Date of publication – 6.11.2008

SURVEY ON THE USE OF ELECTRONIC COMMUNICATIONS BY PORTUGUESE COMPANIES

MICRO, SMALL AND MEDIUM-SIZED ENTERPRISES – DECEMBER 2007

INDEX

AUGUST 2008

I. Penetration of electronic communications services

According to the Survey on the Use of Electronic Communications by Portuguese Companies of December 2007, 95.8 per cent of micro, small and medium-sized enterprises[1] had the **fixed telephone service** and 71.5 per cent had the **mobile telephone service**. The **Internet service** was used by only 2/3 of the companies.

Paid television (4.5 per cent) and data transmission service (1 per cent) registered considerably lower rates.

Table 1. Possession of electronic communications services (%)

Fixed telephone / Fixed Voice Communications	95.8
Mobile phone	71.5
Internet	63.5
Paid television service	4.5
Data Transmission Services	1.0
Has no telecommunications (1)	1.0
Leased line	0.3
Other	0.1

(1) No telecommunications subscribed by the company (uses personal telecommunications or from other company)

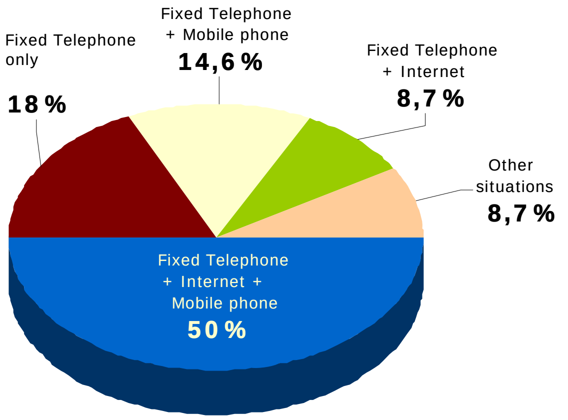
Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

Half of the companies under analysis included the simultaneous use of the three main services **(Fixed telephone, Mobile phone e Internet)** of the business market.

There was a greater tendency to **group fixed telephone with mobile phone** (14.6 per cent) than with Internet (8.7 per cent).

Nevertheless, in December 2007, 18 per cent of the companies under analysis only **had fixed telephone service**.

Graph 1. Grouping electronic communications services



Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

Multiple play offerings were used by roughly 16.9 per cent of business customers, with highlight to the **predominance of *double play* packages made up of fixed telephone service and Internet** (used by 81.3 per cent of companies with package services).

[1] Companies with less than 250 employees, with registered office in Portugal and only operating under some sections/groups of the Economic Activities Classification (CAE Rev. 2.1) detailed on section VI (Notes on methodology).

II. Quality, Complaints, Diversity and operator Switching

Table 2. Comparison between electronic communications services

	RATES						EVALUATION					
	Penetration %		**Complaints** %		**Operator switching** %		**Service's overall quality** (1)		**Diversity evolution** (3)		**Quality evolution** (3)	
Mobile telephone service	71.5	*2º*	25.4	*1º*	16.6	*1º*	3.06 (2)	*1º*	3.97	*2º*	3.75	*2º*
Fixed telephone service	95.8	*1º*	36.8	*3º*	37.3	*3º*	2.12	*3º*	3.89	*3º*	3.51	*3º*
Internet service	63.5	*3º*	31.6	*2º*	29.0	*2º*	2.89	*2º*	4.05	*1º*	3.82	*1º*

(1) Average value according to the scale: 1. Very bad; …; 4. Very good

(2) Satisfaction regarding the provided service, being initially established on a scale from 1 to 5. In order to compare the remaining services, the corresponding figure for the scales showed in (1) was estimated.

(3) Average value according to the scale: 1. Much worse; …; 5. Much better

Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

The estimated complaint and operator switching rates were directly related to the overall quality of service assessed by the users of the corresponding services:

- The **mobile telephone service** had the lowest complaint (25.4 per cent) and operator switching (16.6 per cent) rates and, consequently, a higher evaluation of the quality of service (3.06);
- The **Internet service** comes second, both on complaint rates (31.6 per cent) and operator switching (29 per cent), and in the assessment of the overall quality of service (2.89);
- The **fixed telephone service** is very much used by companies with less than 250 employees. It has the worst complaint- (36.8 per cent) and operator switching (37.3 per cent) rates, as well as the worst evaluation concerning overall quality of service (2.12).

Electronic communications services' business consumers tend to consider that the **Internet service** was the one that most evolved in the latest times concerning **offer diversity** and **quality**.

