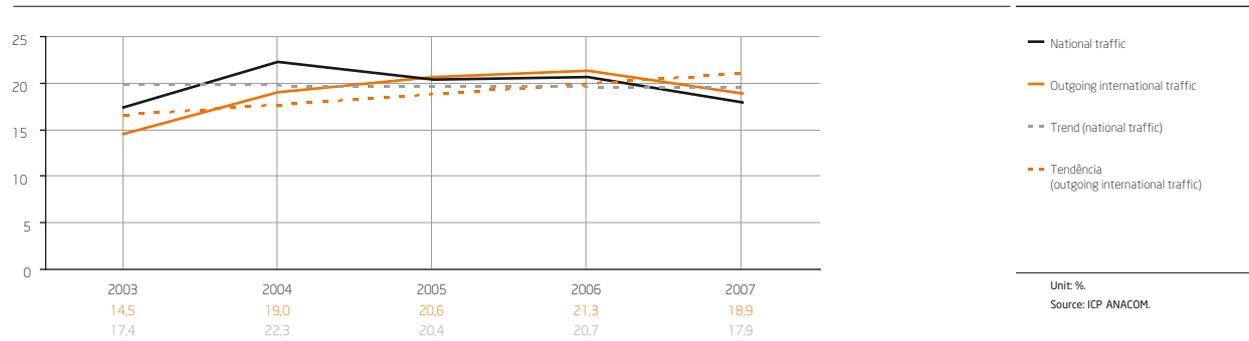
Regarding outgoing indirect access international traffic, in 2007 this kind of traffic stood for about 13.7 per cent of total conversation minutes and 17.9 per cent of the overall amount of calls. Indirect access became an important alternative to direct access right after this service's

liberalization. However, between 2002 and 2003, indirect access international traffic decreased due to the lack of alternative operators' investment on this segment.

In 2004, with the emergence of a new provider with considerably aggressive offers, there was again an increase in the use of this means of access. However, since 2005 until now, this type of traffic shows a decreasing trend.

Evolution of the rate of traffic routed using indirect access modes (calls)

Graph 26.



Average traffic per customer

Average traffic per direct access customer decreased considerably since the first years of sector's liberalization. This process is mostly driven by the decrease of dial-up traffic and by the decrease of voice traffic to fixed numbers.

Monthly traffic per indirect access customer (minutes)

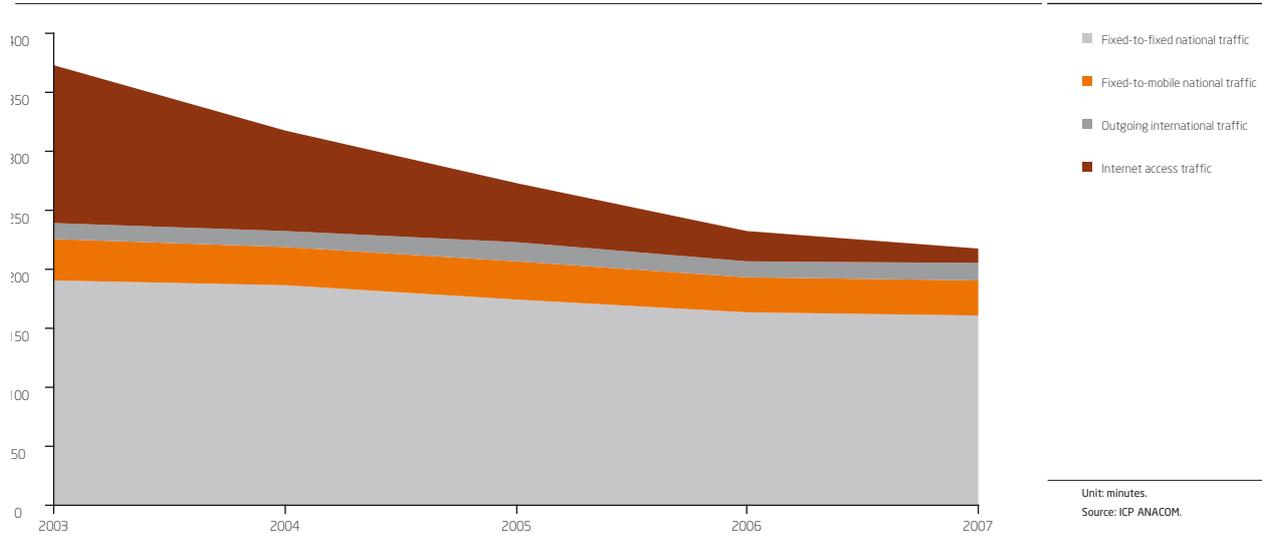
Table 21.

