



# ICTs in Spanish households

## 30th Panel Survey

Fourth Quarter 2010 October-December

This report on the 30th edition Survey Panel "ICTs in Spanish Households" conducted by the ONTSI (Spanish Observatory for Telecommunications and the Information Society) has been drawn up by the ONTSI survey team:

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## HIGHLIGHTS

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### **Internet expenditure has grown by 5.5% over the last year**

With a year-on-year increase of 5.5%, the expenditure on Internet services by Spanish households reaches €619 million.

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### **Expenditure by households with three ICT services accounts for 45% of the total.**

Accumulated expenditure by households with three ICT services in the fourth quarter of 2010 accounted for 45% of the total. In addition, expenditure of households with four services was 24.6% of the total expenditure.

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### **Spanish households as a whole spent €3.4 million on ICT**

In the fourth quarter of 2010, Spanish households spent €3,362 million on ICT services. This is 93 million less than in the same period the previous year.

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### **Fixed telephony, with €953 million represents 28.4% of total ICT expenditure.**

Household expenditure on fixed telephony was €953 million in the last quarter of 2010, which represents a year-on-year decrease of 2.8%. However, it shows an increase of 15 million with respect to the previous quarter of the year, that is, of 1.6%.

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### Three quarters of the total expenditure on mobile telephony corresponded to the contract option

As for the distribution of expenditure by payment method, the contract modality has strengthened its position as the preferred option. The contract option accounts for €1,118 million of overall expenditure on mobile telephony, which totals €1,514 million.

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### ADSL represents 16% of total expenditure on pay TV, with a year-on-year increase of 3.5 percentage points

Of the total €276 million spent on pay TV in the last quarter of 2010 by Spanish households, almost 60% corresponds to digital satellite technology, a fourth of it to cable technology and 16% to ADSL technology, this last recording an increase of 3.5 percentage points over the last year.

29<sup>th</sup> edition

October-December 2010

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The sections indicated cannot be updated to the fourth quarter of 2010, on which this report is based and, therefore, the information of the previous edition/quarter, that is, of the **29th Edition/3rd Quarter** is shown.

The aforementioned is because this report corresponds to an edition that is not based on questionnaires. Said information is obtained half-yearly, in alternate editions, while information from invoices is collected quarterly, as is the case of this **30th Edition/4th Quarter**.

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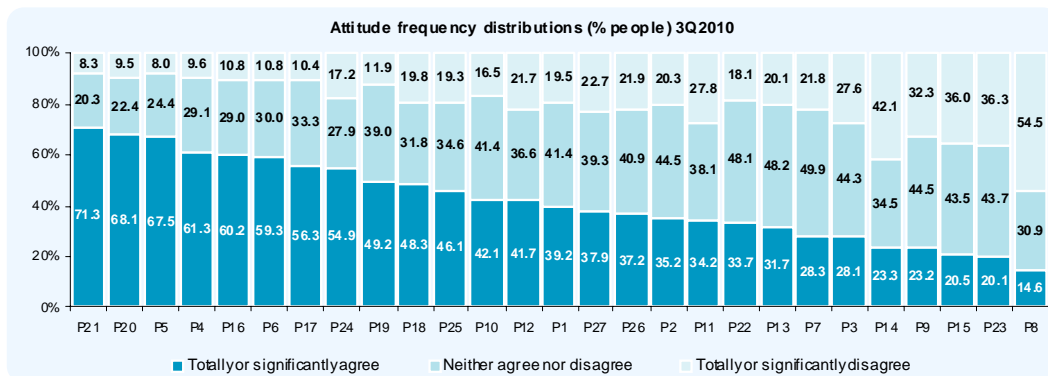
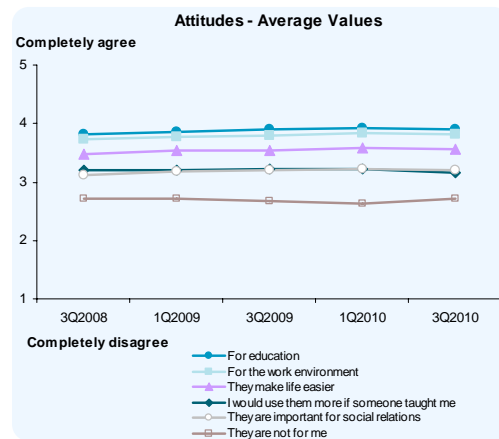
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# 1. ATTITUDES TOWARDS NEW TECHNOLOGIES

Average values (1 totally disagree - 5 totally agree)		3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
P21	Awareness of new technologies will be fundamental to education	3.82	3.86	3.89	3.92	3.90
P20	Public administrations should help raise awareness of new technologies	3.73	3.78	3.79	3.83	3.82
P5	Knowledge of new technologies is important in the work environment	3.81	3.83	3.84	3.84	3.82
P4	Those who do not adapt to new technologies are going to find things difficult	3.62	3.68	3.64	3.60	3.67
P16	New technologies often do not justify their price	3.55	3.58	3.58	3.61	3.63
P6	New technologies help to resolve some problems	3.51	3.53	3.55	3.59	3.57
P17	New technologies make life easier and more convenient	3.48	3.53	3.54	3.58	3.56
P19	New technologies make it difficult to separate work from leisure time	3.44	3.50	3.48	3.48	3.47
P24	My relationship with new technologies is very practical	3.45	3.44	3.48	3.46	3.45
P18	New technologies cause people to communicate less	3.38	3.38	3.34	3.35	3.38
P25	NTs allow me to do what I want, when and where I want	3.30	3.32	3.33	3.30	3.30
P10	I am only interested in technologies that are easy to set up and use	3.20	3.22	3.30	3.32	3.29
P1	I would use more technological products and services if someone taught me	3.19	3.23	3.20	3.17	3.24
P27	Some knowledge of new technologies is important for social relations	3.21	3.28	3.18	3.16	3.21
P12	Price is the most important factor for me when choosing	3.11	3.17	3.20	3.23	3.20
P22	I am interested in the new technologies, but I find them very expensive	3.21	3.18	3.19	3.15	3.20
P2	The Internet presents more disadvantages for children than advantages	3.18	3.22	3.21	3.16	3.19
P26	New technologies do not fulfil all their promises	3.21	3.21	3.23	3.23	3.16
P13	I use them when they have been sufficiently tested	3.11	3.13	3.12	3.08	3.09
P7	I am not planning on buying NTs until their prices drop	3.13	3.11	3.14	3.06	3.08
P11	I like to try new technological advances	3.01	3.01	3.06	3.06	3.04
P3	New technologies help me to develop as a person	2.84	2.84	2.90	2.93	2.96
P9	I start to use new technologies when I see several other people using them	2.82	2.82	2.82	2.80	2.82
P15	I am not sure what new technologies can do for me	2.82	2.81	2.78	2.73	2.77
P23	Shopping on the Internet is safe	2.63	2.63	2.68	2.69	2.72
P14	New technologies are not for me	2.71	2.72	2.68	2.64	2.71
P8	I am one of the first to buy NTs in my environment	2.38	2.33	2.38	2.39	2.39

The positive attitude of citizens towards new technologies continued in the third quarter of 2010. The population continue to agree on the importance of new technologies in education and in the world of work, but most citizens do not consider themselves to be pioneers in using new technologies. The attitudes towards new technologies have not experienced important year-on-year variations over the last period. The utility of ICTs in personal development and adaptation to the new technological environment perceived by citizens has increased slightly. The biggest change in the last two years has been in the amount of importance that citizens confer to the role that Internet plays in their social relationships.

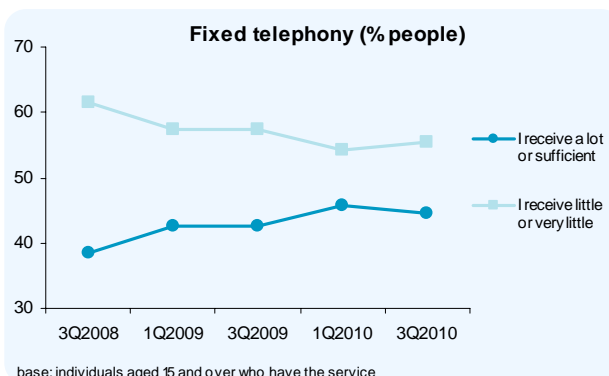
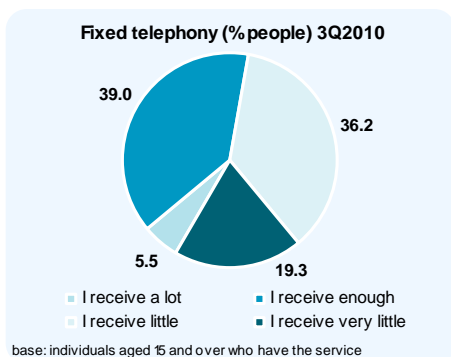


Around 70% of the population believe that ICTs are fundamental in education (71.3%) and in the world of work (68.1%). 57% of the population recognises they are not one of the first to buy NTs and 23.3% does not feel identified with these technologies.

## 2. ICT COST-BENEFIT RATIO

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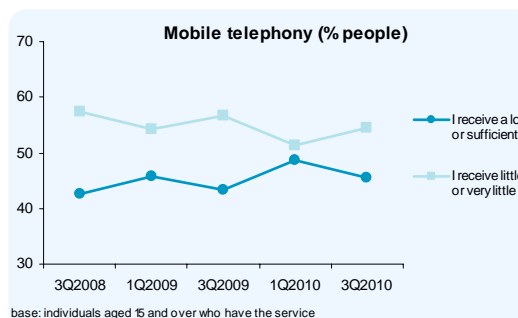
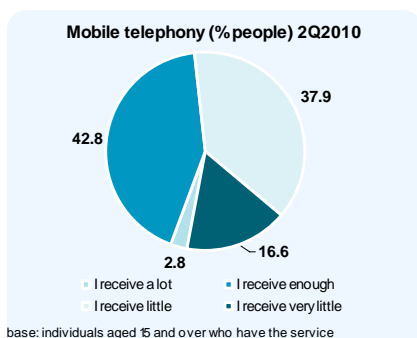
### 2.1. Cost-benefit ratio of ICT services



% individuals	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
I receive a lot	5.0	5.5	6.1	5.1	5.5
I receive enough	33.6	37.0	36.5	40.6	39.0
I receive little	40.4	38.6	36.7	36.2	36.2
I receive very little	21.0	18.9	20.7	18.1	19.3

Base: individuals aged 15 and over who have the service

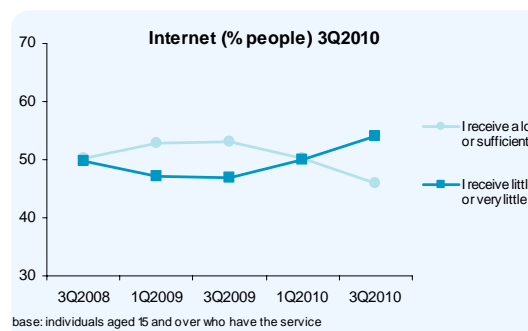
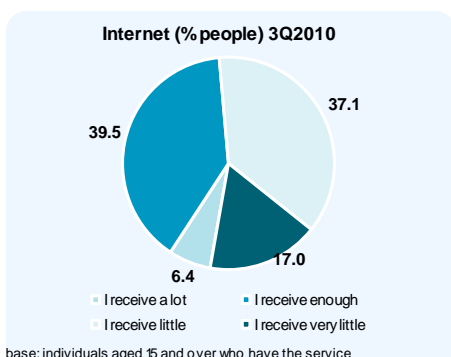
We observe an improvement in the cost-benefit ratio of fixed telephony in the last two years, although more than half the population consider that they receive little or very little for the price paid (55.5%).



% individuals	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
I receive a lot	3.3	4.0	3.1	3.9	2.8
I receive enough	39.3	41.8	40.2	44.8	42.8
I receive little	41.1	38.2	39.6	36.8	37.9
I receive very little	16.3	16.0	17.1	14.6	16.6

Base: individuals aged 15 and over who have the service

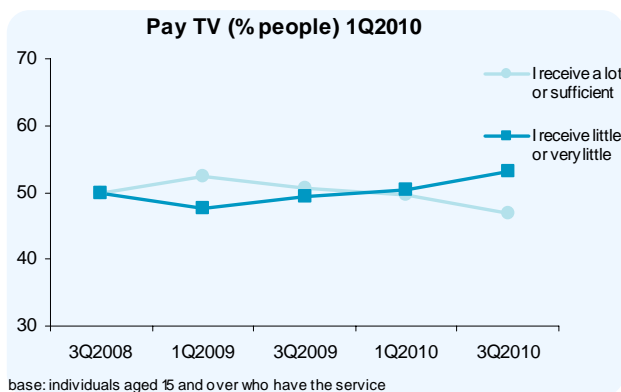
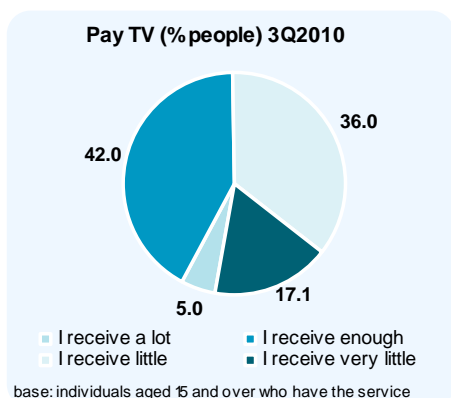
45.6% of the population consider that they receive a lot or sufficient for what they paid for mobile telephony services, which represents an improvement in the perception.



% individuals	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
I receive a lot	7.7	9.3	8.5	8.0	6.4
I receive enough	42.6	43.5	44.6	42.2	39.5
I receive little	33.8	33.1	29.2	33.5	37.1
I receive very little	15.9	14.1	17.7	16.4	17.0

Base: individuals aged 15 and over who have the service

Over half of the persons with Internet access (54.1%) think they receive little or very little in return for the price paid.



The cost/benefit ratio of pay TV services has deteriorated in the last year, with 53.1% of the users considering that they receive little or very little for what they pay, compared to 46.9% who think they receive a lot or sufficient.