III. Main problems identified by business users

Table 3. Main problems of electronic communications services in Portugal identified by business users

	Mobile telephone service	Fixed telephone service	Internet service
Too expensive	**44.0**	**45.8**	**41.5**
Little information / Mixed information	**15.5**	**14.2**	**13.6**
Low quality	**9.3**	6.4	**13.6**
Low competition	**7.7**	**12.4**	6.8
Network Coverage / Infrastructure problems	**7.4**	0.5	2.9
Services poorly fitted to companies' needs	3.9	6.0	6.5
Low offer	3.9	4.7	5.4
Insufficient offer	3.6	2.4	3.8
Too much offer / Too much information/ Misleading advertising	1.4	1.1	0.5
Poor quality of equipment	1.0	:	:
Lack of customer support / assistance or poorly qualified Commercial Agents	0.9	1.3	:
Existence of monthly fees	:	**7.3**	:
Insufficient real speed (speed-price relation not favourable; low speed;...)	:	:	4.8
Insecurity	:	:	0.7
Monopoly / PT's dominant position in the market	:	0.7	:
Other problems	3.1	2.2	4.0
No problems identified	4.9	4.9	4.3
N.A.	21.5	19.6	23.2

Note: Multiple answering question

Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

"Too expensive", "little information or mixed information" and "lack of quality" were the **main problems of the electronic communications services market** identified by the corporate consumers.

Highlight also goes to "lack of completion" in the fixed (12.4 per cent) and mobile (7.7 per cent) telephone services, as well as "monthly fee", in the fixed telephone service (7.3 per cent), and "lack of coverage" in mobile telephone service (7.4 per cent).

The percentage of electronic communications services business consumers who did not identify any problem in the market did not reach 5 per cent in all services. Furthermore, about 1 in every 4 consumers had no opinion on this matter.

IV. Profile of the companies using electronic communications

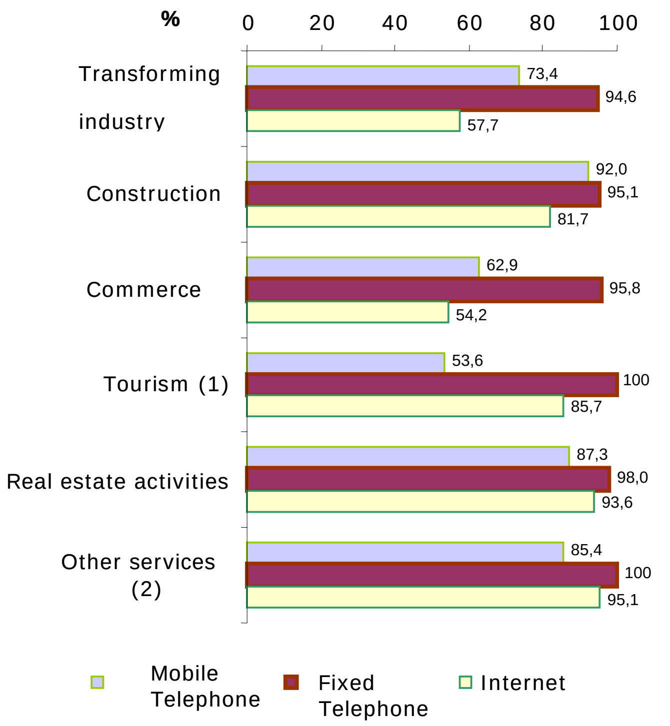
Companies in the **sectors "Real estate activities", "Other services[2]" and "Construction"** stand out above the average both regarding possession of the mobile telephone service and Internet.

Data of the current survey shows that 92 per cent of companies in the "Construction" sub-sector used the mobile telephone service and over 90 per cent of companies in "Real estate activities" and "Other services" used the Internet service.

The **lowest rates** in the mobile telephone service occur in the "Tourism" and "Commerce" sectors. In the Internet service, the "Commerce" and "Industry" sectors have the lowest penetration.

The fixed telephone service is strongly used in most sectors under analysis.

Graph 2. Possession of electronic communications services per activity sector



[1] Only includes hotel establishments and camping sites and other short term lodging facilities.

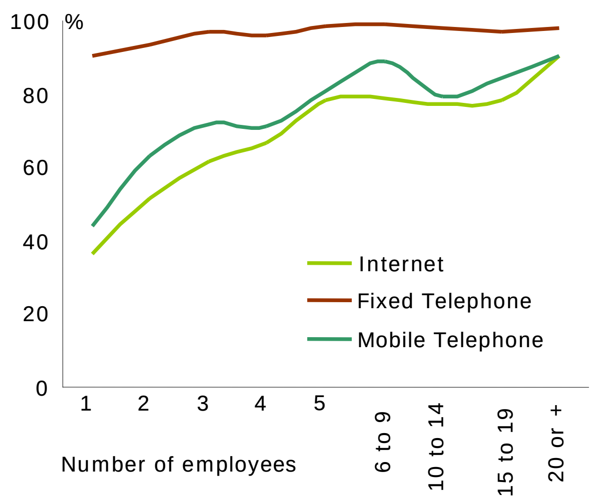
[2] Includes transports, warehousing and communications, cinema, video, radio and television activities.

Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

Given that the Portuguese business structure is dominated by micro enterprises (with less than 10 employees), it is important to stress out that company size has influence in the use of electronic communications services, which is specially obvious for the mobile telephone service and the Internet.

Indeed, **the greater the size of the company, the greater the propensity for using theses services.**

Graph 3. Possession of electronic communications services per number of company employees

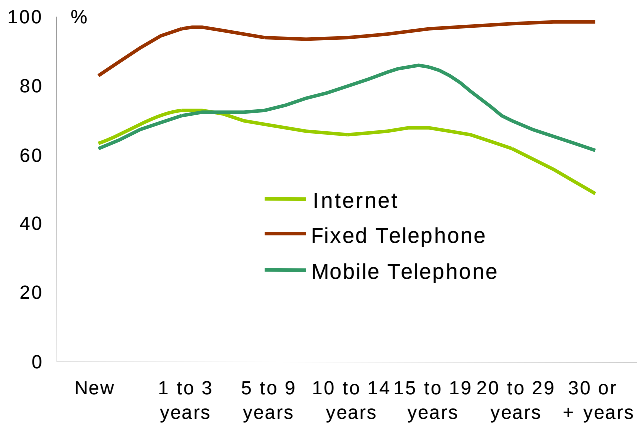


Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

The survey's data also show a slight relationship between the possession of electronic communications services and the companies' age. In this scope, the mobile telephone service has a different behaviour from the Internet service.

There is a **growing trend to use the mobile phone by companies up to 20 years** in the market, followed by a decrease trend as they become older.

Graph 4. Possession of electronic communications services per company age



Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

Internet use is greater among companies that entered the market recently.

V. Other results

1. Mobile telephone service

1.1. Equipment and Services

In average, **micro enterprises had one active card per employee**, while small and medium size companies only had 4 cards per each 10 employees.

Table 4. Average number of active mobile phone cards per employee

Micro enterprise (less than 10 employees)	1.05
Small and medium-sized enterprise (10 to 249 employees)	0.41
Total	**0.96**

Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

The penetration of 3G mobile phones and of specific services for companies in **small and medium enterprises** (58.3 per cent and 91.9 per cent, respectively) stands above the one recorded in micro enterprises.

Table 5. Rate of 3G mobile phones and specific mobile service for companies

	Micro-enterprise	**Small and medium-sized enterprise**	**Total**
% companies with 3G mobile phone	50,8	58,3	51,9
% companies specific service for companies and professionals	79,2	91,9	81,1

Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

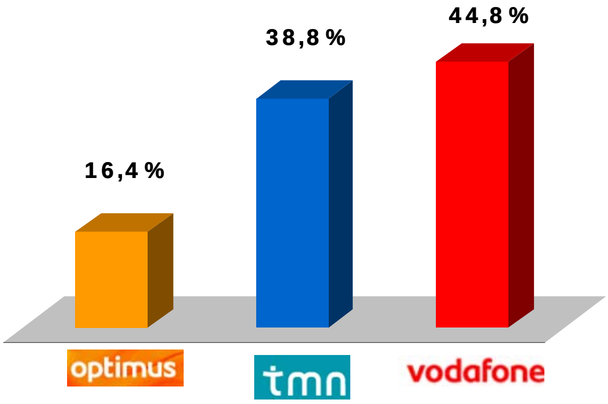
1.2. Operators and Operator switching

About 44.8 per cent of the companies analyzed in this survey were **customers of the network operator Vodafone**. Around 38.8 per cent were TMN customers.

The reasons “*lowest prices*” was presented as one of the most important for **choosing the main mobile operator**.

“Confidence/reliability” was the second reason for operator selection. No differences between operators were registered regarding this criterion.

Graph 5. Percentage of mobile telephone service users per operator



Note: Multiple answering question.

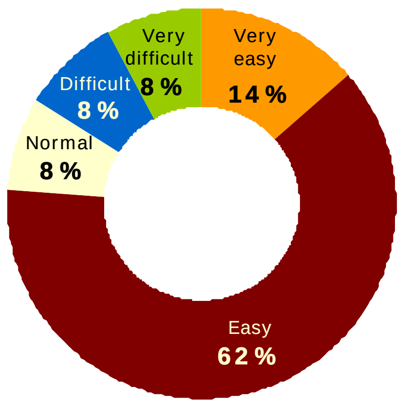
Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

The **mobile network operator switching rate** was 16.6 per in December 2007, with highlight to a 5 per cent difference between small/medium (20.8 per cent) and micro enterprises (15.8 per cent). Nonetheless, 1.7 per cent of the companies that were customers of the mobile telephone service stated that they had tried to switch operator but without success.

The **operator most badly hit by these switches** was TMN, followed by Optimus. About 48.5 per cent of operator-switching mobile service customers were from TMN and 29,4 per cent from Optimus.