	2006	2007	2006/2007 var. (%)	2003/2007 average yearly var. (%)	2001/2006 var. (%)
Total traffic (voice + Internet + VoIP)	232	216	-6,9	-12,7	-41,9
Voice traffic	207	205	-1,0	-3,7	-13,9
National traffic (voice)	193	191	-1,0	-4,1	-15,5
National fixed-to-fixed traffic	163	161	-1,2	-4,2	-15,7
National fixed-to-mobile traffic	30	30	0,0	-3,8	-14,3
Outgoing international traffic	14	15	7,1	3,6	15,4
Internet access traffic	26	11	-57,7	-46,5	-91,8

Unit: minutes, %.
Source: ICP-ANACOM.

Evolution of monthly traffic per customer (minutes)

Graph 27.





Revenues

The strong decrease in traffic, decreasing prices and the decrease in the amount of customers are the factors behind the downward trend in FTS's revenues.

In 2007, total revenues decreased about 14 per cent, while traffic revenues decreased 15 per cent and the installation and monthly fee revenues decreased 13.5 per cent.

FTS revenues

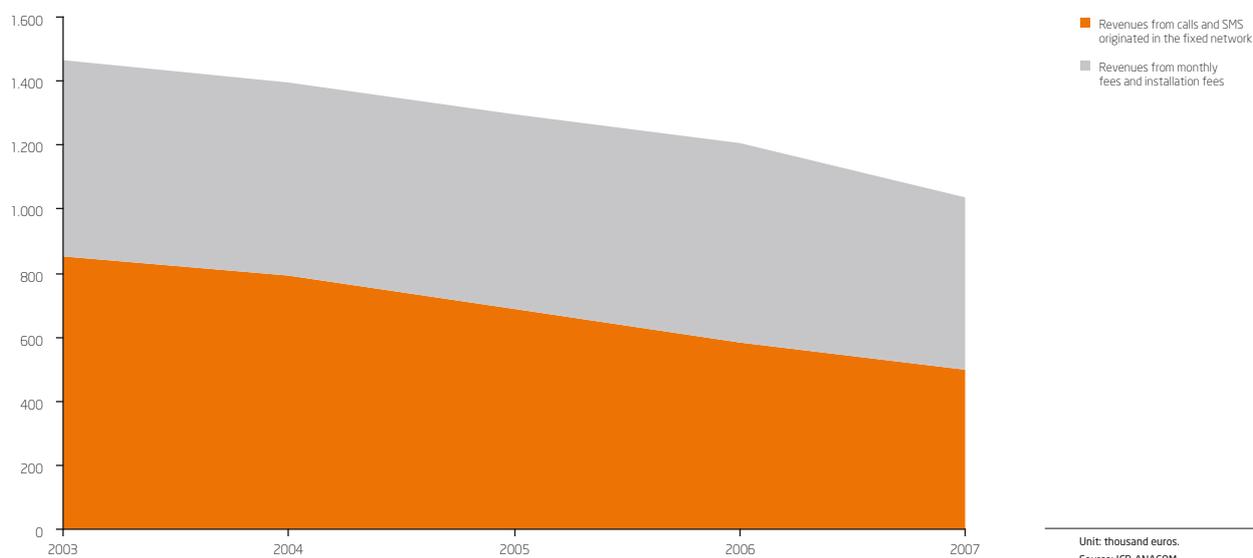
Table 22.