% individuals	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
I receive a lot	5.2	6.3	5.0	5.8	<b>5.0</b>
I receive enough	44.8	46.2	45.7	43.9	<b>42.0</b>
I receive little	35.4	34.5	36.3	32.5	<b>36.0</b>
I receive very little	14.6	13.0	13.0	17.8	<b>17.1</b>

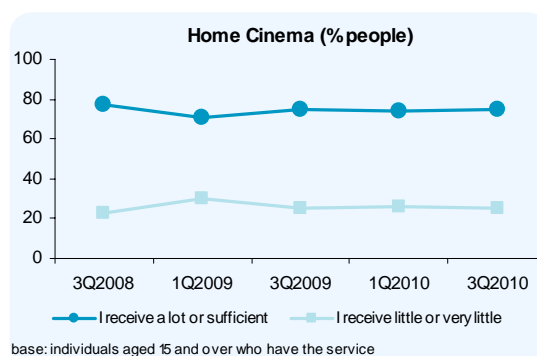
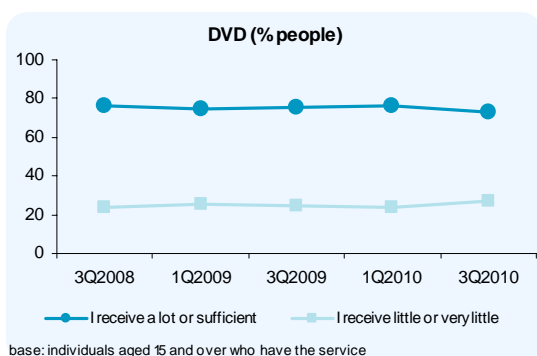
Base: individuals aged 15 and over who have the service

## 2.2. Cost-benefit ratio of ICT devices

	% individuals	3Q2007	1Q2008	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
<b>DVD</b>	I receive a lot	12.8	11.4	10.8	13.8	10.9	10.7	<b>10.7</b>
	I receive enough	64.9	64.0	65.5	60.9	64.6	65.6	<b>62.6</b>
	I receive little	15.7	16.7	15.6	18.0	15.1	15.2	<b>19.0</b>
	I receive very little	6.6	8.0	8.1	7.3	9.4	8.5	<b>7.7</b>
<b>Home Cinema</b>	I receive a lot	16.7	13.1	11.6	14.6	7.0	8.9	<b>9.2</b>
	I receive enough	63.8	64.7	65.4	55.8	68.0	64.8	<b>65.6</b>
	I receive little	14.5	14.2	14.9	25.0	17.0	15.0	<b>19.2</b>
	I receive very little	5.0	8.0	8.1	4.7	8.0	11.3	<b>6.0</b>
<b>Video console</b>	I receive a lot	12.0	11.0	10.7	14.7	8.8	11.2	<b>11.5</b>
	I receive enough	56.7	54.2	56.2	55.9	56.7	57.1	<b>56.7</b>
	I receive little	22.1	23.0	19.0	20.0	19.8	18.0	<b>21.3</b>
	I receive very little	9.2	11.8	14.1	9.5	14.7	13.7	<b>10.5</b>

Base: individuals aged 15 and over who have the equipment

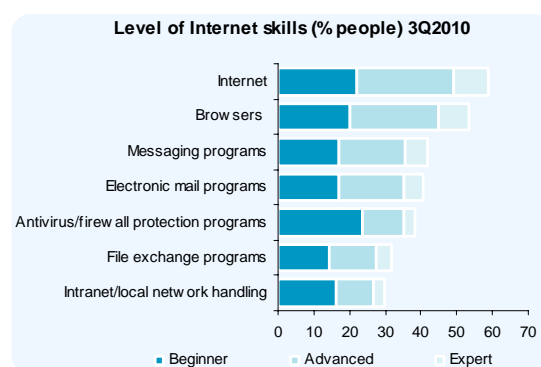
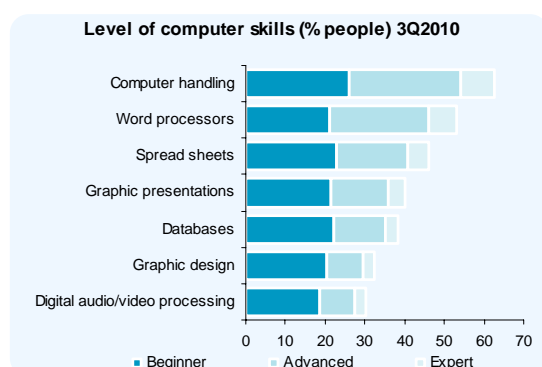
The cost/benefit ratio of DVDs, Home Cinemas and videoconsoles, according to users, remains very stable in the last three years. Those who claimed to receive an excellent or adequate service in return for the price paid for DVDs and Home Cinemas amount to 74% of the population, and for 68.2% in the case of videoconsoles.





### 3. COMPUTER AND INTERNET SKILLS

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October-December 2010



In the third quarter of 2010, 62.7% of the population had some computer knowledge and 58.7% had some Internet knowledge. 36.7% and 36.5% of the population were advanced users of computers/Internet respectively. In the case of text processors, over 30% of the population were advanced users. For spreadsheets and graphic presentations the percentages are around 20%.

Lastly, slightly over 10% of the population were advanced or expert users of digital audio/video processing and graphic design. As for the Internet, a third of the population is highly skilled in browser use. Between 23% and 25% of them are advanced or expert users of messaging and email programs, while for intranets/local networks and antivirus/firewall protection programs this percentage is hardly 15%.

#### Computer knowledge

% individuals (1Q2010)	Beginner	Advanced	Expert	I am not a user	DK/NA
Computer handling	26.1	28.2	8.4	29.6	7.7
Word processors	21.1	24.9	7.0	37.9	9.0
Spread sheets	23.0	17.7	5.5	44.0	9.7
Graphic presentations	21.3	14.8	4.0	50.0	9.9
Databases	22.1	12.9	3.4	52.2	9.5
Graphic design	20.3	9.2	2.7	57.7	10.1
Digital audio/video processing	18.7	8.8	2.9	59.5	10.2

#### Internet knowledge

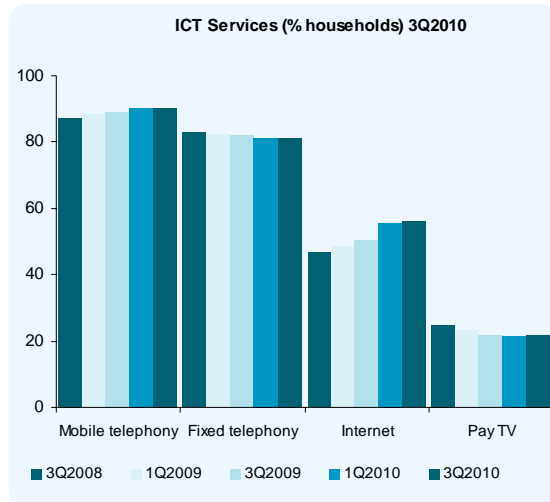
% individuals (1Q2010)	Beginner	Advanced	Expert	I am not a user	DK/NA
Internet	22.2	26.9	9.6	31.8	9.5
Browsers	20.1	24.9	8.3	36.8	10.0
Messaging programs	17.0	18.6	6.1	48.4	9.8
Electronic mail programs	16.9	18.4	5.1	49.7	9.9
Antivirus/firewall protection programs	23.4	11.8	3.0	51.7	10.0
File exchange programs	14.4	13.2	4.2	58.2	10.0
Intranet/local network handling	16.2	10.3	3.4	59.8	10.2

## 4. ICT EQUIPMENT AND SERVICES

29<sup>th</sup> edition

October-December 2010

### 4.1. ICT Services

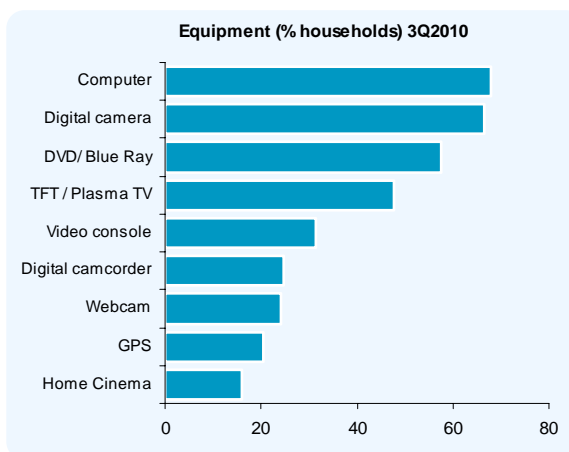


% households	Mobile telephony	Fixed telephony	Internet	Pay TV
3Q2008	87.0	82.8	46.8	24.8
1Q2009	88.2	82.4	48.5	23.3
3Q2009	89.1	82.0	50.7	21.8
1Q2010	90.2	81.3	55.5	21.3
3Q2010	<b>90.5</b>	<b>81.4</b>	<b>55.9</b>	<b>21.9</b>

Of the four ICT services analysed in the survey, mobile telephony was the most widespread in Spanish households. Nine out of ten households are subscribers of mobile telephony services and eight out of ten of fixed telephony services.

As in previous years, the service with the highest growth was the Internet, recording a year-on-year rise of 3.7 percentage points. 55.9% of households are already connected to the Internet. The percentage of households with pay TV remains practically flat at 22%.

### 4.2. Household equipment

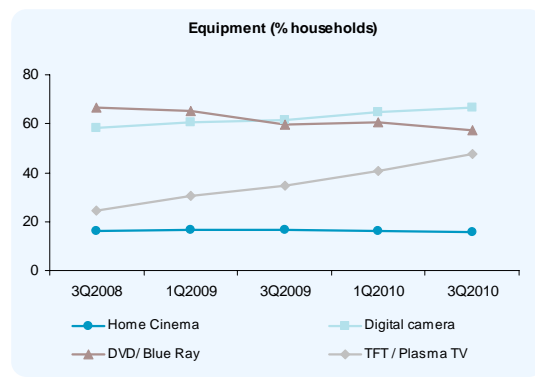
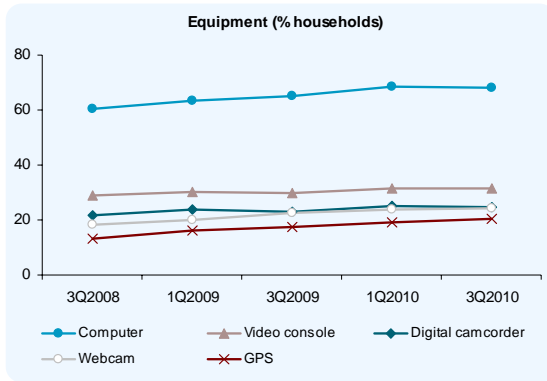


PC is the most commonly used ICT equipment in households. It is present in 68% of them. It is followed by the digital camera, which is present in two out of three households.

Next, DVDs/Blue Rays are present in 57.5% of households, and videoconsoles in 31.5% of them. The percentages for digital camcorders and webcams are around 24.5%.

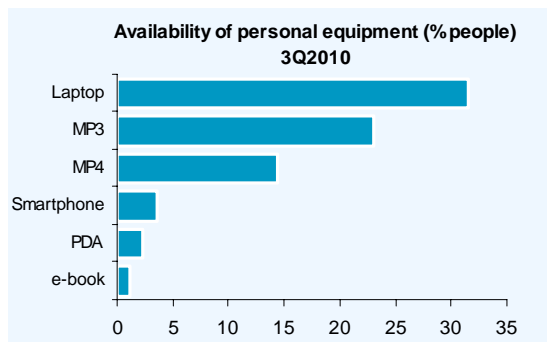
% households	Computer	Digital camera	DVD/Blue Ray	TFT/Plasma TV	Video console	Digital camcorder	Webcam	GPS	Home Cinema
3Q2008	60.4	58.2	66.5	24.4	28.8	21.7	18.2	13.0	16.0
1Q2009	63.4	60.7	65.2	30.7	30.1	24.0	20.0	16.1	16.7
3Q2009	65.0	61.4	59.8	34.7	29.8	22.9	22.7	17.3	16.8
1Q2010	68.5	64.7	60.4	40.5	31.7	25.0	24.0	19.0	16.4
3Q2010	<b>68.0</b>	<b>66.4</b>	<b>57.5</b>	<b>47.8</b>	<b>31.5</b>	<b>24.7</b>	<b>24.2</b>	<b>20.6</b>	<b>15.9</b>

The most notable growth has been observed in TFT/plasma/led TVs that have almost doubled their presence in households (in 47.8% of them) during the last two years. GPS systems have also experienced a considerable growth: they are present in 20.6% of households.



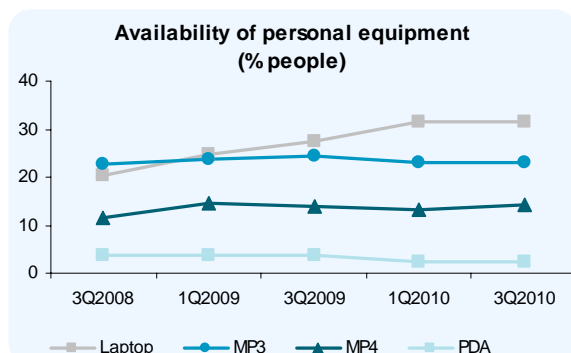
percentage points increase	Computer	Digital camera	DVD/ Blue Ray	TFT / Plasma TV	Video console	Digital camcorder	Webcam	Home Cinema	GPS
3Q2008 – 3Q2009	4.6	3.2	-6.7	10.3	1.0	1.2	4.5	0.8	4.3
1Q2009 – 1Q2010	5.1	4.0	-4.8	9.8	1.6	1.0	4.0	-0.3	2.9
3Q2009 – 3Q2010	<b>3.0</b>	<b>5.0</b>	<b>-2.3</b>	<b>13.1</b>	<b>1.7</b>	<b>1.8</b>	<b>1.5</b>	<b>3.3</b>	<b>-0.9</b>

### 4.3. Individual equipment



% Individuals	Laptop	MP3	MP4	Smartphone	PDA	e-book
3Q2008	20.3	22.8	11.4	---	3.6	---
1Q2009	24.8	23.6	14.7	---	3.8	---
3Q2009	27.3	24.3	14.0	2.7	3.6	0.5
1Q2010	31.4	23.2	13.2	3.4	2.5	1.0
3Q2010	<b>31.6</b>	<b>23.0</b>	<b>14.4</b>	<b>3.6</b>	<b>2.3</b>	<b>1.2</b>

Among personal equipment, laptop computers stand up with a penetration rate of 31.6% of the Spanish population. They experienced an increase of 4.3 percentage points over the last year. Additionally, 23% of the population has a MP3 player, and 14.4% a MP4 player.