Three out of every four customers that switched mobile operator stated that the **switching process was easy** or very easy.

Graph 6. Evaluation of the mobile network operator switching process



Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

Data from this survey allow us to estimate that the **number portability service** was used by 10.2 per cent of the mobile operator's customers. About 5.4 per cent of customers stated that they **did not know that this service existed**.

1.3. Satisfaction and Complaints

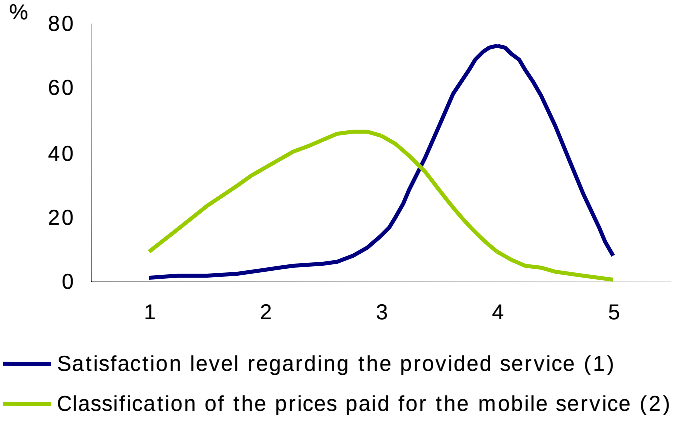
The business consumers of the mobile network service presented a 3.83[(1)] **average satisfaction regarding the service provided by the operator**.

The **price level** is usually considered high, resulting in an average evaluation of 2.56[(2)]. However, the price level doesn't seem to have a negative influence on the satisfaction regarding the provided service.

The average **evaluation of the evolution of diversity in the offer** of the mobile service operators during the last year stands slightly above the evolution of the quality of mobile services in the latest years (3.97 against 3.75 on a scale from 1 (much worse) to 5 (much better)).

Complaint rates of business customers of the mobile telephone service were 25.4 per cent, in December 2007. The last complaints made by these customers resulted, namely, from problems connected to "contract conditions" (24.9 per cent), "invoicing errors" (24.2 per cent) and "technical problems" (14.2 per cent).

Graph 7. Evaluation of business consumers' satisfaction regarding the service and price of the mobile telephone service(%)



(1) Scale: 1. Very dissatisfied; ...; 5. Very satisfied

(2) Scale: 1. Very expensive; ...; 5. Very cheap

Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

Table 6. Average evaluation of the evolution of diversity in the operators' offer and of the quality of mobile services (1)

	Diversity of the operators' offer in the last year	Quality of the services in the latest years
Optimus	3.92	3.67
TMN	3.94	3.68
Vodafone	4.01	3.83
Total	**3.97**	**3.75**

(1) Scale: 1. Much worse; ...; 5. Much better

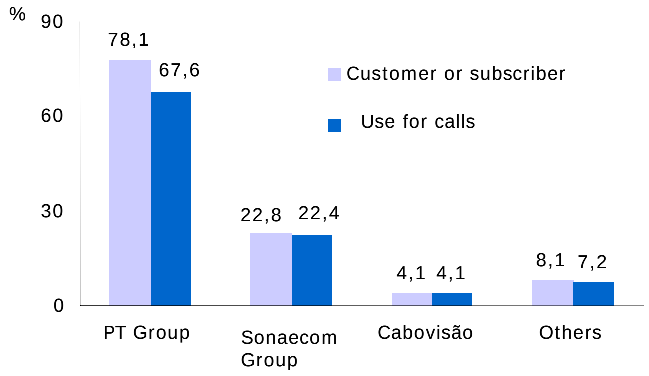
Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

2. *Fixed telephone service*

2.1. Operator and Operator switching

78.1 per cent of the companies that replied to the Survey on the Use of Electronic Communications by Portuguese Companies and that had fixed telephone service stated that they were **PT Group customers**, although only 67.6 per cent used this operator **to make calls**.

Graph 8. Percentage of fixed telephone service users in each operator, separating monthly fee / use for calls



Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

The **use of specific offers for companies or professionals** was more obvious in small and medium-sized enterprises than in micro enterprises.

Specifically, 69.3 per cent of small and medium-sized enterprises that were fixed telephone customers used this type of specific service. For micro enterprises this rate was 45.7 per cent.

The reasons "it was the only one available in the area" and "no better operators showed up" were presented as the most important ones for **choosing PT Group as the main fixed operator**.

