

# SURVEY ON THE USE OF ELECTRONIC COMMUNICATIONS SERVICES BY SMALL AND MEDIUMSIZED ENTERPRISES

2010

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#### I. Penetration of electronic communications services

According to the Survey on the use of electronic communications services by small and mediumsized enterprises (SME)<sup>1</sup>, **90.3 percent of these companies had the fixed telephone service** (FTS) and **81.8 percent had the mobile telephone service** (MTS) as of December 2010. As such, the number of SMEs with the FTS fell by 5.5 percentage points, while MTS penetration rose by 10 percentage points.

The **Fixed Internet access service** (FIAS) was used by **71 percent of the SMEs surveyed**, while around a third had the Mobile Internet access service (MIAS).

The subscription TV service (TV) was reported with a penetration rate of 13.1 percent.

Table 1 - Possession of electronic communications services

Service	2007	2010
FTS	95.8	90.3
MTS	71.5	81.8
FIAS	63.5	71.0
MIAS	00.0	32.2
TV	4.5 *	13.1 *
Leased lines	0.3 #	2.3 #
Other data services	1.1 #	1.8 #

Unit: %.

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2007 and 2010

Base: All companies with less than 250 staff

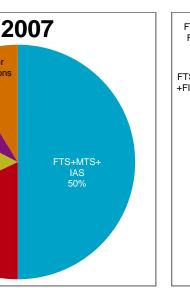
Note 1: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate.<sup>2</sup>

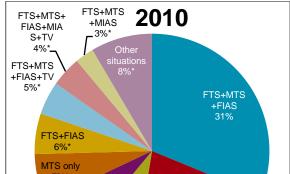
Note 2: The 2007 survey did not separate Internet by type of access (fixed or mobile).

The **simultaneous** use of fixed telephone, mobile telephone and Internet access (fixed and/or mobile) services is reported in 52 percent of all the companies surveyed, in line with the findings of the previous year.

<sup>&</sup>lt;sup>1</sup>The following concepts are used in the context of this survey: micro-companies - companies with less than 10 employees; small companies – companies with 10 - 49 employees; medium-sized companies – companies with 50 - 249 employees.

<sup>&</sup>lt;sup>2</sup>The variation coefficient is considered as sampling error indicator, based on the variance of the "proportion" or "average" estimator (according to the case) of a simple random sample and assuming a significance level of 95 percent. The following classification is used: reliable estimate when variation coefficient of is less than 10 percent; acceptable estimate when variation coefficient is greater than or equal to 10 percent and less than 25 percent; unreliable estimate when variation coefficient is greater than or equal to 25 percent.





FTS+MTS +FIAS+MI

AS

FTS+MTS

FTS only

**Graph 1 – Groupings of electronic communications services** 

Unit: %.

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2007 and 2010

Base: All companies with less than 250 staff

FTS only

Other

FTS+IAS

FTS+MTS

Note 1: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate (see Footnote 2).

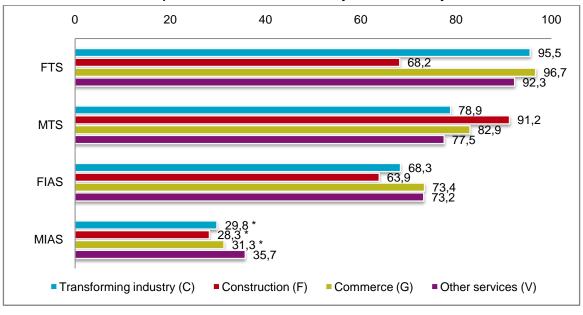
Note 2: The 2007 survey did not distinguish Internet by type of access (fixed or mobile).

At the end of 2010, around 31 percent of the companies surveyed had, simultaneously, the FTS, MTS and FIAS, whereas 21 percent used these three services in addition to the mobile Internet. However, only 37.4 percent of companies reported that they subscribed to a **bundle** of services (*multiple play*). This value is double the figure reported at the end of 2007.

#### II. Penetration of electronic communication services by sector of activity and size

In most sectors, penetration of the telephone service at a fixed location exceeds 90 percent. The exception is the Construction subsector, where this service has less than 70 percent penetration, with fixed Internet reported at rates that are significantly lower. In contrast, when it comes to the mobile telephone service, the Construction subsector has the highest penetration rate (91.2 percent)

Internet penetration increased across the board compared to 2007. In the specific case of the mobile Internet, penetration is reported at close to 30 percent, with the highest level of penetration reported in the "other services" subsector (36 percent).