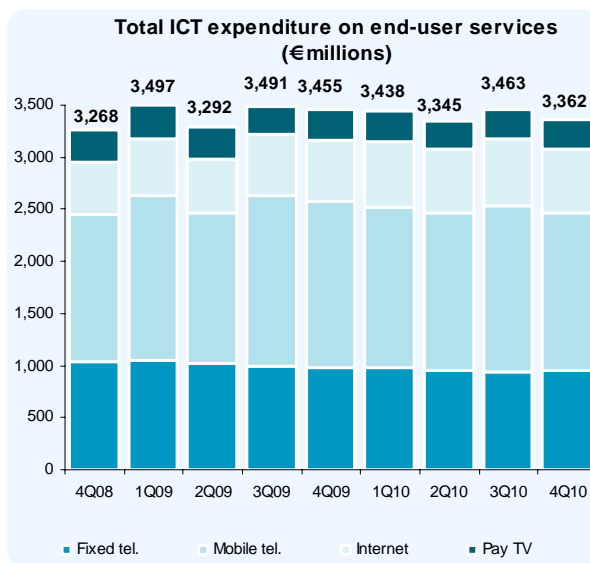


percentage points increase	MP3	MP4	PDA	Laptop
1Q2008 – 1Q2009	1.3	3.9	0.6	6.6
3Q2008 – 3Q2009	1.5	2.6	0.0	7.0
1Q2009 – 1Q2010	-0.4	-1.5	-1.3	6.6
3Q2009 – 3Q2010	<b>-1.3</b>	<b>0.4</b>	<b>-1.3</b>	<b>4.3</b>

## 5. ICT EXPENDITURE

ICT service expenditure (4Q2010)	% households	Num. of households (thousands)	ICT service expenditure (€million)
Fixed telephony	81.4	13,789	953
Mobile telephony	90.5	15,323	1,514
Internet	55.9	9,464	619
Pay TV	21.9	3,708	276
<b>Total</b>	<b>100</b>	<b>16,939</b>	<b>3,362</b>

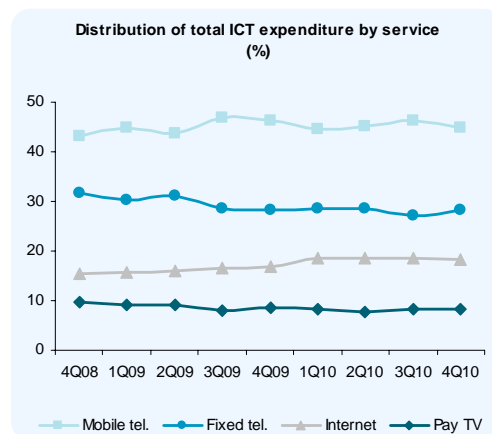
In the fourth quarter of 2010, Spanish households spent €3,362 million on ICT services. This is 93 million less than in the same period the previous year, which represents a year-on-year decrease of 2.7%.



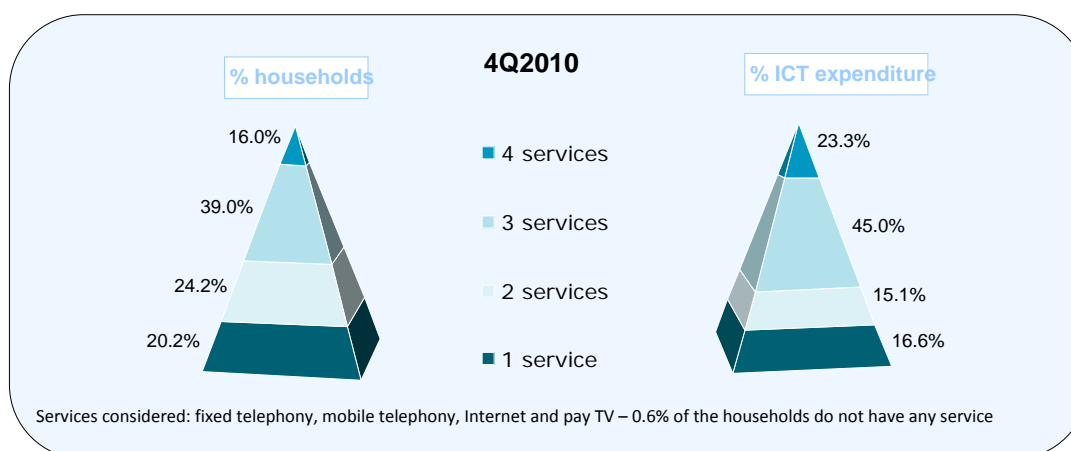
We observe a drop in the expenditure by households on all ICT services except on the Internet, as compared to the previous year. In fixed telephony, this drop amounts to 2.8%, in mobile telephony to 5.1% and in pay TV to 5.8%. Internet expenditure in this period was €619 million, recording a year-on-year increase of 5.5%.

ICT service expenditure	€Millions					Percentage			
	Fixed tel.	Mobile tel.	Internet	Pay TV	Total	Fixed tel.	Mobile tel.	Internet	Pay TV
4Q2008	1,037	1,412	505	314	3,268	31.7	43.2	15.5	9.6
1Q2009	1,056	1,570	550	321	3,497	30.2	44.9	15.7	9.2
2Q2009	1,025	1,437	525	305	3,292	31.1	43.7	15.9	9.3
3Q2009	997	1,638	579	277	3,491	28.6	46.9	16.6	7.9
4Q2009	980	1,595	587	293	3,455	28.3	46.2	17.0	8.5
1Q2010	979	1,536	642	281	3,438	28.5	44.7	18.7	8.2
2Q2010	952	1,507	625	261	3,345	28.5	45.1	18.7	7.8
3Q2010	938	1,598	643	284	3,463	27.1	46.1	18.6	8.2
4Q2010	<b>953</b>	<b>1,514</b>	<b>619</b>	<b>276</b>	<b>3,362</b>	<b>28.4</b>	<b>45.0</b>	<b>18.4</b>	<b>8.2</b>

Mobile telephony is at the top of the list of ICT service expenditure distribution, with a percentage of 45% of the total. This trend has remained stable in the last two years. The remainder of the expenditure was for fixed telephony and Internet. Three out of 10 euros were spent by households in fixed telephony and two in Internet services.



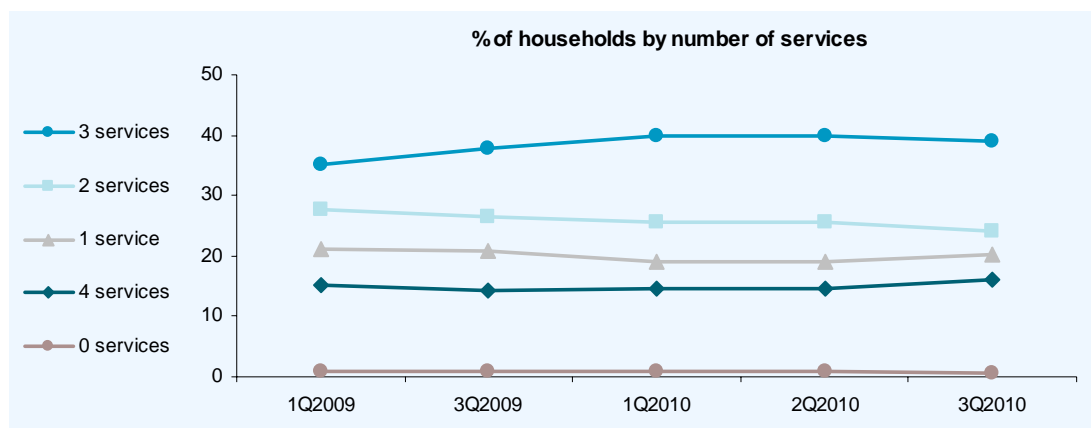
## 6. ICT SERVICES PYRAMID



In the third quarter of 2010, four out of ten households were subscribed to three ICT services, typically fixed telephony, mobile telephony and Internet. Accumulated expenditure by these households in the fourth quarter of 2010 accounted for 45% of the total. Households subscribed to four ICT services accounted for 23.3% of the expenditure, representing 16% of all households.

### 6.1. Percentage of households by number of services

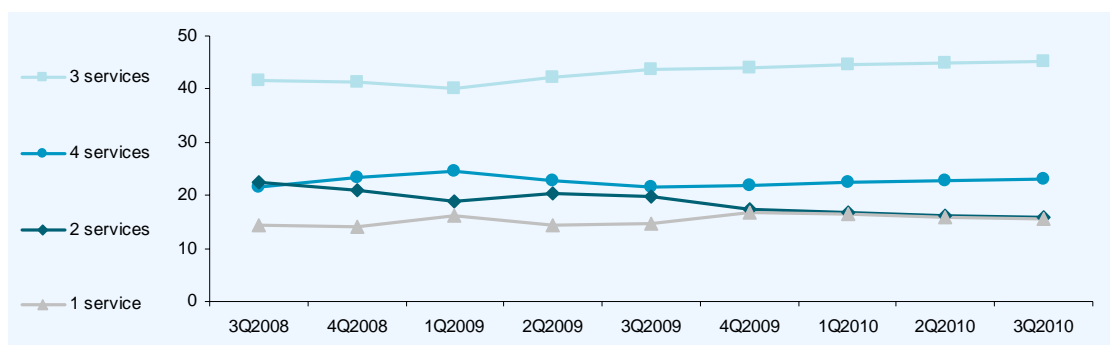
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The percentage of households with four and three services recorded a year-on-year rise of 1.8 and 1.2 percentage points respectively, while the percentage of households with two and one services recorded a drop of 1.2 and 0.6 percentage points respectively.

% households	3Q2007	1Q2008	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
4 services	12.1	13.3	14.3	15.2	14.2	14.7	16.0
3 services	32.5	33.9	36.0	35.0	37.8	39.9	39.0
2 services	32.4	29.5	27.3	27.8	26.4	25.5	24.2
1 service	22.2	22.3	21.3	21.2	20.8	19.1	20.2
0 services	0.9	1.0	1.0	0.9	0.8	0.9	0.6

## 6.2. Percentage of expenditure by number of services



The evolution of the percentage of expenditure by number of services over the year shows a fall of households subscribed to two ICT services (of 2.3 percentage points) and a slight increase of households subscribed to four and three ICT services (of 1.4 and 1.1 percentage points respectively).

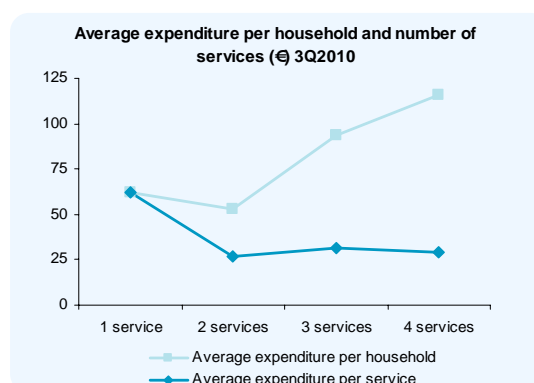
% expenditure	3Q2008	4Q2008	1Q2009	2Q2009	3Q2009	4Q2009	1Q2010	2Q2010	3Q2010
4 services	21.7	23.4	24.6	22.8	21.7	21.9	22.4	22.7	23.2
3 services	41.5	41.4	40.2	42.3	43.8	43.9	44.5	45.0	45.2
2 services	22.4	21	19	20.5	19.7	17.4	16.7	16.3	15.9
1 service	14.4	14.2	16.2	14.4	14.8	16.8	16.4	16.0	15.7

## 6.3. Evolution of average monthly expenditure per household and number of services

Average expenditure per household (€)	3Q2008	4Q2008	1Q2009	2Q2009	3Q2009	4Q2009	1Q2010	2Q2010	3Q2010
1 service	55.6	52.3	55.6	52.2	57.9	64.7	67.4	64.1	62.5
2 services	67.6	60.6	62.1	56.3	60.4	53.0	51.4	48.7	52.9
3 services	94.8	90.4	93.3	92.4	94.0	93.2	87.7	86.4	93.3
4 services	124.6	128.3	131.8	115.0	124.2	124.1	119.9	117.8	116.1

Households subscribed to one service pay on average €64.4 a month, while those with two services pay €48.7. So that, upon analysing the expenditure per household depending on the number of services they are subscribed to, we observe that it is cheaper to have two services than only one. Households with three and four services pay €90.1/month and €113.4/month respectively, on average.

So in the last quarter of 2010, monthly average expenditure per contracted service stood at around €24.4 for households with two contracted ICT services, €30 for households with three services, and €28.3 for households with four services.

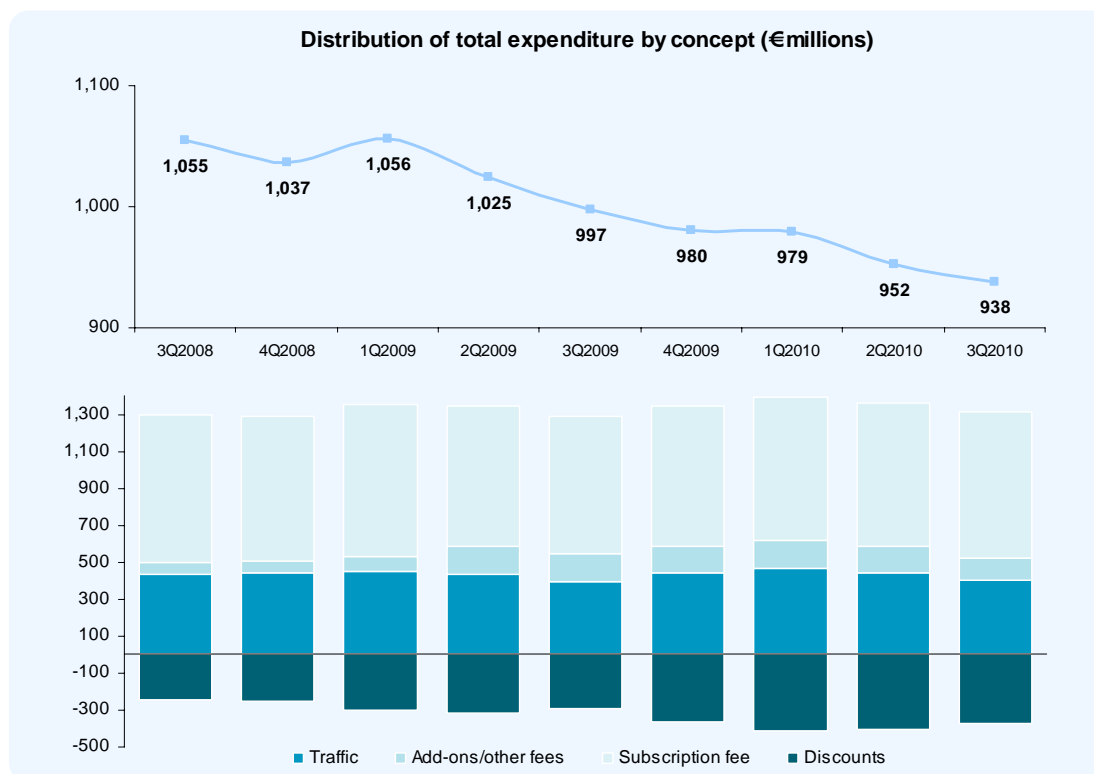


Average expenditure per service (€)	3Q2008	4Q2008	1Q2009	2Q2009	3Q2009	4Q2009	1Q2010	2Q2010	3Q2010
1 service	55.6	52.3	55.6	52.2	57.9	64.7	67.4	64.1	62.5
2 services	33.8	30.3	31.1	28.2	30.2	26.5	25.7	24.4	26.5
3 services	31.6	30.1	31.1	30.8	31.3	31.1	29.2	28.8	31.1
4 services	31.2	32.1	32.9	28.7	31.0	31.0	30.0	29.4	29.0

In the last year, monthly average expenditure per subscribed service for households with one service has remained flat. In the case of households with two services it has fallen by €2.1/month; in those with three services by €1.1/month and in those with four services by €2.7/month. So except in households with one service, all households have reduced their average expenditure per service in the last year.