Table 7. Average importance(1) of the reasons for selecting the main fixed network operator

	PT	Other	Total
No better operator showed up	**1.6**	1.7	1.7
Lower prices	2.0	**1.1**	1.7
Provided all the services required by the company	1.8	**1.5**	1.7
It was the only one available in the area	**1.5**	2.1	1.7
It is a trustworthy and reliable operator	1.8	1.7	1.8
Offers good customer support service	1.8	1.8	1.8
The operator's brand was known	1.8	1.9	1.9
The company was contacted by the supplier	2.1	1.7	2.0
It offered the most advanced technology and services	2.0	2.0	2.0
It managed to offer all the services in a package	2.2	1.7	2.0
It was recommended by a trustworthy source	2.1	2.0	2.1

(1) Scale: 1. Very important; ...; 5. Little important

Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

The **selection of the remaining operators** resulted mainly from "lower prices" and "[providing] all the services required by the company".

The **fixed telephone operator switching rate** was 37.3 per cent during the period under analysis, with higher rates in largely-sized (small and medium) companies, with 32.7 per cent. For micro enterprises, this indicator reached 37.9 per cent.

Although **PT Group is the "main operator before switching" (50 per cent)**, about 30 per cent of the switching customers had Sonaecom Group companies as their previous operator.

The **main reason leading to operator switching** was based on customer dissatisfaction regarding the price of the fixed telephone service (69.6 per cent).

"Dissatisfaction with the quality of service" justified operator switching in 11.5 per cent of cases.

It should also be stressed out that three out of every four customers that switched operators considered the **process to be easy** or very easy.

Table 8. Main reason for fixed network operator switching (%)

Dissatisfaction with prices	69.6
Dissatisfaction with quality of service	11.5
Interest in trying new products/services	3.3
Services that are more adjusted to the specific need of the company	2.3
Was contacted	1.6
The previous operator didn't provide a package including the possibility to access the Internet	1.5
New operator doesn't charge monthly fee	1.5
Other	4.9
N.A.	3.8
Total	100

Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

Less than 9 per cent of the companies under analysis that are fixed network service customers stated that they **didn't know the number portability service**.

This feature's usage rate, among companies that have switched fixed network operator, was above 90 per cent, showing a high use of this feature during operator switching processes.

Table 9. Knowledge and usage of the number portability service

Rate of knowledge of the number portability service	8.4%
(Base: Fixed telephone service customer companies)	
Rate of usage of the number portability service	92.3%
(Base: Fixed telephone service customer companies that switched operator)	

Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

2.2. Satisfaction and Complaints

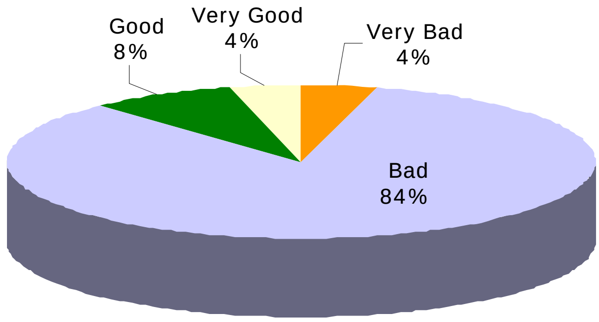
The percentage of fixed telephone service business customers that evaluated the **overall quality of service** as “bad” or “very bad” was quite high, 88 per cent.

The **real evaluation of the fixed telephone service prices** stood below that of the mobile telephone service. On average, on a scale from 1 (Very expensive) to 5 (Very cheap), the prices were rated 2.38 (in comparison with 2.56 in the mobile telephone service).

Fixed telephone service customers have a **more favourable appreciation regarding the evolution of diversity in the offer**, 3.89 and 3.51 in average terms, respectively.

The **evolution of the quality of the services was considered more positive by PT Comunicações’s customers**, while the evaluation regarding the evolution of diversity in the offer was slightly above by customers of other fixed network operators.

Graph 9. Evaluation of the overall quality of fixed telephone service



Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

Table 10. Average evaluation of the evolution of diversity in the operators’ offer and the quality of mobile services[1]

	Diversity of the operators’ offer in the last year	Quality of the services in the latest years
PT Group	3.88	3.54
Other operators	3.91	3.45
Total	**3.89**	**3.51**

[1] Scale: 1. Much worse; ...; 5. Much better

Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

In December 2007, fixed telephone service’s **business customers’ complaint rates** were 36.8 per cent, 11.4 per cent above the mobile service’s rate. The **main reasons leading to the last complaints** from these customers were, namely, “bad quality of service/lack of service/malfunction” (59.8 per cent) and, although with a lower rate, “invoicing errors” (14,3 per cent).

2.3. Services Used

According to the current survey's data, the **lack of knowledge concerning SLRO** (Subscriber line resale offer), **operator pre-selection** and **call-by-call selection** stood between 30 and 40 per cent.

About 7 per cent of the **fixed telephone service's business customers were SLRO users**, the operator pre-selection usage rate falling to 2.2 per cent, and the rate of call-by-call selection users close to zero.

Complementarily, the **rate of abandon of the call-by-call and pre-selection services** stood above the recorded usage rate.