	2006	2007	2006/2007 var. (%)	2003/2007 average yearly var. (%)	2003/2007 var. (%)
Total revenues ¹⁴	1.208.261	1.036.429	-14,2	-8,3	-29,2
Revenues from monthly fees and installation fees	623.585	539.667	-13,5	-3,1	-11,8
Revenues from calls and SMS with origin in the fixed network ¹⁵	584.676	497.762	-15,0	-12,6	-41,8

Unit: thousand Euros, %
Source: ICP-ANACOM.

Evolution of FTS revenues

Graph 28.



¹⁴ Não inclui receitas associadas a cartões virtuais de chamadas.

¹⁵ Inclui receitas provenientes de tráfego de comunicações locais, regionais e nacionais, chamadas fixo-móvel (originadas na rede fixa), tráfego internacional de saída originado na rede fixa, postos públicos e SMS originados na rede fixa.

During the period under review, fixed telephone service's overall revenues showed a decreasing trend, corresponding to a 14.2 per cent reduction regarding 2006, and -29.2 per cent regarding 2003 - total variation.

A constant decrease had been registered in revenues from monthly fees and installation fees, with the exception of 2006. In 2007 there was a 13.5 per cent reduction in this type of revenue.

Revenues regarding calls and SMS originated in the fixed network also showed a decreasing trend. They dropped 15 per cent in 2007, from 2006.

Service price level

Below is the evolution of the incumbent operator's prices and an international comparison of FTS prices in 2007.

Evolution of the incumbent operator's price index

In 2007, and in average yearly terms, local call prices decreased 8.6 per cent, regional call prices also decreased 8.6 per cent, and national call prices decreased 8.3 per cent. Monthly fee and installation prices stabilized.

Compared to 2003, the incumbent operator's price basket decreased around 6 per cent in nominal terms. It should also be stressed out that a regional or national call's cost in 2007, in nominal terms, was almost half of a similar call in 2003.

Incumbent operator's nominal price index

Table 23.

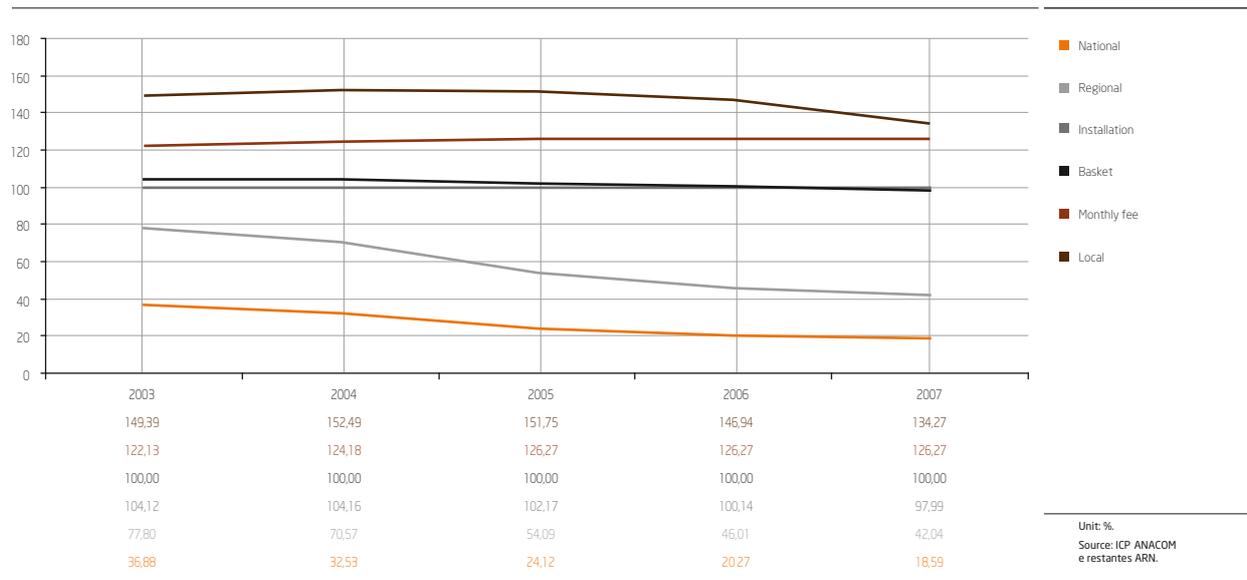
	2006	2007	2006/2007 var. (%)	2003/2007 average yearly var. (%)	2003/2007 var. (%)
Installation	100,0	100,0	0,0	0,0	0,0
Monthly fee	126,3	126,3	0,0	0,8	3,4
Local	146,9	134,3	-8,6	-2,6	-10,1
Regional	46,0	42,0	-8,6	-14,3	-46,0
National	20,3	18,6	-8,3	-15,7	-49,6
Basket	100,1	98,0	-2,2	-1,5	-5,9