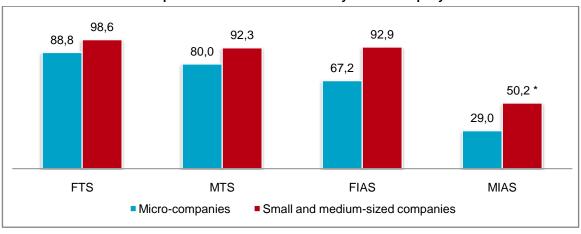
Graph 2 - Possession of services by sector of activity

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2010

Base: All companies with less than 250 staff according to sector of activity

Note: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate (see Footnote 2).

Compared to penetration of electronic communication among micro-companies, penetration among small and medium-sized companies is higher for all of the services, especially for **Internet access services**.



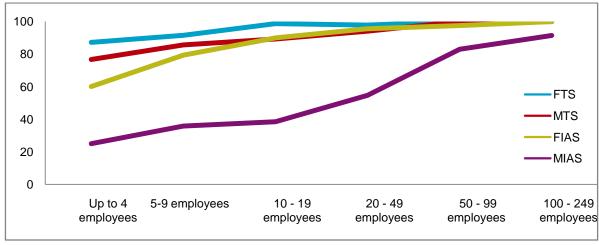
Graph 3 - Penetration of services by size of company

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2010

Base: All companies with less than 250 staff according to size

Note 1: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate (see Footnote 2).

A more detailed analysis of electronic communication services according to company size shows that possession tends to increase in line with the size of the company. This is especially true in the case of Internet access services (particularly mobile).



Graph 4 - Possession of services by size of company

Unit: %.

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2010

Base: All companies with less than 250 staff according to company size

Note: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate (see Footnote 2).

#### III. Main problems identified by business users

The main problem of the electronic communications services market, as identified by its business consumers, is that it is "too expensive". This was also the main problem cited in 2007, although the percentage of surveyed companies is significantly higher.

Table 2 - Main problems of the market (%)

Service	MTS	FTS	MIAS	FIAS
Too expensive	37.4	27.7	26.6 *	22.8
Poor quality	12.8 *	5.2 *	16.6 *	14.2 *
Lack of / unclear information	4.5 *	2.9 *	2.2 #	2.2 #
Services poorly suited to company needs	3.6 *	4.0 *	3.0 #	3.4 *
Insufficient services	3.5 *	2.4 #	7.7 *	6.7 *
Lack of competition	3.2 *	5.4 *	3.2 #	3.4 *
Lack of offer	1.3 #	1.5 #	1.0 #	1.1 #
Other	19.6	16.5	15.8 *	15.8 *
Don't know / no response	31.0	44.9	39.5	44.7

Unit: %.

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2010

Base: All companies with less than 250 staff according to services possessed

Note 1: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate (see Footnote 2).

Note 2: Multiple choice question

"Poor quality" is the second most cited problem in the case of MTS and the Internet. Meanwhile, "Insufficient services" was cited in third place in the case of the Internet by a significant number of respondents.

#### IV. Quality, Complaints and Operator switching

No significant variations from service to service were seen in terms of the consumer assessment of the evolution of the electronics market from 2009 to 2010.

Meanwhile, consumers considered that tariffs had evolved less favourably, with an average assessment below 6 (on a scale of 1 - a lot worse to 10 - a lot better).

Table 3 - Evolution of the average quality of the services

	MTS	FTS	MIAS	FIAS
Diversity of provider offers	6.5	6.5	6.5	6.6
Quality of service's management / support given by providers to companies	6.2	6.2	6.3	6.3
Tariffs	5.6	5.8	5.7	5.9
Quality of networks	6.5	6.6	-	-
Transmission speed	-	-	6.1	6.4
Overall quality of services	6.5	6.5	6.4	6.5

Unit: Scale 1 (a lot worse) to 10 (a lot better)

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2010

Base: All companies with less than 250 staff according to service in possession

Note: On a scale of 1 to 10, the absolute margins for error do not exceed 0.1 absolute points, except in the case of mobile Internet where absolute margin for error varies between 0.12 and 0.14 points.