Table 11. Knowledge and usage of call-by-call selection, pre-selection and fixed network SLRO services (%)

	Call-by-call selection	Operator pre-selection	SLRO[1]
Lack of knowledge rate	40.4	37.7	31.1
Usage rate	0.5	2.2	7.0
Usage abandon rate	2.8	3.4	:

[1] Subscriber line resale offer

Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

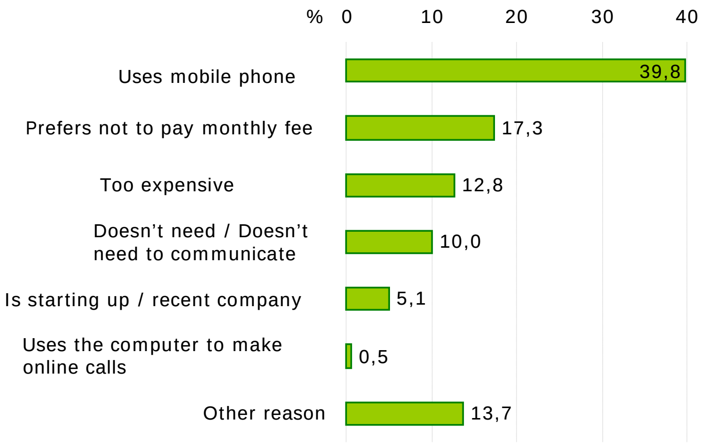
2.4. Barriers to using the fixed telephone service

Although the business population under analysis not using the fixed network telephone is small (4.2 per cent), the current survey made it possible to understand the main reasons associated to this situation.

The use of mobile phone was pointed out as the **main barrier to possessing fixed telephone** (39.8 per cent).

About 30 per cent of the non subscribing companies point to the tariff scheme and the price level as the main reasons for not subscribing the service.

Graph 10. Reasons for the company not to subscribe the fixed telephone service (%)



Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

However, it should be noted that 7.9 per cent of the inquired companies that did not have fixed network telephone show **interest regarding a future acquisition of the service within a year**.

3. *Internet service*

3.1. Equipment and Usage

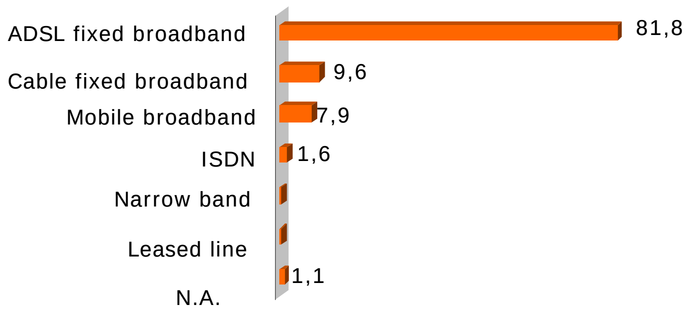
According to the survey under analysis, the vast majority of companies with **Internet service use broadband**, namely ADSL (81.8 per cent), cable modem (9.6 per cent) and mobile broadband (7.9 per cent).

The **rate of employees with Internet access was higher on micro enterprises** in comparison with small and medium-sized enterprises.

Almost 50 per cent of micro enterprises that had the Internet service made its access available to all employees. The same situation only occurs in 7.8 per cent of small and medium-sized enterprises.

In addition, over 80 per cent of small and medium-sized enterprises **don't' provide Internet access** to more than half of their employees.

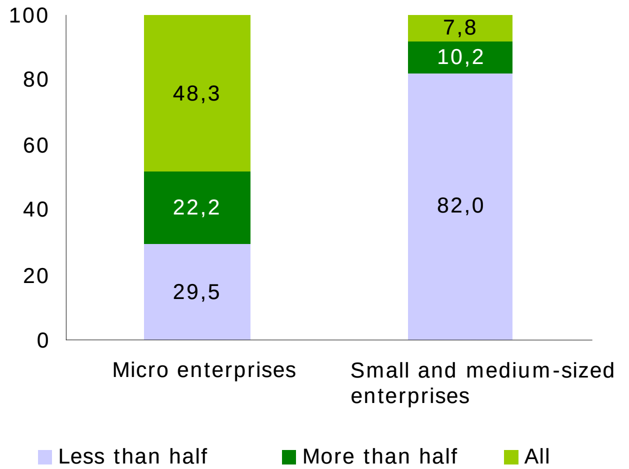
Graph 11. Types of Internet connection in companies (%)



Note: Multiple answering question

Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

Graph 12. Rate of employees with Internet access in the company (%)



Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

3.2. Operators and Operator switching

According to the survey under analysis, about 91.7 per cent of the companies with Internet are **fixed Internet operators' customers** and 10.1 per cent are **mobile Internet operators' customers**. The simultaneous use of these two services is considerably small. The rate of companies with Internet that are simultaneously customers of fixed and mobile network operators didn't reach 2 per cent.