## 7. FIXED TELEPHONY

### 7.1. Total expenditure and distribution by concept



Household expenditure on fixed telephony was €953 million in the last quarter of 2010, which represents a year-on-year decrease of 2.8%. However, it shows an increase of 15 million with respect to the previous quarter of the year, that is, of 1.6%.

€ millions	4Q2008	1Q2009	2Q2009	3Q2009	4Q2009	1Q2010	2Q2010	3Q2010	4Q2010
Traffic	439	452	437	396	443	468	445	401	457
Add-ons/other fees	67	74	150	147	146	148	140	124	123
Subscription fee	786	827	755	744	758	773	773	788	810
Discounts	-255	-297	-318	-290	-367	-410	-406	-374	-437
<b>Total expenditure</b>	<b>1,037</b>	<b>1,056</b>	<b>1,025</b>	<b>997</b>	<b>980</b>	<b>979</b>	<b>952</b>	<b>938</b>	<b>953</b>

If we break down the expenditure on fixed telephony, we observe that consumption on telephone calls has increased by 3.2% compared to the previous year, consumption on add-ons has fallen by 15.8%, and subscription fees have increased by 6.9%. So total expenditure on calls, add-ons, and fees totals €457M, €123M and €810M respectively.

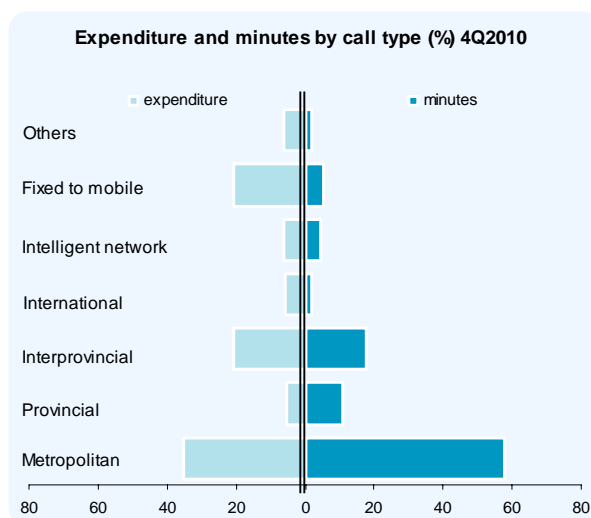
As for discounts applied by operators, these totalled €437 million this quarter, 19.1% more than in the same period of the previous year.



## 7.2. Minutes and expenditure by call type

### Percentage of *minutes* consumed by call type

% minutes	Metropolitan	Provincial	Interprovincial	International	Intelligent network	Fixed to mobile	Others
3Q2008	58.9	9.3	16.2	2.3	5.8	4.6	2.9
4Q2008	59.3	9.8	16.5	2.7	4.2	3.9	3.6
1Q2009	57.5	10.2	16.5	2.4	4.7	4.5	4.3
2Q2009	58.4	10.7	14.8	2.5	4.5	5.2	3.9
3Q2009	56.8	10.4	19.0	2.7	4.4	4.3	2.4
4Q2009	56.6	11.7	19.3	1.6	4.3	3.7	2.8
1Q2010	53.6	13.3	20.2	1.4	4.9	4.0	2.5
2Q2010	56.4	12.0	18.3	1.5	4.7	5.4	1.8
3Q2010	<b>57.8</b>	<b>10.7</b>	<b>17.5</b>	<b>1.9</b>	<b>4.6</b>	<b>5.5</b>	<b>2.1</b>



In the fourth quarter of 2010, 57.8% of all call minutes made by fixed telephony customers were metropolitan calls, with a drop of 1 point compared to the previous year. These were followed by interprovincial calls with 17.5% of all minutes made in fixed telephony. Lastly, calls to mobiles represented 5.5% of all calls made.

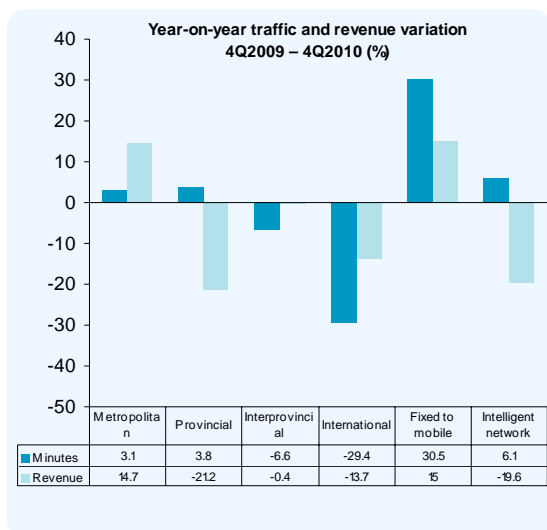
As for the distribution of expenditure by call type, in the last quarter of 2010, more than a third part of it corresponded to metropolitan calls, a fifth to interprovincial calls and another fifth to calls from fixed to mobile phones.

### Percentage of expenditure made by call type<sup>1</sup>

% expenditure	Metropolitan	Provincial	Interprovincial	International	Intelligent network	Fixed to mobile	Others
3Q2008	29.7	9.0	18.2	7.0	10.1	20.3	5.6
4Q2008	31.7	9.9	19.4	5.9	8.8	18.9	5.3
1Q2009	30.7	10.2	18.9	5.9	9.1	19.6	5.6
2Q2009	29.8	10.4	17.3	5.8	10.2	22.4	4.1
3Q2009	31.5	7.0	21.3	6.9	8.0	18.5	6.8
4Q2009	36.8	6.0	22.6	5.6	6.6	16.9	5.5
1Q2010	35.0	6.2	23.2	5.1	7.3	17.6	5.6
2Q2010	35.2	5.7	20.6	4.6	6.9	21.2	5.8
3Q2010	<b>35.1</b>	<b>5.4</b>	<b>20.6</b>	<b>5.7</b>	<b>6.3</b>	<b>20.6</b>	<b>6.3</b>

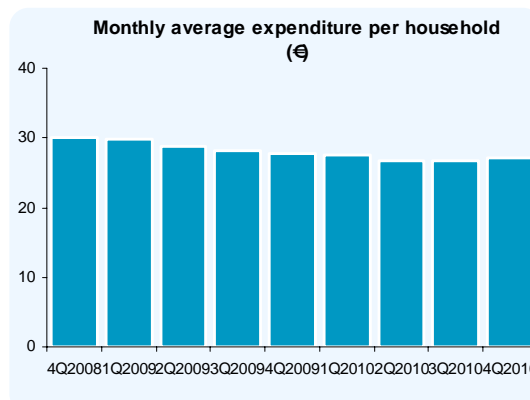
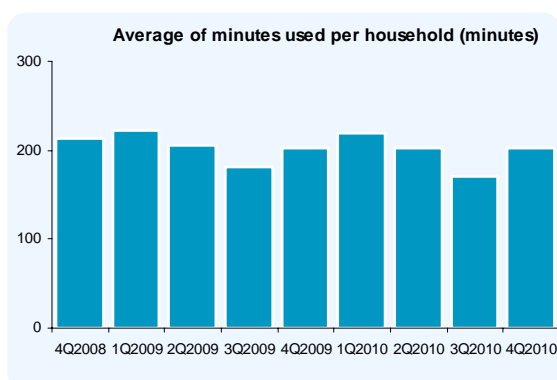
<sup>1</sup> Since the second quarter of 2009, the expenditure on VoIP (e.g. Skype) and on pre-paid cards for fixed telephone (often used for international calls) is also included. Expenditure is recorded for these types but it is not possible to record the traffic. Throughout the report, this expenditure is grouped in the category 'Others'.

## Year-on-year traffic and revenue variation



The global analysis of the evolution of revenue by type of call over the year shows an increase of about 15% both in metropolitan calls and calls made to mobiles. On the other hand, the evolution of minutes by type of call over the year is very irregular; we observe an increase of 3.1% in the case of metropolitan calls, and of over 30% in calls to mobiles.

### 7.3. Average minutes and expenditure per household



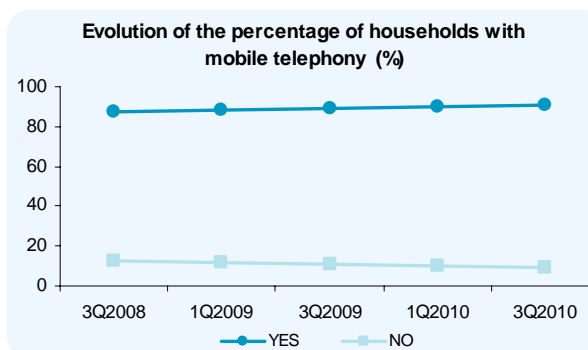
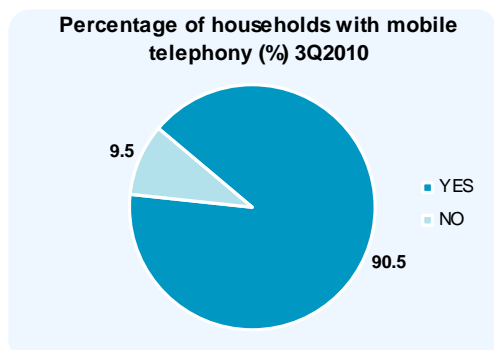
Average household expenditure on fixed telephony was €27.2 per month (including VAT), similarly to the previous year (€27.7). And average number of minutes per household and month in the fourth quarter of 2010 was 202 minutes.

Monthly average per household	4Q2008	1Q2009	2Q2009	3Q2009	4Q2009	1Q2010	2Q2010	3Q2010	4Q2010
Minutes	213	222	206	181	202	219	202	170	202
Euros	30.1	29.8	28.9	28.2	27.7	27.5	26.7	26.8	27.2

## 8. MOBILE TELEPHONY

### 8.1. Households with mobile telephony

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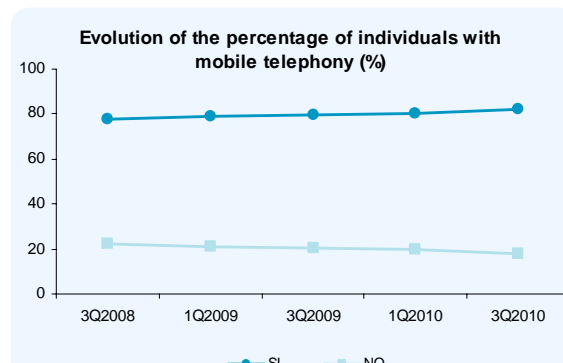
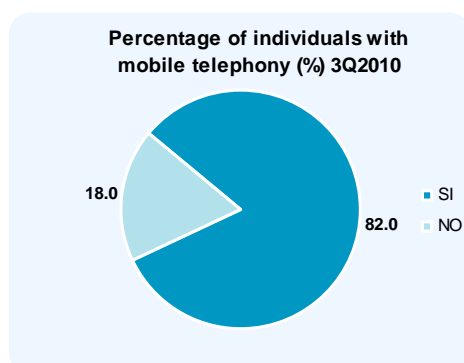


With a year-on-year increase of almost 500,000 households, the mobile telephone was present in 90.5% of households in the third quarter of 2010, which means over 15.3 million households.

Households with mobile telephony	Percentage	Absolute (thousands of households)
3Q2007	86.5	13,833
1Q2008	86.9	13,961
3Q2008	87.0	13,975
1Q2009	88.2	14,688
3Q2009	89.1	14,842
1Q2010	90.2	15,286
3Q2010	90.5	15,323

### 8.2. Individuals with mobile telephony

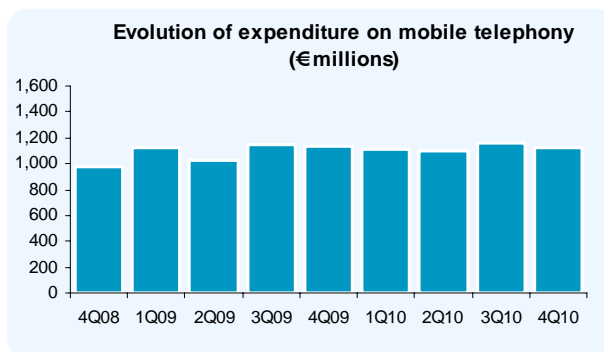
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October-December 2010



Individuals with mobile telephony	Percentage	Absolute (thousands of individuals)
3Q2007	75.2	28,219
1Q2008	76.0	28,717
3Q2008	77.5	29,285
1Q2009	78.8	30,052
3Q2009	79.6	30,372
1Q2010	80.5	31,415
3Q2010	82.0	31,996

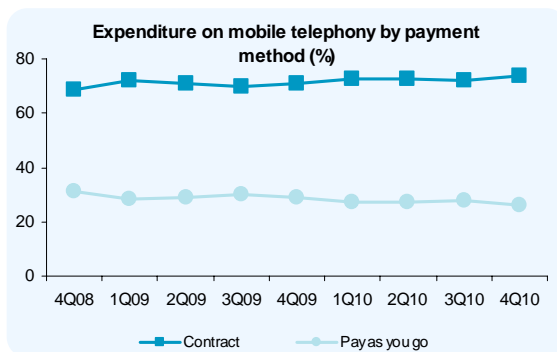
More than eight out of ten individuals aged 15 and over have at least one active mobile telephone (used in the last month), which means over 32 million individuals. This number continues its upward trend year after year. Specifically, it increased by more than 1.6 million individuals over the last year.