The highest levels of satisfaction among micro, small and medium-sized companies (7.0 on a scale of 1 – very dissatisfied to 10 – very satisfied) are associated with the mobile telephone service. This situation is confirmed by the low rate of operator switching associated with this service (5.9 percent). However, around 1/5 of business customers report having submitted at least one complaint during 2010.

In contrast, the mobile Internet access service had a slightly lower level of satisfaction among business customers (6.7); However, the propensity to switch operator or to submit a complaint tends to be the lowest of the services subject to analysis.

Table 4 - Comparison between electronic communications services

	Switched provider in 2010 (%)	Submitted complaint 2010 (%)	Overall evaluation of provider (average 1 to 10)
MTS	5.9 *	20.0	7.0
FTS	10.2 *	20.2	6.9
MIAS	4.1 #	12.1 *	6.7
FIAS	7.8 *	22.2	6.9

Unit: % / Scale 1 (very dissatisfied) to 10 (very satisfied)

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2010

Base: All companies with less than 250 staff according to service in possession (excludes non-responses)

Note: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate (see Footnote 2). On a scale of 1 to 10, the absolute margins for error do not exceed 0.1 absolute points, except in the case of mobile Internet where absolute margin for error is 0.13 points

The highest rate of **operator switching** was reported for the fixed telephone service, with over 10 percent of respondents switching provider during 2010.

Compared to 2007, the survey highlights the following aspects:

- A reduction is reported in the total number of fixed telephone service customers who have submitted a complaint, falling from 37.1 percent to 29.5 percent in 2010. Although this service's penetration rate has been declining, an improvement is reported in average satisfaction with providers by this service's business customers (companies with fewer than 250 employees).
- The mobile telephone service has seen a decline in overall levels of customer satisfaction and a slight increase is reported in the number of customers submitting a complaint (increasing 3 percentage points between 2007 and 2010), despite an increase in business customers with fewer than 250 employees.

Table 5 - Summary: comparison between electronic communications services (2007/2010)

	Penetration rate (%) (1)		Submitted complaint (%) (2)		Overall evaluation of provider (average 1 to 10) (2)	
	2007	2010	2007	2010	2007	2010
MTS	71.5	81.8	25.8	28.8	7.7	7.0
FTS	95.8	90.3	37.1	29.5	5.3	6.9
IAS	63.5		32.0		7.2	
MIAS		32.2		19.0 *		6.7
FIAS		71.0		30.9		6.9

Unit: % / Scale 1 (very dissatisfied) to 10 (very satisfied)

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2010

Note: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate (see Footnote 2). On a scale of 1 to 10, the absolute margins for error do not exceed 0.1 absolute points, except in the case of mobile Internet where absolute margin for error is 0.13 points in 2010.

#### V. Mobile Telephone Service

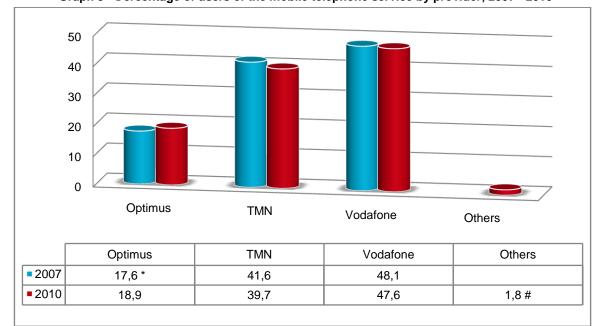
According to data from the survey, around three quarters of small and medium-sized companies and 62.0 percent of micro-companies have a **specific mobile telephone service for companies** and **professionals**.

<sup>(1)</sup> Base: All companies with less than 250 staff

<sup>&</sup>lt;sup>(2)</sup> Base: All companies with less than 250 staff according to service in possession (excludes non-responses)

Meanwhile, the **average number of cards per employee** is higher in micro-companies (0.96) than in larger companies (0.5).

Around 47.6 percent of the companies subject to analysis were customers of Vodafone's mobile telephone service and 39.7 of TMN. There figures have declined slightly since 2007.



Graph 5 - Percentage of users of the mobile telephone service by provider, 2007 - 2010

Unit: %

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2007 and 2010

Base: All companies with less than 250 staff with mobile telephone service

Note 1: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate (see Footnote 2).

Note 2: Multiple choice question.

Choice of operator was mainly driven by "lower prices", which was the reason cited by 37 percent of the companies surveyed. "Trustworthiness and reliability" and "there were no better operators at moment of choosing" were each mentioned by around 18 percent of respondents.