Among those questioned who are fixed Internet service customers, 64.6 per cent are PT Group's customers, and 22.6 per cent are Sonaecom Group's customers.

Of the mobile Internet service's customers, 52.2 per cent are Vodafone's customers and 31.5 are Optimus'.

About 54.5 per cent of the companies subscribing the Internet service **used a specific service for companies or professionals**, although this rate was lower for small and medium-sized enterprises (64.8 per cent).

Table 12. Rate of fixed and mobile Internet service users per operator

Fixed Internet service	PT Group	64.6
	Sonaecom Group	22.6
	Cabovisão	6.1
	Zon Group	4.4
	Other	3.9
Mobile Internet service	Vodafone (3G)	52.2
	OPTIMUS (Kanguru - 3G)	31.5
	TMN (3G)	17.4
	Radiomóvel (Zapp)	0.7
Using both fixed and mobile Internet services		1,7

Note: Multiple answering question.

Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

The **selection of other operators not belonging to PT Group** mainly resulted from the existence of lower-priced offers.

The fact that the operator is trustworthy and reliable was one of the **main reasons for selecting a mobile Internet operator**.

The "[provision] of all services required by the company" was also considered as one of the **main reasons for selecting the operator**.

Data from the current survey make it possible to estimate that 29 per cent of **Internet service customers have already switched operator**. This rate was lower in the small and medium-sized enterprises group (24 per cent) in comparison with micro enterprises (30 per cent).

Table 13. Average importance[(1)] of the reasons for selecting the main Internet service provider

	Fixed Internet			Mobile Internet
	PT	Sonae-com	Others	
Provided all the services required by the company	**1.5**	**1.3**	**1.4**	**1.4**
Lower prices	1.7	**1.2**	**1.3**	1.5
It is a trustworthy and reliable operator	1.6	1.7	1.7	**1.4**
The operator's brand was known	1.6	1.8	1.8	1.9
It managed to provide all the services in a package	1.9	1.4	1.5	1.7
It provides a good customer support service	1.8	1.7	1.6	1.5
No better operator came up	1.7	1.8	1.6	1.7
It provided more advanced technology and services	1.8	1.7	1.8	1.7
The company was contacted by the provider	2.0	1.7	1.8	1.9
It was recommended by a trustworthy source	2.0	2.0	1.9	1.7
It was the only one available in the area	2.0	2.2	2.1	2.0

(1) Scale: 1. Very important; ...; 5. Little important

Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

Most switches occurred with Internet operators.

The **switching process** was classified as "easy" or "very easy" by 64.6 per cent of the customers that switched Internet operator, a figure bellow that registered in the case of the remaining electronic communications services under analysis (fixed and mobile telephone services).

Table 14. Internet service operator before switching (%)

FIXED INTERNET OPERATORS	**97.4**
PT Group	59.8
Sonaecom Group	23.3
Other fixed Internet operators	14.3
MOBILE INTERNET OPERATORS	**1.9**
OTHER	**0.7**
Total	100

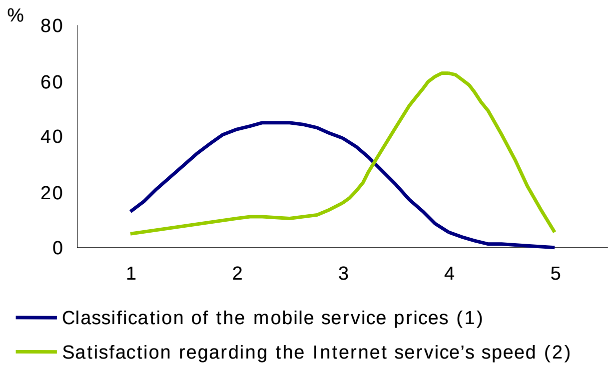
Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

3.3. Satisfaction and Complaints

The **overall quality of the Internet service** was rated 2.89, in average terms, on a scale from 1 (Very bad) to 4 (very good).

Regarding the **service's speed and prices**, there was an average satisfaction level of 3.53 in the case of the service's speed, and of 2.38 in the case of prices (see scale on the Graph on the side).

Graph 13. Evaluation of business consumers' satisfaction regarding the speed and prices of the Internet service (%)



(1) Scale: 1. Very expensive; ...; 5. Very cheap

(2) Scale: 1. Very dissatisfied; ...; 5. Very satisfied

Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

Three out of every four customers stated that the provided Internet service met the **initial expectations**. About 11.7 per cent of Internet customers exceeded their expectations, while 11.3 per cent stated that the service didn't meet their expectations.

According to those inquired, the **evolution of the diversity of the Internet operators' offers** in the last year was positive.

There was a **greater propensity to consider that the quality of mobile Internet services evolved more than the quality of fixed Internet**.