### 8.3. Total and average expenditure per household on mobile telephony



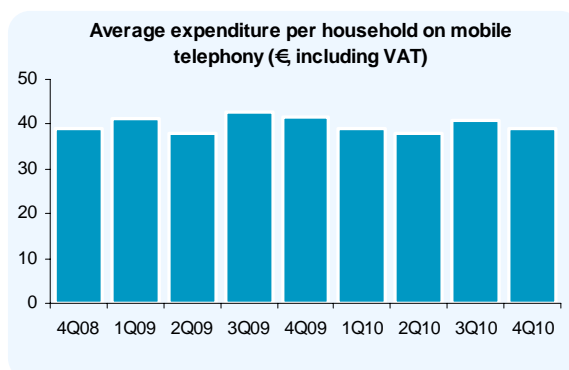
Total expenditure (€ Millions)	Contract	Pay as you go	total
4Q2008	972	440	1,412
1Q2009	1,127	443	1,570
2Q2009	1,020	417	1,437
3Q2009	1,147	491	1,638
4Q2009	1,136	459	1,595
1Q2010	1,113	423	1,536
2Q2010	1,095	413	1,507
3Q2010	1,156	442	1,598
4Q2010	<b>1,118</b>	<b>396</b>	<b>1,514</b>

The year-on-year decrease of -5.1% in mobile telephony consumption means that the expenditure on this service fell to €1,514 million over the last quarter of 2010. This drop came mainly from the pay as you go option, which fell by 13.7%, but also by the drop of 1.6% in the contract option.



Mobile expenditure (%)	Contract	Pay as you go
4Q2008	68.9	31.1
1Q2009	71.8	28.2
2Q2009	71.0	29.0
3Q2009	70.0	30.0
4Q2009	71.2	28.8
1Q2010	72.5	27.5
2Q2010	72.6	27.4
3Q2010	72.3	27.7
4Q2010	<b>73.9</b>	<b>26.1</b>

As for the distribution of expenditure by payment method, the contract modality has strengthened its position as the preferred option. The contract option accounts for three fourths of overall expenditure on mobile telephony, while pay-as-you-go cards account for one fourth.

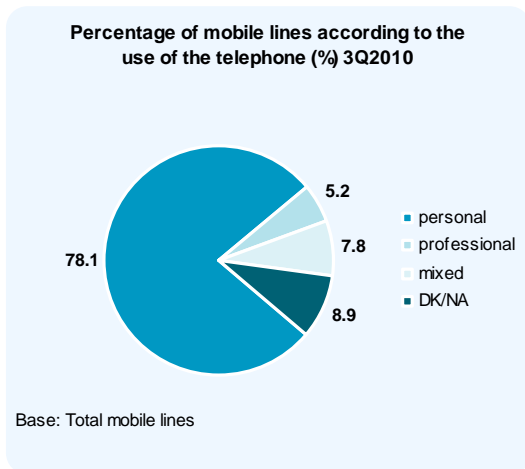


€ (including VAT)	Average expenditure per household
4Q2008	39.1
1Q2009	41.3
2Q2009	37.8
3Q2009	42.7
4Q2009	41.6
1Q2010	38.9
2Q2010	38.1
3Q2010	41.0
4Q2010	<b>38.9</b>

During the last quarter of 2010, average monthly expenditure on mobile telephony per household decreased by €2.7 compared to the previous year, standing at €38.9/household/month.

### 8.4. Main types of use of mobile telephony lines

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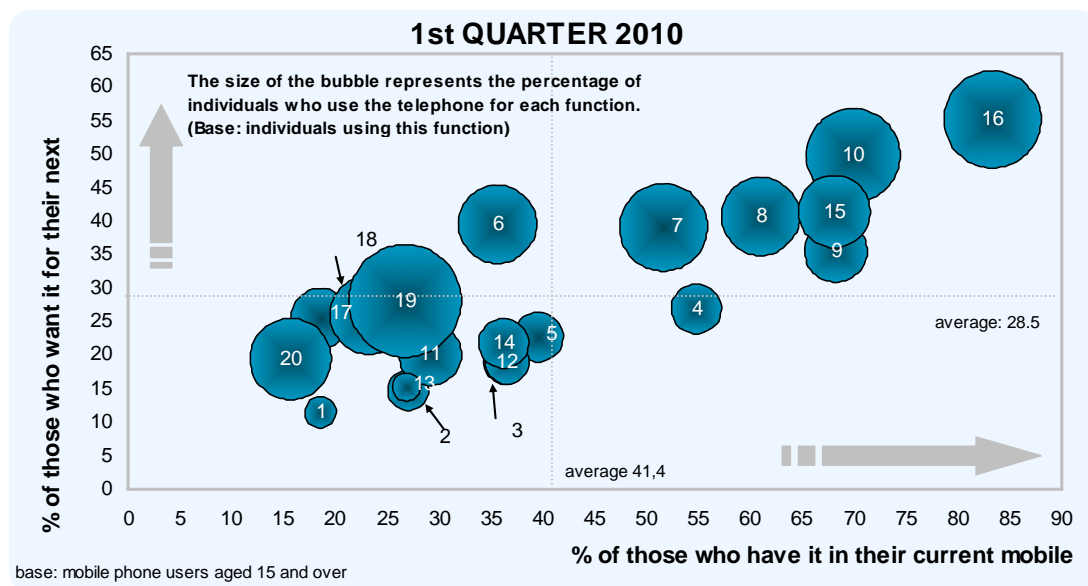


% of lines	personal	professional	mixed	DK/NA
3Q2008	79.2	6.5	7.6	6.6
1Q2009	79.5	5.2	8.8	6.5
3Q2009	79.8	4.9	9.7	5.6
1Q2010	75.4	5.2	9.7	9.7
3Q2010	<b>78.1</b>	<b>5.2</b>	<b>7.8</b>	<b>8.9</b>

78.1% of all mobile telephony lines are exclusively for private use, 5.2% for professional use, and 7.8% for mixed (private-professional) use.

### 8.5. Current features of the mobile telephone compared to features of the next mobile

29<sup>th</sup> edition  
October-December 2010



See the following table with the list of features corresponding to each bubble on the graph

#	(% indiv.) 3Q2010	Have it currently	Want it for next mobile	Use it
1	Chat	18.6	11.4	6.7
2	WAP Browsing	27.1	14.8	10.7
3	Voice dialling	36.4	19.0	12.6
4	Internet access	54.8	27.0	15.4
5	E-mail	39.5	22.7	16.1
6	Handsfree car kit	35.6	39.5	37.9
7	MP3	51.6	39.0	47.4
8	FM Radio	61.0	40.8	39.3
9	MMS	68.3	35.6	25.2
10	Bluetooth	69.9	49.7	53.5
11	Infrared	29.2	20.2	24.6
12	Video messages	36.5	18.9	12.2
13	Video calls	26.9	15.2	5.2
14	3G connection	36.3	21.7	15.4
15	Video recording	68.1	41.3	31.0
16	Camera	83.4	55.1	57.7
17	GPS	18.5	25.6	21.9
18	WiFi	23.2	26.0	37.2
19	Touch screen	26.8	28.0	79.5
20	Electronic agenda	15.7	19.4	42.3

Base: Have a mobile    Have a mobile    Have the function

In the third quarter of 2010, the most frequent features in mobile telephone sets were digital camera (available to over 83.4% of mobile telephone users) and Bluetooth communication (available to 69.9% of mobile users).

As for use, touch screens stand out, being used by 79.5% of those who have this type of interface. In second place, cameras and Bluetooth are used by 57.7% and 53.5% of those who had these features respectively. These – cameras and Bluetooth- are also

the most desired characteristics for future handsets.

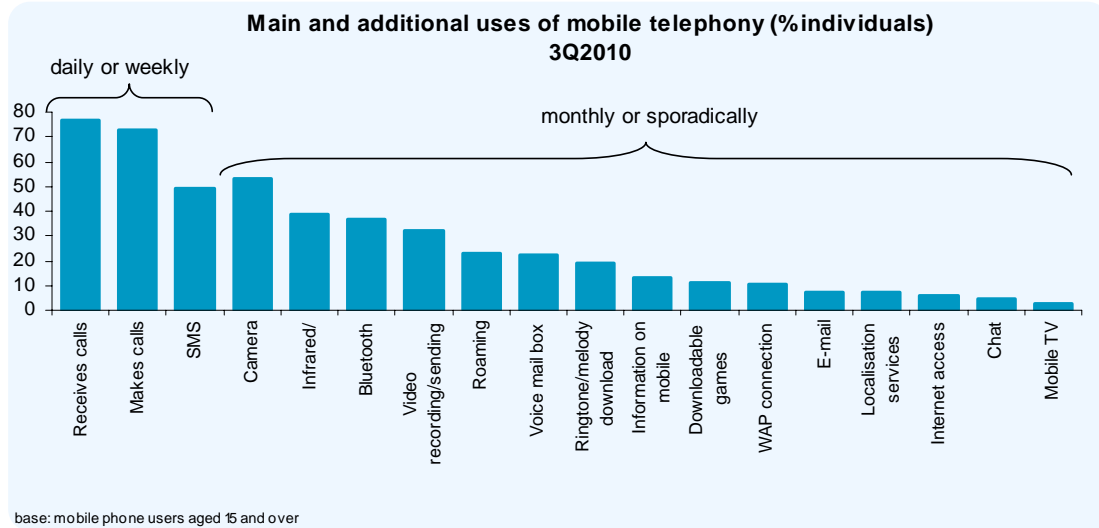
## 8.6. Main uses and features of mobile telephony

29<sup>th</sup> edition  
October-December 2010

% individuals		1Q2008	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
Receives calls	Daily or weekly	72.8	73.6	76.6	74.2	75.8	76.9
	Monthly or sporadically	14.1	14.5	12.9	14.2	12.5	12.5
Makes calls	Daily or weekly	69.4	70.1	72.1	71.5	72.5	73.1
	Monthly or sporadically	16.2	16.7	16.3	16.4	15.2	15.3
SMS	Daily or weekly	50.5	48.9	50.0	50.4	49.7	49.0
	Monthly or sporadically	32.9	35.7	35.0	34.0	35.6	35.9
Voic mail box	Daily or weekly	12.8	11.3	10.1	10.2	10.2	8.8
	Monthly or sporadically	23.6	24.4	22.8	23.4	24.8	22.1
Chat	Daily or weekly	1.2	1.1	1.1	0.9	1.1	1.4
	Monthly or sporadically	3.5	3.0	3.2	2.9	3.5	4.4
Internet access	Daily or weekly	1.3	1.6	3.2	2.0	2.8	3.4
	Monthly or sporadically	4.1	4.5	4.1	5.0	5.6	6.1
Use from abroad	Daily or weekly	0.6	0.7	0.8	0.8	0.8	0.3
	Monthly or sporadically	19.9	21.6	20.1	21.4	19.8	22.8
Information on mobile	Daily or weekly	1.7	2.6	2.2	1.6	2.1	1.7
	Monthly or sporadically	12.0	12.7	11.8	12.4	11.1	12.8
Downloadable games	Daily or weekly	0.9	1.1	0.9	0.8	1.0	0.9
	Monthly or sporadically	14.0	14.6	12.7	11.7	11.8	11.2
Multimedia messages	Daily or weekly	3.4	3.8	3.0	2.8	2.7	2.7
	Monthly or sporadically	32.9	36.4	36.2	35.3	36.6	36.6
Ringtone/melody download	Daily or weekly	1.6	1.4	1.3	1.0	0.9	0.5
	Monthly or sporadically	23.5	24.4	20.8	20.0	20.2	19.2
WAP connection	Daily or weekly	1.2	1.5	2.0	2.1	2.7	3.1
	Monthly or sporadically	8.6	8.4	7.9	7.2	10.1	10.7
E-mail	Daily or weekly	1.4	1.8	2.6	2.8	3.2	3.8
	Monthly or sporadically	5.5	5.5	5.0	6.5	6.2	7.2
Infrared/Bluetooth	Daily or weekly	10.9	10.9	12.2	12.0	11.0	10.4
	Monthly or sporadically	30.7	34.8	33.2	34.8	38.6	38.5
Video recording sending	Daily or weekly	4.3	5.2	5.3	4.0	4.6	4.2
	Monthly or sporadically	25.4	27.4	28.8	28.2	30.6	32.3
Camera	Daily or weekly	13.6	14.9	16.1	15.5	15.4	16.8
	Monthly or sporadically	44.8	47.8	50.3	50.6	53.4	53.2
Localisation services	Daily or weekly	0.7	1.2	0.9	0.9	1.3	1.0
	Monthly or sporadically	4.0	3.7	4.3	5.2	5.5	7.1
Mobile TV	Daily or weekly	-	0.7	0.7	0.4	0.6	0.3
	Monthly or sporadically	-	2.4	1.9	2.1	2.7	2.5

Base: mobile phone users aged 15 and over

In the third quarter of 2010, 73.1% of the customers used their mobile phone to make a call on a daily or weekly basis. Also half the users of mobile telephony received and/or sent SMS on a daily or weekly basis. Lastly, digital cameras were used daily or weekly by 16.8% of all users aged 15 and over.



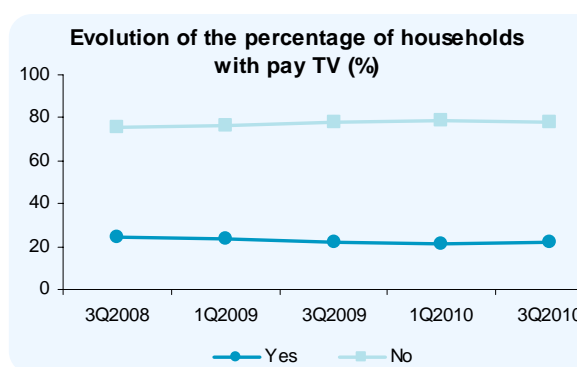
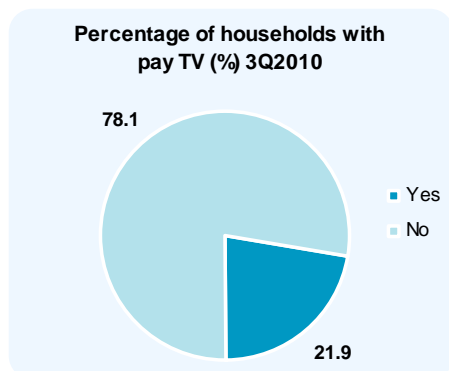
Additionally, digital cameras are monthly or sporadically used by 53.4% of mobile users aged 15 and over, with an increase of 2.6 percentage points compared to the same quarter of the previous year. And roaming services were used by 22.8% of the customers.