Nearly 1/5 of mobile telephone service customer report having made at least one complaint in the last year, with 8.8 percent of companies making a complaint more than one year ago. There is a greater propensity among small and medium-sized companies to complain, compared to microcompanies (36.6 and 27.2 percent respectively). "Billing errors" and the "tariffs" were the two main reasons associated with the most recent complaints made by business companies.

In 2010, around **6 percent** of companies changed mobile telephone service provider, whereas over 12 percent considered switching or attempted to switch, with the main reason for not doing so being "minimum length clause with current provider" (35.7 percent).

Among companies which actually switched provider, around 2/3 took a positive view of the switching process and **over 93 percent made use of portability when switching**.

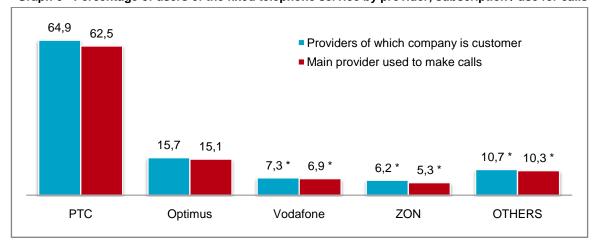
While the majority of companies without access to the mobile telephone service reported "no need for this means of communication", "use of the fixed telephone service" was identified by ¼ of these companies as a barrier to the use of the mobile telephone service.

Almost 85 percent of companies without the mobile telephone service never had access to this service and almost 90 percent manifested no interest in becoming a customer.

#### VI. Fixed Telephone Service

Contrary to the evolution of the mobile telephone service, possession of the fixed telephone service by Portuguese companies declined from 95.8 percent in 2007 to 90.3 percent in 2010.

64.9 percent of the surveyed companies were customers of PTC, followed by Optimus with 15.7 percent of companies surveyed.



Graph 6 - Percentage of users of the fixed telephone service by provider, subscription / use for calls

Unit: %

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2010

Base: All companies with less than 250 staff with fixed telephone service

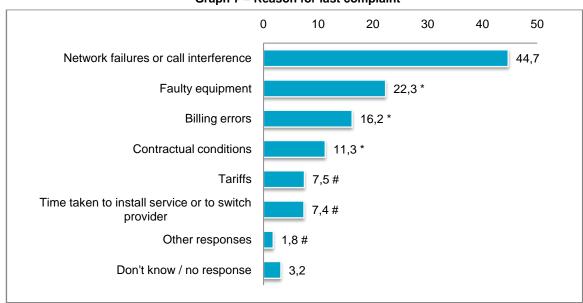
Note 1: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate (see Footnote 2).

Note 2: The question "providers of which company is customer" is multiple choice.

In line with the mobile telephone service "lowest prices" remains the main reason for choosing provider, indicated by 32 percent of surveyed customers.

20.2 percent of fixed telephone service customers made at least one complaint in the last year, whereas 9.3 percent made their last complaint more than one year ago. A greater propensity to complain is reported among small and medium-sized companies, compared to micro-companies (38.5 and 27.8 percent respectively).

A large number of complaints stemmed from "network failures or call interference" with double the responses of "faulty equipment".



Graph 7 - Reason for last complaint

Unit: %

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2010

Base: All companies with less than 250 staff which are customers of fixed telephone service and which have made a complaint to the most used provider (includes non-responses)

Note 1: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate (see Footnote 2).

Note 2: Multiple choice question.

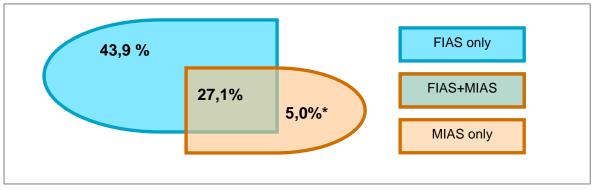
More than 10 percent of the surveyed companies reported switching fixed telephone service provider in 2010 and another 7 percent considered switching or attempted to switch, whereas 94.9 percent of the companies which did switch made use of the portability service.

Among micro, small and medium-sized companies without the fixed telephone service, more than half reported "no need for this means of communication". "Use of mobile telephone" was mentioned by ¼ of these companies.

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#### VII. Internet Access Service

According to the survey, 76.1 percent of micro, small and medium-sized companies in Portugal had access to the Internet, compared to 63.5 percent in 2007.