Unit: %
Source: ICP-ANACOM.
Note: 1998=100.



Evolution of FTS prices - nominal prices

Graph 29.



Since 2003 there was a generalized decrease in the real price of calls to the several traffic destinations. In fact, the incumbent operator's price basket registered a 15 per cent decrease in real terms between 2003 and 2007. Regarding

the monthly fee and service installation, during that period, there was a 9.7 and a 6.6 per cent decrease, respectively.

Incumbent operator's real price index

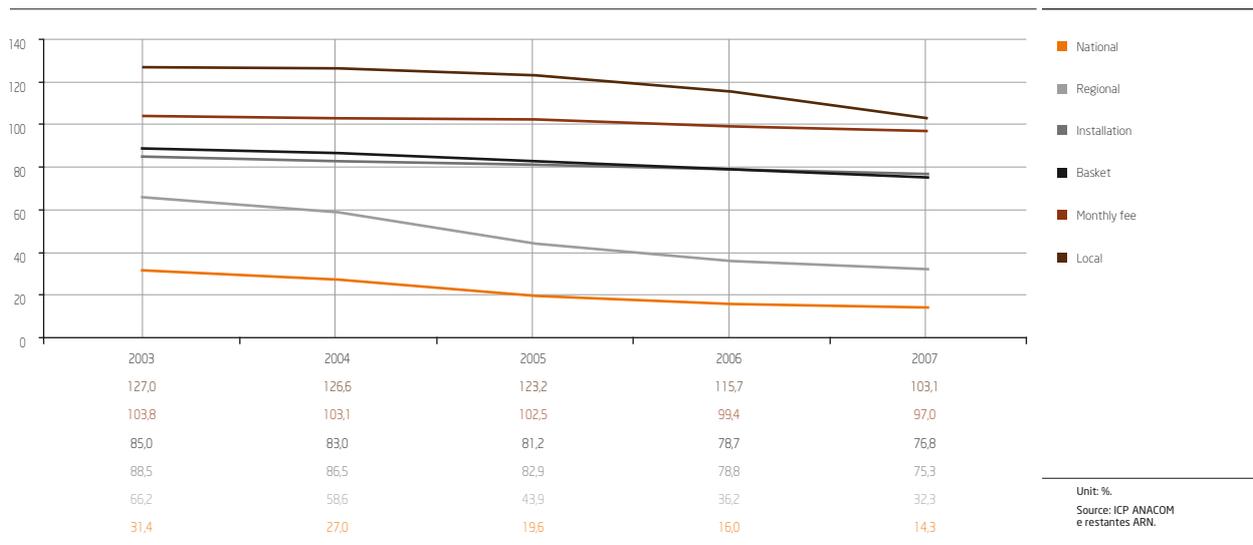
Table 24.