## 9. PAY TELEVISION

### 9.1. Households with Pay TV

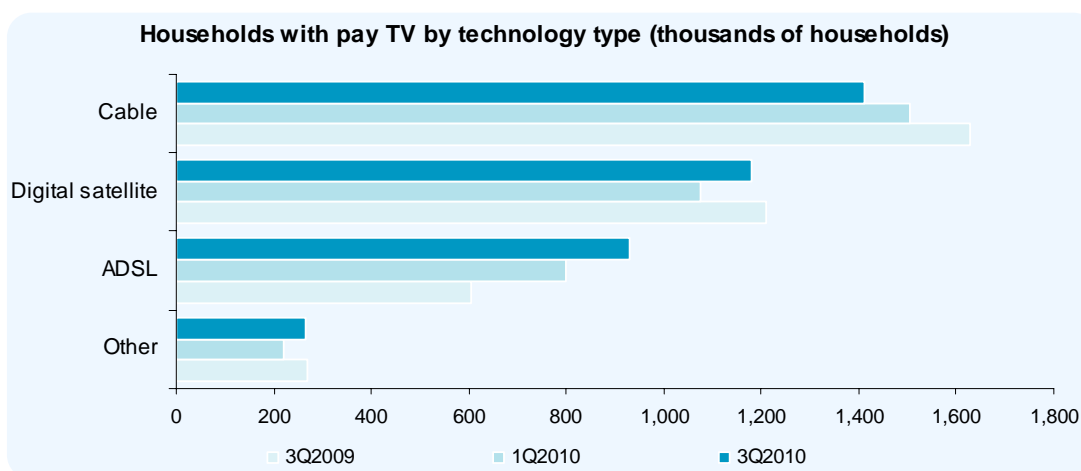
29<sup>th</sup> edition

October-December 2010



Households with Pay TV	Percentage	Absolute (thousands)
3Q2008	24.8	3,981
1Q2009	23.3	3,876
3Q2009	21.8	3,628
1Q2010	21.3	3,609
3Q2010	<b>21.9</b>	<b>3,708</b>

In the third quarter of 2010, the percentage of households with pay TV was 21.9%, which means 3.7 million households and a penetration rate 0.1 points higher than in the previous year.

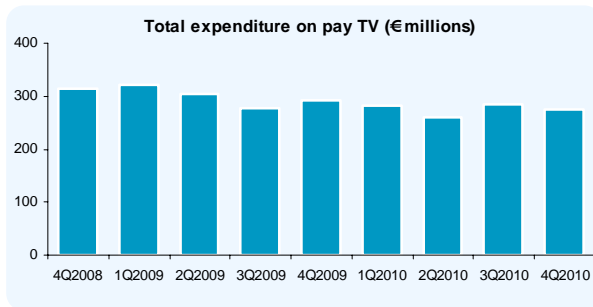


Thousands of households miles	Cable	Digital satellite	ADSL	Other
1Q2008	1,501	1,122	.	868
3Q2008	1,721	1,186	.	981
1Q2009	1,580	1,285	783	222
3Q2009	1,627	1,210	605	270
1Q2010	1,505	1,074	799	221
3Q2010	<b>1,411</b>	<b>1,179</b>	<b>930</b>	<b>226</b>

ADSL pay television records a year-on-year increase of 325,000 households, totalling almost 1 million households (930,000). Cable pay television is present in 1.4 million households, and digital satellite pay television in 1,179,000 households.

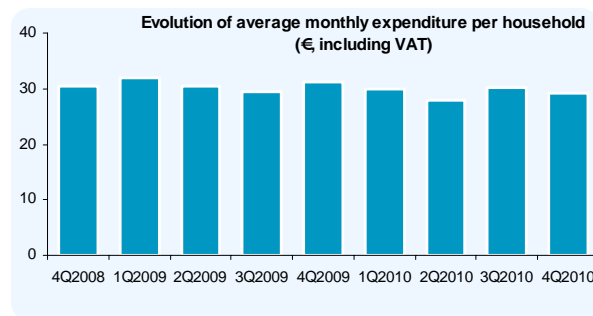


## 9.2. Total and average expenditure per household on pay TV



Total expenditure (€ Millions)	fee	price	discounts	Total
4Q2008	322	13	21	314
1Q2009	332	12	23	321
2Q2009	310	14	19	305
3Q2009	287	5	15	277
4Q2009	306	4	17	293
1Q2010	296	6	21	281
2Q2010	271	5	15	261
3Q2010	289	6	11	284
4Q2010	288	6	18	276

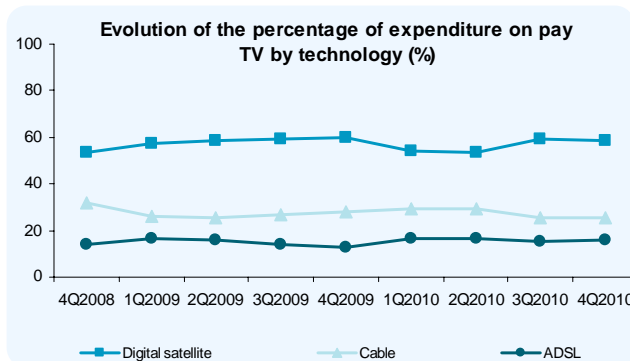
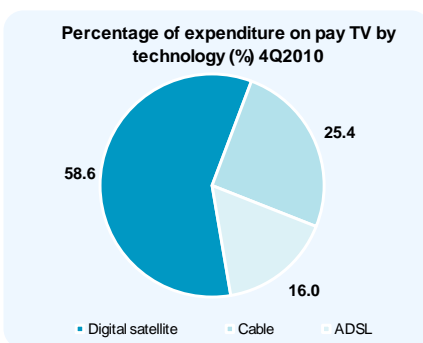
Following the downward trend observed in previous measurements, pay TV recorded a decrease in terms of household expenditure of 6% in the last year, down to €276 million in the last quarter of 2010. Expenditure on pay per view remained flat at €6 million, while fees fell down to €288 million.



expenditure per household	€ (including VAT)
4Q2008	30.5
1Q2009	32.0
2Q2009	30.4
3Q2009	29.5
4Q2009	31.2
1Q2010	30.0
2Q2010	28.0
3Q2010	30.1
4Q2010	29.2

Average household expenditure on pay TV was €29.2 per month (including VAT), recording a decrease of two euros over the last year and reaching the values of the third quarter of 2009.

## 9.3. Expenditure by type of technology



Of the total expenditure on pay TV by Spanish households, almost 60% corresponds to digital satellite technology, a fourth of it to cable technology and 16% to ADSL technology.

Expenditure (%)	Digital satellite	Cable	ADSL	Expenditure (€ mill.)	Digital satellite	Cable	ADSL	Total
4Q2008	53.5	32.1	14.3	4Q2008	168	101	45	314
1Q2009	57.4	26.2	16.3	1Q2009	184	84	52	321
2Q2009	58.9	25.3	15.8	2Q2009	180	77	48	305
3Q2009	59.2	26.9	13.9	3Q2009	164	74	39	277
4Q2009	59.6	27.9	12.5	4Q2009	175	82	37	293
1Q2010	54.3	29.0	16.7	1Q2010	153	81	47	281
2Q2010	53.7	29.5	16.7	2Q2010	141	76	44	261
3Q2010	59.5	25.4	15.0	3Q2010	169	72	43	284
4Q2010	<b>58.6</b>	<b>25.4</b>	<b>16.0</b>	4Q2010	<b>162</b>	<b>70</b>	<b>44</b>	<b>276</b>

In absolute terms, digital satellite technology totals €162 million, cable technology €70 million and ADSL technology €44 million. ADSL technology is the only one that has recorded an increase in the last twelve months.

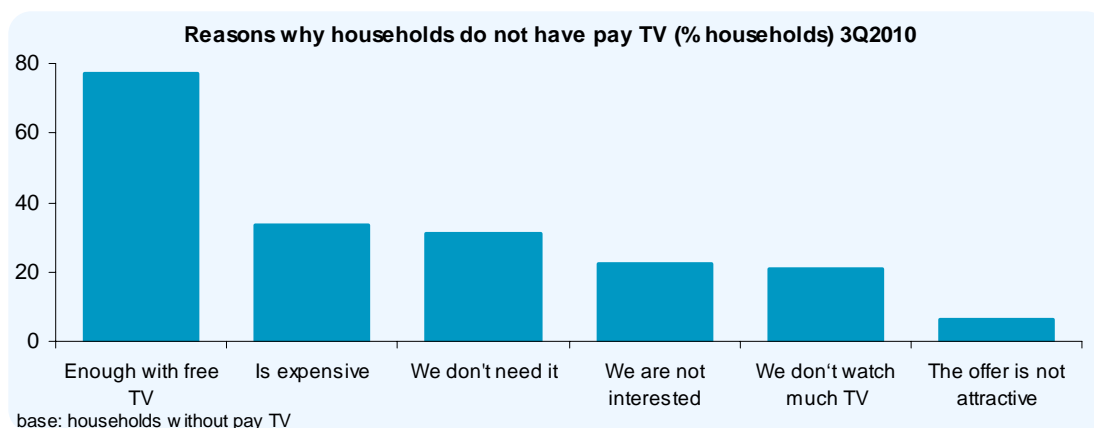
#### 9.4. Reasons why households do not have pay TV

29<sup>th</sup> edition  
October-December 2010

% households	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
Enough with free TV	62.1	75.3	73.5	72.6	<b>77.1</b>
Is expensive	24.6	32.1	31.1	31.6	<b>33.3</b>
We don't need it	22.7	28.8	28.6	30.7	<b>30.9</b>
We are not interested	16.2	22.0	20.9	22.0	<b>22.3</b>
We don't watch much TV	19.1	21.5	25.1	18.8	<b>20.8</b>
The offer is not attractive	5.1	6.7	7.8	5.1	<b>6.1</b>

Base: households without pay TV

In the third quarter of 2010, 77.1% of Spanish households that did not have pay TV said that they had enough with the free television they currently received (compared to 73.5% the previous year). The number of households that did not have it because it is too expensive also increased to a lesser extent (33.3% vs. 31.1%), as well as those that consider that they do not need it (30.9% vs. 28.6%) and those that are not interested in it (22.3% vs. 20.9%).

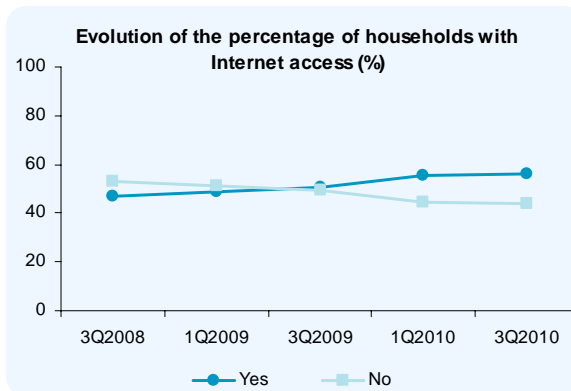
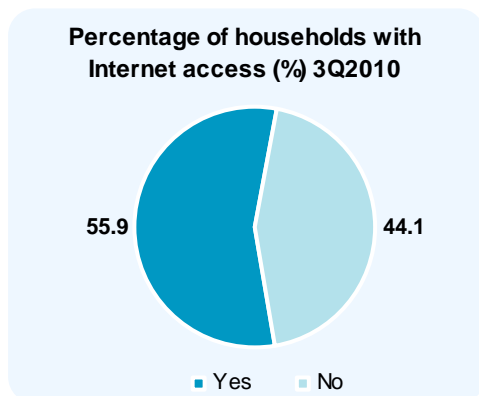


On the contrary, the percentage of those who state as a reason not watching TV that much falls (20.8% versus 25.1% the previous year), as well as the percentage of those who state that the offer is not attractive (6.1% vs. 7.8%).

## 10. INTERNET

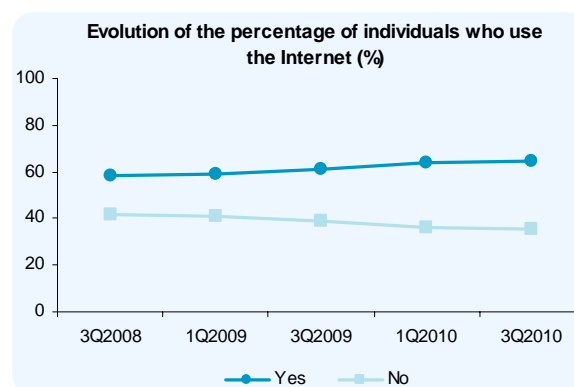
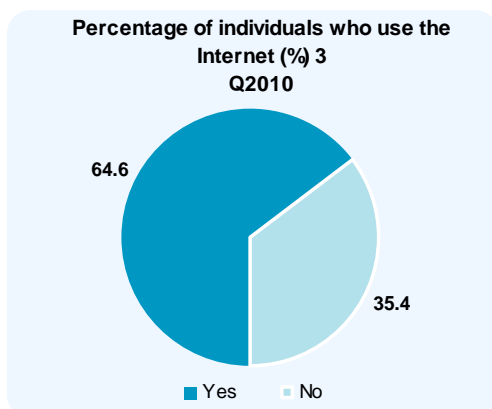
### 10.1. Households with Internet and individuals who have used the Internet

29<sup>th</sup> edition  
October-December 2010



55.9% of Spanish households have an Internet connection, which represents a figure of nearly 9.5 million households. Approximate growth over the last year exceeds 1 million new households.

Households with Internet	Percentage	Absolute (thousands of households)
3Q2008	46.8	7,518
1Q2009	48.5	8,071
3Q2009	50.7	8,434
1Q2010	55.5	9,393
3Q2010	<b>55.9</b>	<b>9,464</b>



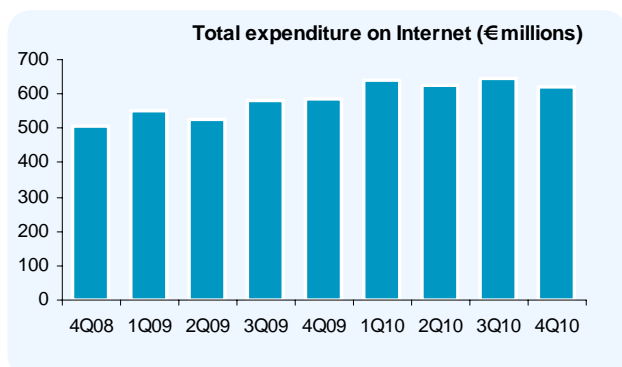
64.6% of the population aged 15 and over have used the Internet at some time, which means over 25 million people. Growth over the last twelve months exceeds 1.8 million people.

Taking into consideration the population aged 10 and over, this figure reaches 27.1 million, 65.8% of the total population.