Graph 8 - Penetration of the Internet access service by type of access

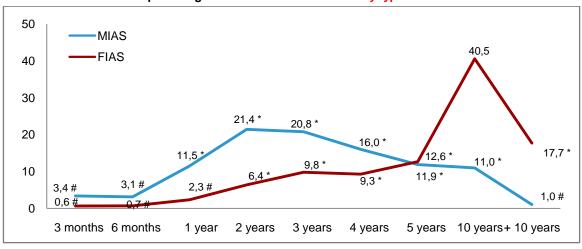
Unit: %

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2010

Base: All companies with less than 250 staff (excludes non-responses)

Note: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate (see Footnote 2).

In terms of the length of time that the company has had the service, this is naturally longer for the fixed Internet service, compared to the mobile Internet service. Over 56 percent of companies have had their fixed service for over 5 years, whereas 58.2 percent of Mobile Internet customers contracted this service less than 3 years ago.



Graph 9 - Age of Internet access service by type of access

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2010

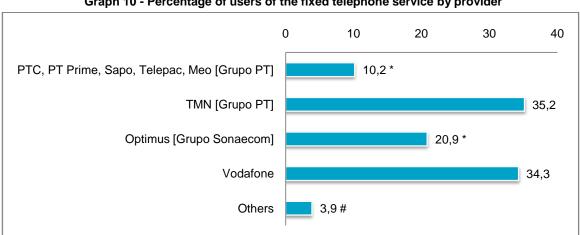
Base: All companies with less than 250 staff with fixed or mobile Internet access service (excludes non-responses)

Note: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate (see Footnote

Of the companies without Internet access, 3 in 4 mentioned that this service was "irrelevant to the company's business" and around 84 percent reported that they had no intention of taking up the service in 2011.

#### 1. Mobile Internet

TMN and Vodafone are the most widely used Mobile Internet providers, with 35.2 and 34.3 percent, respectively.



Graph 10 - Percentage of users of the fixed telephone service by provider

Unit: %

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2010

Base: All companies with less than 250 staff with mobile Internet access service (excludes non-responses)

Note 1: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate (see Footnote 2).

Note 2: "Others" includes Grupo ZON, Clix [Grupo Sonaecom] and other providers.

Note 3: Multiple choice question

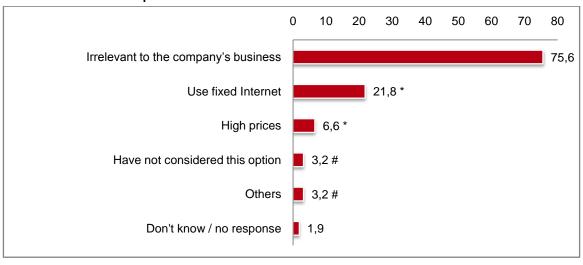
"Lowest prices" (29.3 per cent) and the "offer of all services as a bundle" (19.8 percent) are the two main reasons given by business customers of the mobile Internet access service for having opted for the current provider of this service.

The equipment most widely used by surveyed companies with Mobile Internet is data transmission cards (52.1 percent), integrated cards (38.7 percent) and mobile telephones or PDAs with broadband access (21.9 percent).

Although the majority of companies which are customers of the mobile Internet access service have a specific offer for companies and professions, this is particularly the case with small and medium-sized companies (71.4 percent) compared to micro-companies (58.3 percent).

The companies which have made complaints to their mobile Internet access service provider indicate "system failures or interrupted connection" as the main reason for complaining (41.4 percent).

Companies which only have the Internet through fixed access indicate that they do not have mobile access because it is "irrelevant to the company's business" (75.6 percent) or because they "use the Fixed Internet access service" (21.8 percent).



Graph 11 - Barriers to use of mobile Internet Access service

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2010

Base: All companies with less than 250 staff with fixed Internet access but without mobile Internet access (includes non-responses)

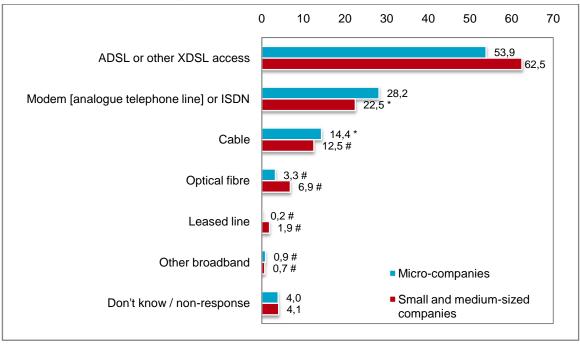
Note 1: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate (see Footnote 2).