	2006	2007	2006/2007 var. (%)	2003/2007 average yearly var. (%)	2003/2007 var. (%)
Installation	78,7	76,8	-2,4	-2,5	-9,7
Monthly fee	99,4	97,0	-2,4	-1,7	-6,6
Local	115,7	103,1	-10,8	-5,1	-18,8
Regional	36,2	32,3	-10,8	-16,4	-51,2
National	16,0	14,3	-10,5	-17,9	-54,5
Basket	78,8	75,3	-4,5	-4,0	-15,0

Unit: %.
Source: ICP-ANACOM.
Note: 1998 = 100.

Evolution of FTS prices - real prices

Graph 30.



International comparisons of FTS prices

Below are international comparisons of FTS prices¹⁶.

Regarding the annual average invoice (basket), prices paid by FTS residential customers in Portugal are below the average price charged in the countries under analysis, for all consumption profiles considered, in opposition to what occurred until recently.

This change in Portugal's position on these ranking results from the fact that new tariff schemes launched by the Portuguese incumbent operator were taken into account, and because prices raised in other countries.

International comparisons of FTS prices - Residential Segment

Table 25.

	May 2007	Nov. 2007
Low Consumption		
Deviation from the average	2,3%	-1,7%
Ranking	13	9
Average Consumption		
Deviation from the average	3,0%	-8,0%
Ranking	13	4
High Consumption		
Deviation from the average	9,3%	-7,1%
Ranking	15	6

Unit: %
Source: Teligen, OCDE, ICP-ANACOM.

¹⁶ OECD's usage profiles/baskets were taken into account. Values are in Euros and correspond to annual invoices, without VAT, and market currency rates were used to convert prices into Euros (i.e., purchasing power parity was not used). The currency rates are collected by the OECD. The figures for the residential segment do not include discounts and promotions, while these were included in the business segment. The average is reckoned with the results of the 19 EU countries taken into account by the OECD.



In spite of the fact that, globally, the residential consumer's average yearly invoice in Portugal is below the average of the considered countries, there are several components of the basket where it stands above the average. It's the case with the fixed-to-mobile and international calls. In the case with the low consumption basket, the effect of the more expensive calls is quite balanced by the considerably lower installation/monthly fee and national call figures.

It should be mentioned that, for the average and high consumption segments, Teligen selected a tariff option with free monthly fee and free calls. Thus, installation and monthly fee are relatively more expensive than the average. However, free national calls more than make up for this effect, and also the effect of slightly more expensive fixed-to-mobile and international calls.

International comparison of FTS prices (II)

Table 26.

	Low Consumption	Average Consumption	High Consumption
Installation and monthly fee			
Annual expenses with installation and monthly fee	166,3 €	240,7 €	240,7 €
Deviation from the average	-3,0%	24,3%	8,5%
UE19 Ranking	7	16	14
National calls			
Annual expenses with national calls	48,5 €	0 €	0 €
Deviation from the average	-18,9%		
UE19 Ranking	4		
Fixed-to-mobile calls			
Annual expenses with fixed-to-mobile calls	37,6 €	90,8 €	244,3 €
Deviation from the average	7,5%	8,8%	8,9%
UE19 Ranking	13	13	13
International calls			
Annual expenses with international calls	37,6 €	30,1 €	120,2 €
Deviation from the average	31,5%	36,0%	38,0%
UE19 Ranking	16	16	16

Unit: euros, %.
Source: Teligen, OCDE, ICP-ANACOM.

Concerning the business segment, in the SOHO (Small Office, Home Office) segment the prices charged in Portugal are in line with EU's average.

In the case with the SME (Small and Medium Enterprise) segment, results are less favourable. In this case, prices practiced in Portugal rank 15th, and these customers' average invoice is 13.5 per cent above the average of the remaining countries under analysis.

International comparisons of FTS prices - Business Segment

Table 27.