Households with Internet	Percentage	Absolute (thousands of households)
3Q2008	58.3	22,034
1Q2009	59.1	22,538
3Q2009	61.2	23,329
1Q2010	64.0	24,965
3Q2010	<b>64.6</b>	<b>25,215</b>

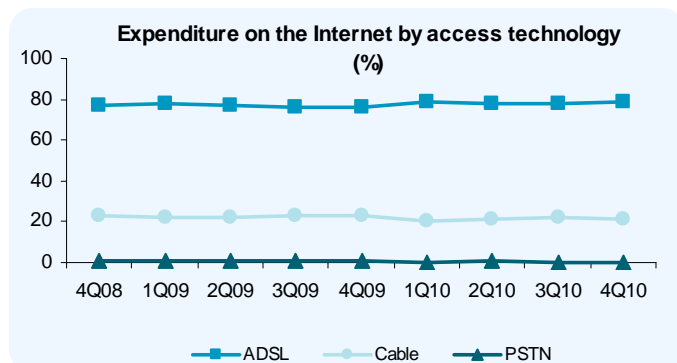
## 10.2. Total and average expenditure per household on the Internet

With a year-on-year increase of 5.5%, the expenditure on Internet services by Spanish households reaches €619 million, in the last quarter of 2010.



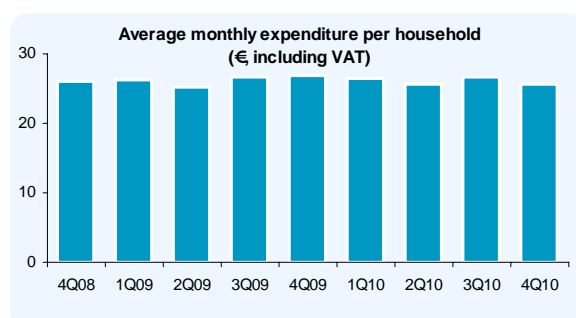
In 2010, total Internet expenditure has risen on average by €70 million, with respect to the previous year. After the important year-on-year increases (of around 20%) in the first and the second quarter of the year in ADSL technology, we observe a more moderate increase of 8% in the last quarter. So that, ADSL technology accounts for €485 million and cable for €162 million (discounts not considered).

Absolute (€ million)	ADSL	Cable	PSTN	Cable discount	Total - cable discount
4Q2008	387	132	4	18	505
1Q2009	426	140	4	20	550
2Q2009	402	132	6	15	525
3Q2009	443	153	3	20	579
4Q2009	448	152	3	16	587
1Q2010	507	150	2	17	642
2Q2010	489	153	3	20	625
3Q2010	498	159	2	16	643
4Q2010	485	162	2	30	619



Internet expenditure (%)	ADSL	Cable	PSTN
4Q2008	76.6	22.6	0.8
1Q2009	77.5	21.8	0.7
2Q2009	76.6	22.3	1.1
3Q2009	76.5	23.0	0.5
4Q2009	76.3	23.2	0.5
1Q2010	79.0	20.7	0.3
2Q2010	78.2	21.3	0.5
3Q2010	77.5	22.2	0.3
4Q2010	78.4	21.3	0.3

The distribution of expenditure by access technology has been very uniform over the last two years. In the last quarter of 2010, 78.4% of the total expenditure corresponded to ADSL technology, the expenditure on cable technology accounted for 21.3% of the total, and expenditure on basic telephone network technology (PSTN) amounted to less than 0.5% of the total.

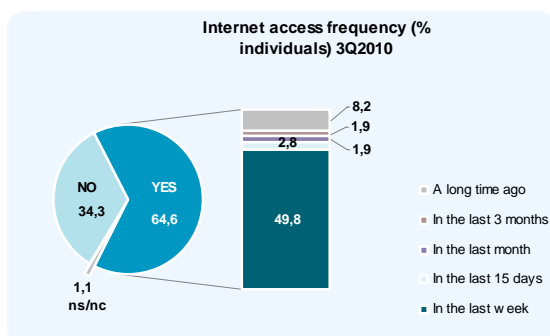


Average monthly expenditure per household	€ (including VAT)
4Q2008	26.0
1Q2009	26.3
2Q2009	25.2
3Q2009	26.6
4Q2009	26.9
1Q2010	26.4
2Q2010	25.7
3Q2010	26.7
4Q2010	25.7

Average household expenditure on the Internet access service in the last quarter of the year was €25.7 per month (including VAT).

### 10.3. Internet use

29<sup>th</sup> edition  
October-December 2010



77.1% of those who have ever accessed the Internet (64.6% of the population aged 15 and over) have done so at least once in the last week, which represents 49.8% of all individuals aged 15 and over. This means a population of 19.4 million persons, most of which use it at on a daily basis.

Thousands of individuals	Has used the Internet at some time					
	Never	In the last week	In the last 15 days	In the last month	In the last 3 months	A long time ago
3Q2008	15,300	15,429	1,114	1,222	1,300	2,968
1Q2009	15,100	17,847	1,007	667	662	2,355
3Q2009	14,315	17,800	832	810	986	2,901
1Q2010	13,539	20,415	798	538	579	2,636
3Q2010	<b>13,374</b>	<b>19,434</b>	<b>1,104</b>	<b>722</b>	<b>749</b>	<b>3,205</b>

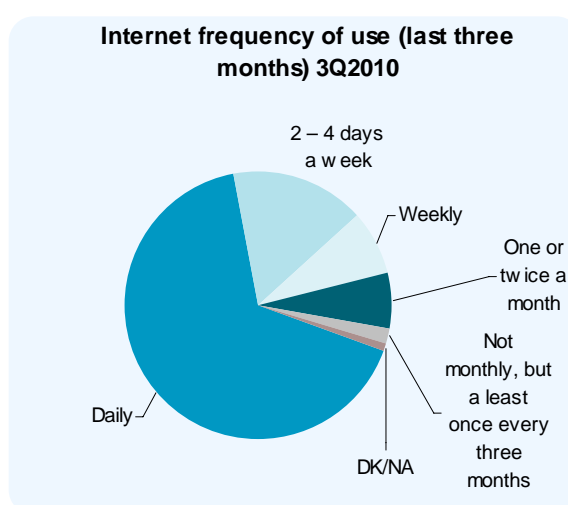
% of individuals	Has used the Internet at some time (accumulated)					
	Never	In the last week	In the last 15 days	In the last month	In the last 3 months	A long time ago
3Q2008	40.5	40.8	43.8	47.0	50.4	58.3
1Q2009	39.6	46.8	49.3	51.1	52.8	59.1
3Q2009	37.5	46.7	48.9	51.0	53.6	61.2
1Q2010	34.7	52.3	54.3	55.7	57.2	64.0
3Q2010	<b>34.3</b>	<b>49.8</b>	<b>52.6</b>	<b>54.5</b>	<b>56.4</b>	<b>64.6</b>

### 10.4. Internet frequency of use (last three months)

29<sup>th</sup> edition  
October-December 2010

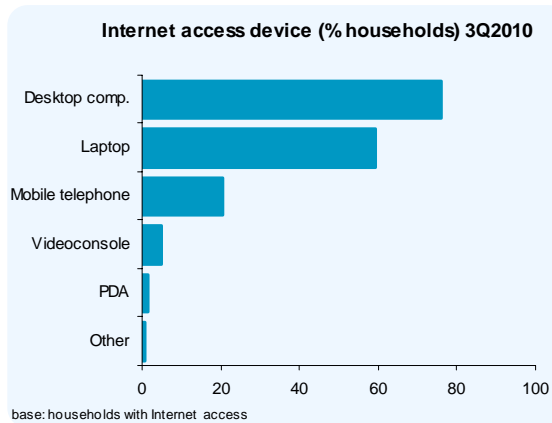
Internet frequency of use (last three months)	%
Daily	66.7
2 – 4 days a week	16.1
Weekly	7.7
One or twice a month	6.7
Not monthly, but a least once every three months	2.0
DK/NA	0.8

In the third quarter of 2010, two out of three individuals who had used the Internet in the last 3 months did it on a daily basis.



## 10.5. Device and place of Internet access

29<sup>th</sup> edition  
October-December 2010



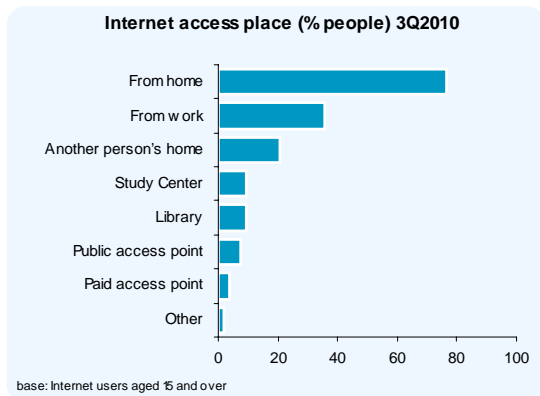
The distance between desktop and laptop computers as equipment for accessing the Internet in households has been reduced. Desktop computers are used in 75.9% of households to access the Internet, while laptops have been steadily growing, with very significant year on year increases, reaching 59.2% of households.

Thousands of households	Desktop comp.	Laptop	Mobile telephone	Videoconsole	PDA	Other
3Q2008	6,274	2,594	173	164	96	41
1Q2009	6,688	3,401	255	302	115	30
3Q2009	6,725	3,901	346	302	174	46
1Q2010	7,264	4,986	723	503	84	59
3Q2010	<b>7,183</b>	<b>5,600</b>	<b>1,937</b>	<b>469</b>	<b>145</b>	<b>88</b>

% of households	Desktop comp.	Laptop	Mobile telephone	Videoconsole	PDA	Other
3Q2008	83.5	34.5	2.3	2.2	1.3	0.5
1Q2009	82.9	42.1	3.2	3.7	1.4	0.4
3Q2009	79.7	46.3	4.1	3.6	2.1	0.6
1Q2010	77.3	53.1	7.7	5.4	0.9	0.6
3Q2010	<b>75.9</b>	<b>59.2</b>	<b>20.5</b>	<b>5.0</b>	<b>1.5</b>	<b>0.9</b>

Base: households with Internet access



The home is the main place for accessing the Internet (76.5% of the users), amounting to 19.3 million. The workplace continues to be the second location to access the Internet (by 35.6% of users, nearly 9 millions). Another person's home remains the third preferred location to access the Internet (20.7%).

Thousands of individuals	From home	From work	Another person's home	Study Center	Library	Paid access point	Public access point	Other
3Q2008	16,422	8,353	4,475	2,347	1,977	1,102	1,343	342
1Q2009	17,542	9,005	4,541	2,039	1,884	1,140	1,561	326
3Q2009	18,416	9,058	4,922	1,968	2,108	894	1,295	382
1Q2010	18,982	7,705	4,894	2,350	2,301	835	1,888	570
3Q2010	<b>19,291</b>	<b>8,985</b>	<b>5,218</b>	<b>2,342</b>	<b>2,354</b>	<b>935</b>	<b>1,869</b>	<b>471</b>

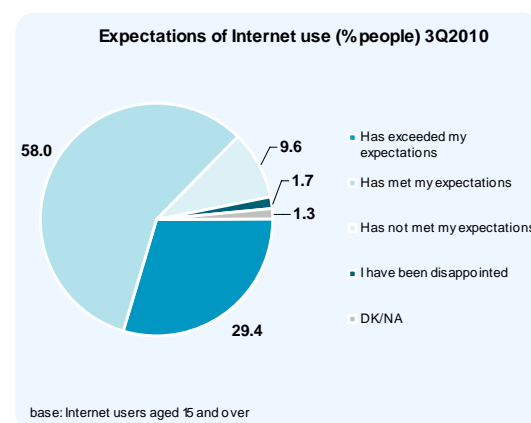
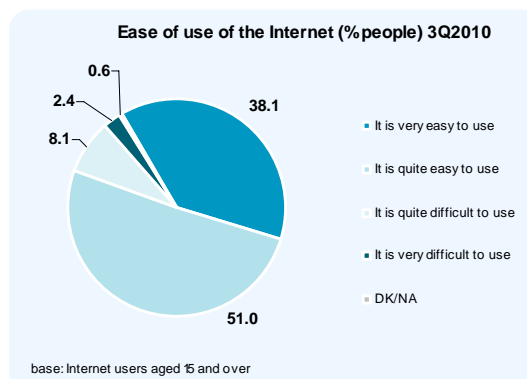
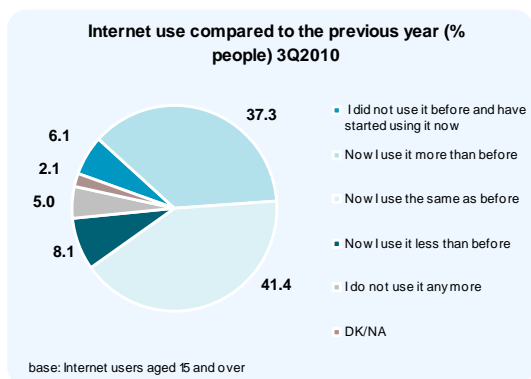
  

% of individuals	From home	From work	Another person's home	Study Center	Library	Paid access point	Public access point	Other
3Q2008	74.5	37.9	20.3	10.7	9.0	5.0	6.1	1.6
1Q2009	77.8	40.0	20.1	9.0	8.4	5.1	6.9	1.4
3Q2009	78.9	38.8	21.1	8.4	9.0	3.8	5.6	1.6
1Q2010	76.0	30.9	19.6	9.4	9.2	3.3	7.6	2.3
3Q2010	<b>76.5</b>	<b>35.6</b>	<b>20.7</b>	<b>9.3</b>	<b>9.3</b>	<b>3.7</b>	<b>7.4</b>	<b>1.9</b>

Base: Internet users aged 15 and over

## 10.6. Internet use, simplicity and expectations

29<sup>th</sup> edition  
October-December 2010



89.1% of Internet users consider the Internet to be easy or very easy to use: 51% believes it is easy and 38.1% that it is very easy.

Additionally, 87.4% of those who have accessed the Internet at some time state that the Internet had met (58%) or exceeded (29.4%) their use and content expectations.