Note 2: Multiple choice question

Almost 1/5 of the surveyed companies with only fixed Internet access report having discontinued the mobile Internet access service, most of them more than one year ago. Meanwhile, 7.8 percent expressed an interest in taking up the service during 2011.

#### 2. Fixed Internet

According to the survey, the companies with the fixed Internet access service mostly used DSL (55.5 percent). This type of access is more widely used by small and medium-sized companies (62.5 percent) compared to micro-companies (53.9 percent). There was wider use among micro-companies of narrowband, ISDN or cable.



Graph 12 - Type of connection to the fixed Internet access service

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2010

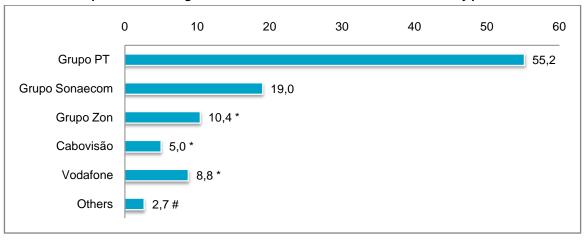
Base: All companies with less than 250 staff with fixed Internet access service (includes non-responses)

Note: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate (see Footnote 2)

Note 2: Multiple choice question

According to the survey, 58.5 percent of surveyed micro-companies had fixed Internet access through a specific offer for companies and professionals. This figure is higher among small and medium-sized companies (72.9 percent).

Grupo PT is the most widely used provider for fixed Internet access by micro, small and mediumsized companies, followed by Sonaecom with 19 percent.



Graph 13 - Percentage of users of the fixed Internet access service by provider

Source: ICP-ANACOM, Survey on the use of electronic communications services by small and medium-sized enterprises, December 2010

Base: All companies with less than 250 staff with fixed Internet access service (excludes non-responses)

Note 1: Estimates: (#) Unreliable estimate; (\*) Acceptable estimate; (no symbol) Reliable estimate (see Footnote 2).

Note 2: Multiple choice question

In line with other electronic communication services "lowest price" is the main reason cited for choosing fixed Internet service provider, as indicated by 34.6 percent of surveyed companies which are customers of this service. The fact that the provider is able to "make an offer of all the services in a bundle" is another widely referenced reason for choice of provider, as indicated by 1/5 of customers.

30.9 percent of companies with fixed Internet access reported having submitted a complaint, with 22.2 percent making a complaint in the last year. Small and medium-sized companies tend to submit significantly more complaints than micro-companies (36.1 and 29.7 percent, respectively).

In their majority, the most recent complaint made to the Internet access service provider resulted from "system failures or interrupted connection", followed by "slow access".

#### VIII. Notes on methodology

## SURVEY ON THE USE OF ELECTRONIC COMMUNICATIONS SERVICES BY SMALL AND MEDIUM-SIZED ENTERPRISES, DECEMBER 2010

The **universe** of this study comprises Micro, Small and Medium-sized Enterprises (SME), with registered offices in Portugal and whose economic activity is covered by one of the following sections of CAE codes (Rev. 3): Section C (Transforming Industries), Section F (Construction), Section G (Wholesale and retail commerce, repair of automobiles and motorcycles), Section H (Hotel and storage), Section I (Accommodation, restaurants and similar), Section K (Financial services and insurance), Section L (Real estate activities), Section M (Consultancy, scientific, technical and similar activities) and Section N (Administrative activities and support services).

The **sample plan** includes a multi-stage probabilistic sample that was previously stratified according to the NUTII, sector of activity and company size. **2503 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 (2.1), fixed telephone service (2.1), fixed Internet service (2.3) and mobile Internet service (3.4).

The **field work** was carried out by **company GfK Metris.** Face-to-face interviews using the CAPI (Computer Assisted Personal Interviewing) system were carried out from 20 October to 16 December 2010.

The **estimation** used weightings reckoned by GfK Metris. The **weightings** enabled adjustment of the obtained results to the known totals of the supporting variables (NUTS II, sector of activity and company size) in order to correct the distortions detected in the sample.

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

The **universe** of this study comprises Micro, Small and Medium-sized enterprises (SME), with registered offices in Portugal, which economic activity is covered by one of the following sections and groups of CAE codes (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.