	May 2007	Nov. 2007
SOHO		
Deviation from the average	-0,6%	2%
Ranking	11	12
PME		
Deviation from the average	12,8%	13,5%
Ranking	15	15

Unit: %.
Source: Teligen, OCDE, ICP-ANACOM.

In the business segment, prices charged in Portugal continue to be below the European average for the items installation, monthly fee and calls to mobile numbers, and above the average for the items: calls to fixed numbers and calls to international numbers.

In calls to mobile networks, Portuguese tariff schemes are the most competitive ones.

International comparisons of FTS prices - Business Segment (II)

Table 28.

	SOHO	PME
Installation and monthly fee		
Annual expenses with installation and monthly fee	187,2 €	5 615,0€
Deviation from the average	-17,9%	-29,9%
UE19 Ranking	7	3
National calls		
Annual expenses with national calls	133,3 €	6 598,0€
Deviation from the average	19,1%	39,6%
UE19 Ranking	13	15
Fixed-to-mobile calls		
Annual expenses with fixed-to-mobile calls	117,28 €	3 751,2 €
Deviation from the average	-22,0%	-21,3%
UE19 Ranking	1	1
International calls		
Annual expenses with international calls	56,3 €	5 255,5 €
Deviation from the average	48,3%	48,7%
Ranking UE19	18	18

Unit: euros, %.

Source: Teligén, OCDE, ICP-ANACOM.

Evaluation by consumers

In general, FTS has high satisfaction levels. According to the most recent electronic communications consumer survey, 89 per cent of users were satisfied with the service's overall

quality. The rate of consumers rating the quality of service as 'good' or 'very good' has remained above 90 per cent, at least since 2005.

Evaluation of the FTS's overall quality

Table 29.

	2005	2006	2007
Very good	12,9	5,2	8,2
Good	81,1	89,7	82,7
Bad	5,5	4,6	6,7
Very bad	0,5	0,5	2,5

Unit: %.

Source: ICP-ANACOM, Electronic communications consumer survey.



Another consumer satisfaction indicator is the number of complaints.

ICP-ANACOM's Mission Unit for the Handling of Market Requests (UM-TSM) received about 6,105 complaints regarding the FTS service and its operators during 2007. It also received 200 information requests.

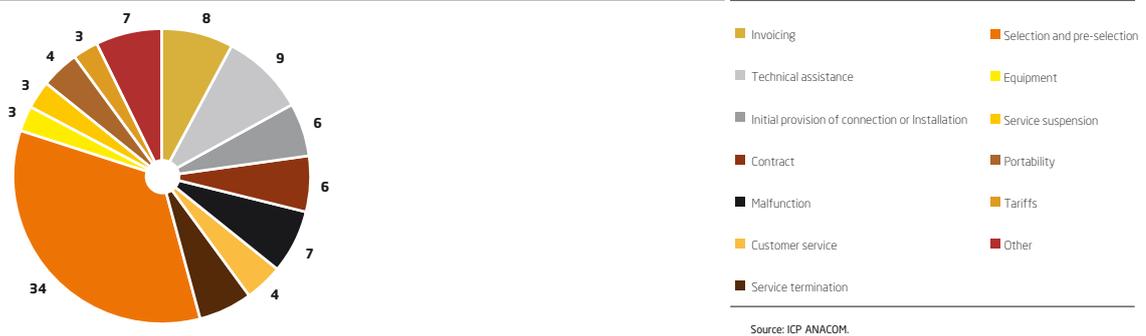
According to the following graph, it is possible to see that most of those complaints are linked to selection and

pre-selection (34 per cent). Issues related to technical assistance (9 per cent), invoicing (8 per cent) and malfunctions (7 per cent) come in second.

The item "Other" includes complaints on local loop unbundling, geographic portability, service out, telephone directories and information services, infrastructure, numbering, privacy and personal data protection, interferences, complaints book, and municipal taxes for passage rights.

Distribution of requests by area

Graph 31.



Source: ICP ANACOM.