Fixed Internet operators with lower user rate had an average evaluation slightly above that of the operators with more users (PT Group and Sonaecom Group), both regarding the diversity of the offer and the quality.

Table 15. Average evaluation of the diversity of the operators' offer and the quality of the Internet service(1)

	Diversity of the operators' offer in the last year	Quality of the services in the last years
Fixed Internet service	**4.05**	**3.82**
PT Group	4.04	3.83
Sonaecom Group	3.95	3.73
Other	4.21	3.92
Mobile Internet service	**4.07**	**3.93**
Total	**4.05**	**3.82**

(1) Scale: 1. Much worse; ...; 5. Much better

Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

The Internet service **business customers' complaint rate** was 31.6 per cent. As with the fixed telephone service, the "bad quality of service/lack of service/malfunction" was the **main reason for the filed complaints** (59.3 per cent). "Slow Internet access" was the second most mentioned reason (17.6 per cent).

3.4. Barriers to using the Internet service

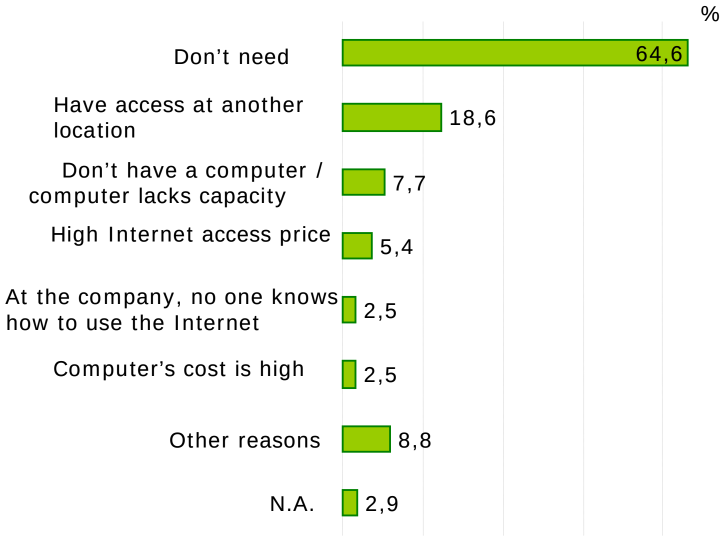
36.5 per cent of the companies answering this survey **didn't have Internet service** at their premises.

Most of these companies (64.6 per cent) stated that they **didn't need the Internet service.**

18.6 per cent of the companies that did not have this service referred they had access to the Internet at another location, other than the company's premises.

It should be stressed out that 19.6 per cent of the companies that did not have the Internet service stated that they **intend to subscribe it in the near future.**

Graph 14. Reasons for the company not to subscribe the Internet service (%)



Note: Multiple answering question

Source: Survey on the Use of Electronic Communications Services by Portuguese Companies, Dec. 2007

VI. Notes on methodology

SURVEY ON THE USE OF ELECTRONIC COMMUNICATIONS BY PORTUGUESE COMPANIES, DECEMBER 2007

This study's **universe** are Micro, Small and Medium-sized enterprises (SME), with registered office in Portugal, which economic activity is part of one of the sections and groups of codes CAE (Rev. 2.1): Section D (Transforming Industries), Section F (Construction), Section G (Wholesale and retail commerce, repair of automobiles, motorcycles, personal and domestic use goods), Group H 551 (Hotel establishments), Group H 552 (Camping sites and other short term lodging facilities), Section I (Transport, warehousing and communications), Section K (Real estate activities, leasing and services to companies), Group O 921 (Cinema and video activities), and Group O 922 (Radio and television activities).

The **sample plan** includes a multi-stage probabilistic sample that was previously stratified. The national territory was divided into groups, according to the NUTII region and the presence of telecommunications operators in each region. A two-step sampling was carried out for each group. The first step corresponds to the selection of municipalities (with uneven probabilities, in proportion to the number of companies, for the target population), and the second step to the selection of companies (using a random sample stratified by activity sector and company size). **2403 interviews** were carried out assuring a maximum absolute error margin of 2.0 (half the amplitude of a confidence interval of 95% for a proportion). Specific fragmentations within each electronic communications service translate into higher error margins: mobile telephone service (2.4), fixed telephone service (2.0) and Internet service (2.5).

The **field work** was carried out by **company Qmetrics, S.A.** Face-to-face interviews using the CAPI (Computer Assisted Personal Interviewing) system were carried out from 21 November to 21 December 2007 and from 3 to 15 January 2008.

The **estimation** used weightings reckoned by Qmetrics, S.A. The **weightings** led the obtained results to adjust to the known totals of the supporting variables (NUTS II, activity sector and company size based on physical data from Dec/2006 and on economic data from Dec/2005, from the National Statistical Institute) in order to correct the distortions detected in the sample.