% of individuals	Internet use compared to the previous year...					
	I did not use it before and have started using it now	Now I use it more than before	Now I use the same as before	Now I use it less than before	I do not use it any more	DK/NA
3Q2008	8.6	38.8	39.2	6.4	5.3	1.7
1Q2009	7.7	39.5	40.6	5.3	5.5	1.4
3Q2009	8.3	34.4	42.8	7.0	5.8	1.7
1Q2010	9.2	38.2	40.5	6.1	4.1	2.0
3Q2010	<b>6.1</b>	<b>37.3</b>	<b>41.4</b>	<b>8.1</b>	<b>5.0</b>	<b>2.1</b>

% of individuals	Based on your experience, you would say that the Internet...				
	It is very easy to use	It is quite easy to use	It is quite difficult to use	It is very difficult to use	DK/NA
3Q2008	36.2	53.2	7.7	1.6	1.3
1Q2009	41.4	48.5	7.0	1.8	1.3
3Q2009	38.2	49.1	8.7	2.6	1.4
1Q2010	40.2	50.5	6.6	2.2	0.5
3Q2010	<b>38.1</b>	<b>51.0</b>	<b>8.1</b>	<b>2.4</b>	<b>0.6</b>

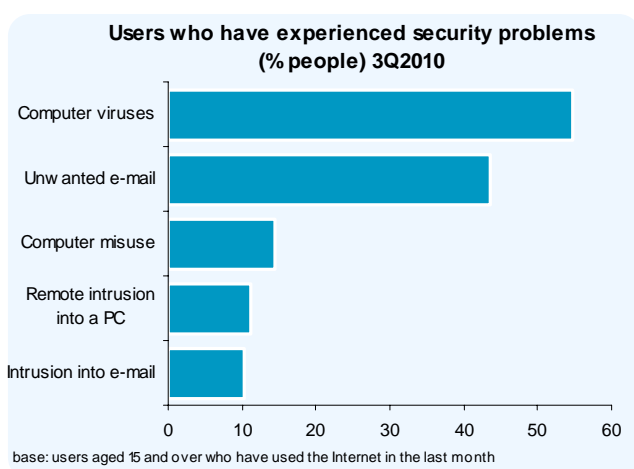
% of individuals	On your expectations, you would say that the Internet...				
	Has exceeded my expectations	Has met my expectations	Has not met my expectations	I have been disappointed	DK/NA
3Q2008	27.3	59.4	9.6	2.0	1.6
1Q2009	30.0	57.0	9.9	1.5	1.5
3Q2009	29.3	58.2	8.3	2.3	1.9
1Q2010	30.6	59.5	7.8	1.3	0.8
3Q2010	<b>29.4</b>	<b>58.0</b>	<b>9.6</b>	<b>1.7</b>	<b>1.3</b>

Base: Internet users aged 15 and over

## 10.7. Technological security problems

29<sup>th</sup> edition

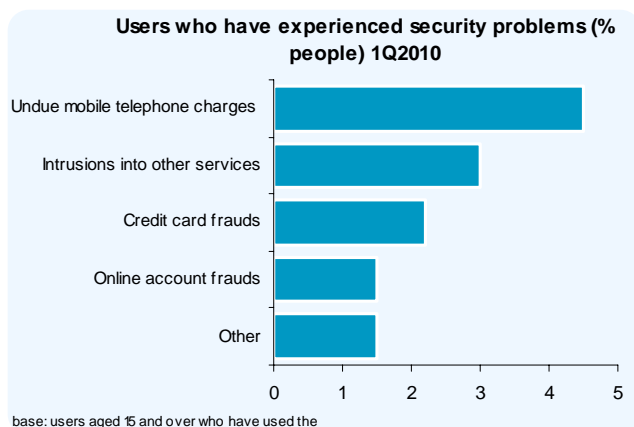
October-December 2010



This quarter records an increase in the percentage of users affected by IT security problems, except in the case of computer viruses (experienced by 54.7% of users). These have fallen compared to the same period of the previous year (56.1%) but increased compared to the first quarter of 2010 (51.2%).

% individuals (last month)	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
Computer virus	58.2	59.6	56.1	51.2	54.7
Unwanted e-mail	49.5	46.2	43.2	41.3	43.5
Computer misuse	11.7	10.3	9.8	10.5	14.5
Remote intrusion into a PC	14.5	11.4	10.3	7.9	11.2
Intrusion into e-mail	9.3	9.8	6.7	7.6	10.3

Base: users aged 15 and over who have used the Internet in the last month



The greatest growth has been observed in computer misuse (14.5% of the users) with an increase of almost 5 points compared to the previous year.

Beyond viruses, the second IT security problem that affects the Internet population the most is unwanted e-mail (the so called spam), which affected 43.5% of users in the first quarter of 2010, recording a slight year-on-year increase.

% individuals (last month)	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
Undue mobile telephone charges	1.8	2.3	2.5	2.7	4.5
Intrusions into other services	2.0	1.5	1.6	1.5	3.0
Credit card frauds	1.3	1.2	1.3	1.0	2.2
Online account frauds	0.5	0.2	0.5	0.4	1.5
Other	0.7	1.1	0.2	0.6	1.5

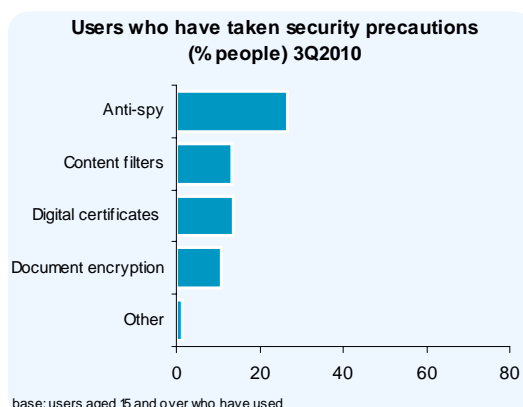
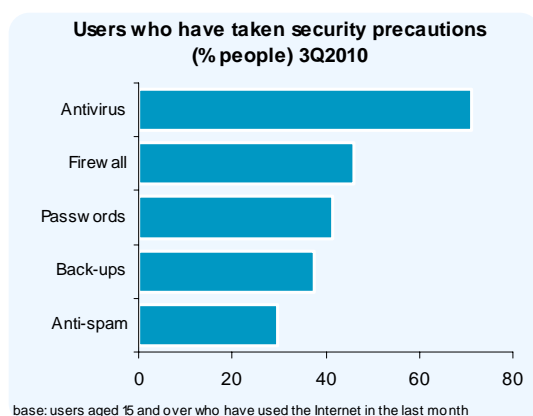
Base: users aged 15 and over who have used the Internet in the last month



## 10.8. Internet security precautions

 29<sup>th</sup> edition

October-December 2010



There is also a generalised increase in all security precautions taken by users, except in anti-spy programs that have fallen slightly to 26.5% in the third quarter of 2010 from 27.5% in the same period the previous year. However, they have increased compared to the first quarter of 2010 (24.5%).

Passwords and back-ups were used by 41.6% of users, recording the greatest year-on-year increase in the third quarter of 2010 (of 3.9 points), followed by document encryption and digital certificates, that were used respectively by 10.8% and 12.6% of Internet users, recording increases of 2 and 2.5 points.

% individuals (last month)	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
Antivirus (updated in the last month)	72.3	74.3	70.7	71.3	<b>71.2</b>
Firewall	50.1	52.4	45.7	43.9	<b>46.1</b>
Passwords	41.0	43.1	37.7	39.6	<b>41.6</b>
Back-ups	39.4	39.1	35.9	36.6	<b>37.6</b>
Anti-spam	30.4	31.0	29.2	29.0	<b>29.8</b>

Base: users aged 15 and over who have used the Internet in the last month

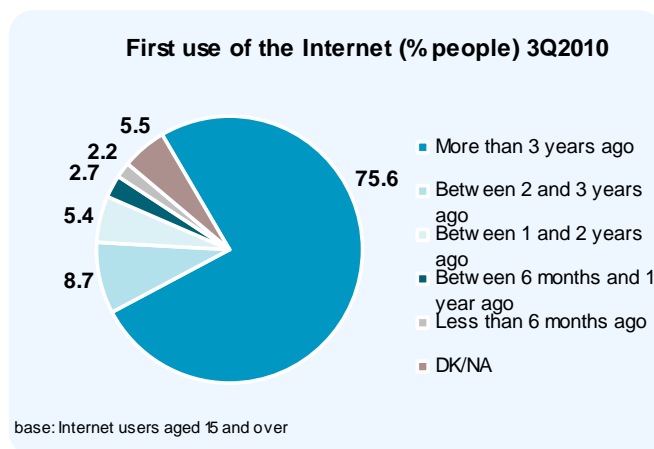
% individuals (last month)	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
Anti-spy	30.3	30.2	27.5	24.5	<b>26.5</b>
Content filters	14.4	12.5	12.0	13.6	<b>13.5</b>
Digital certificates	10.1	8.9	11.4	12.2	<b>13.6</b>
Document encryption	8.8	8.4	8.3	10.7	<b>10.8</b>
Other	0.8	1.4	1.1	2.3	<b>1.6</b>

Base: users aged 15 and over who have used the Internet in the last month

In the third quarter of 2010, 71.2% of Internet users had antivirus programs installed and updated in the device they used to access the Internet. These were followed by firewalls and keys or passwords, used by around 40-45% of Internet users. Less common security precautions, with values of around 25%-30% of Internet users, were anti-spam and anti-spy programs.

## 10.9. First use of the Internet and availability of e-mail

29<sup>th</sup> edition  
October-December 2010

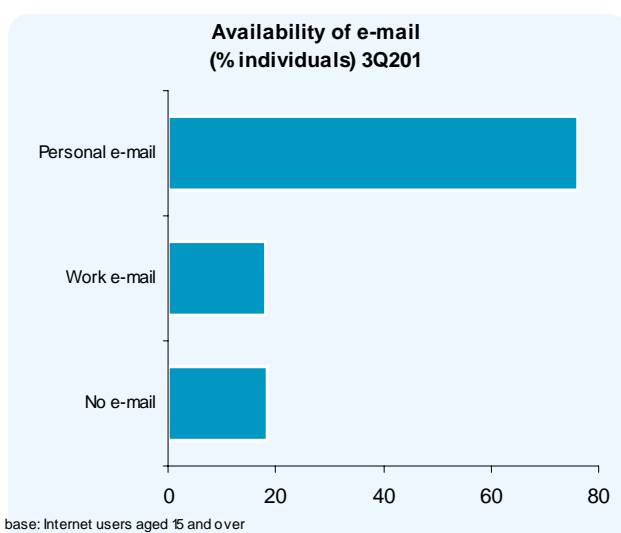


Regarding experience, there are more than 19 million Internet users who started using it more than three years ago, which evidences the loyalty on the Internet. With a year-on-year increase in the third quarter of 2010 of 13.5%, the percentage of users who had been using the Internet for more than three years is 75.6%.

% individuals (Internet users)	More than 3 years ago	Between 2 and 3 years ago	Between 1 and 2 years ago	Between 6 months and 1 year ago	Less than 6 months ago	DK/NA
3Q2008	68.1	10.2	7.2	4.2	5.2	5.1
1Q2009	70.9	10.5	6.7	3.2	4.0	4.7
3Q2009	72.0	8.3	7.3	3.8	3.8	4.8
1Q2010	73.4	9.0	5.2	3.4	3.8	5.2
3Q2010	<b>75.6</b>	<b>8.7</b>	<b>5.4</b>	<b>2.7</b>	<b>2.2</b>	<b>5.5</b>

Base: users aged 15 and over who have used the Internet at some time.

Thousands of individuals	More than 3 years ago	Between 2 and 3 years ago	Between 1 and 2 years ago	Between 6 months and 1 year ago	Less than 6 months ago
3Q2008	15,000	2,249	1,587	933	1,155
1Q2009	15,983	2,368	1,521	728	901
3Q2009	16,793	1,927	1,697	889	892
1Q2010	18,324	2,239	1,289	847	943
3Q2010	<b>19,067</b>	<b>2,184</b>	<b>1,353</b>	<b>690</b>	<b>543</b>



In the third quarter of 2010, following a year-on-year increase of 14%, 19.1 million people had a personal e-mail address, which represents 76% of Internet users. Regarding company e-mail addresses, a little over 18% of individuals who have ever used the Internet have one.

18.4% of individuals who have ever used the Internet do not have an email address.

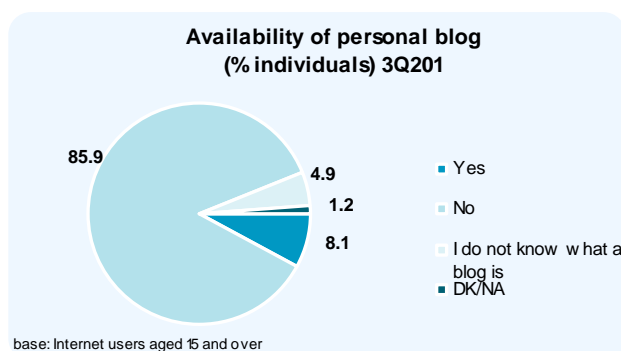
% individuals (Internet users)	No e-mail	Work e-mail	Personal e-mail
3Q2008	22.6	16.9	69.9
1Q2009	21.3	19.4	71.6
3Q2009	20.3	18.1	72.0
1Q2010	19.3	18.2	75.0
3Q2010	<b>18.4</b>	<b>18.1</b>	<b>76.0</b>

Base: users aged 15 and over who have used the Internet at some time.

Thousands of individuals	No e-mail	Work e-mail	Personal e-mail
3Q2008	4,981	3,713	15,393
1Q2009	4,858	4,367	16,141
3Q2009	4,729	4,220	16,787
1Q2010	4,830	4,555	18,712
3Q2010	<b>4,651</b>	<b>4,570</b>	<b>19,168</b>

### 10.10. Availability, reading and writing of blogs

29<sup>th</sup> edition  
October-December 2010

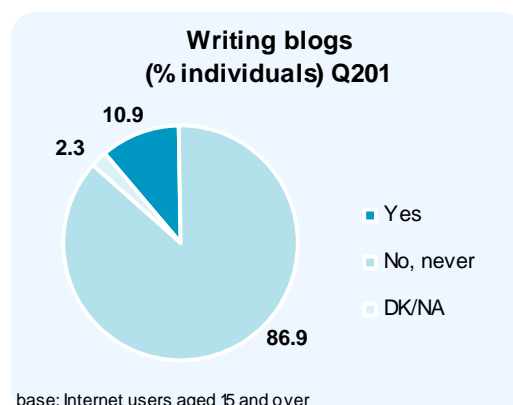
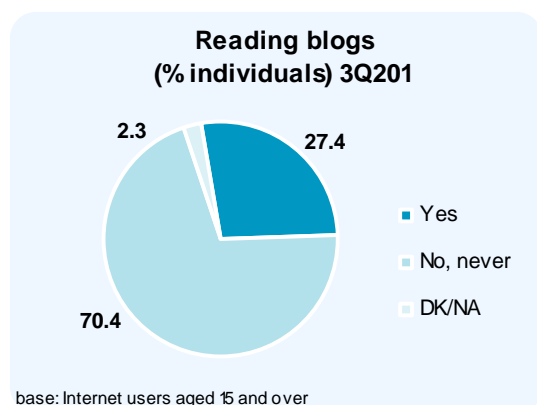


In the third quarter of 2010, 8.1% of Internet users had a personal blog.

4.9% of them do not know what a blog is. However, the unfamiliarity with blogs records a downward trend.

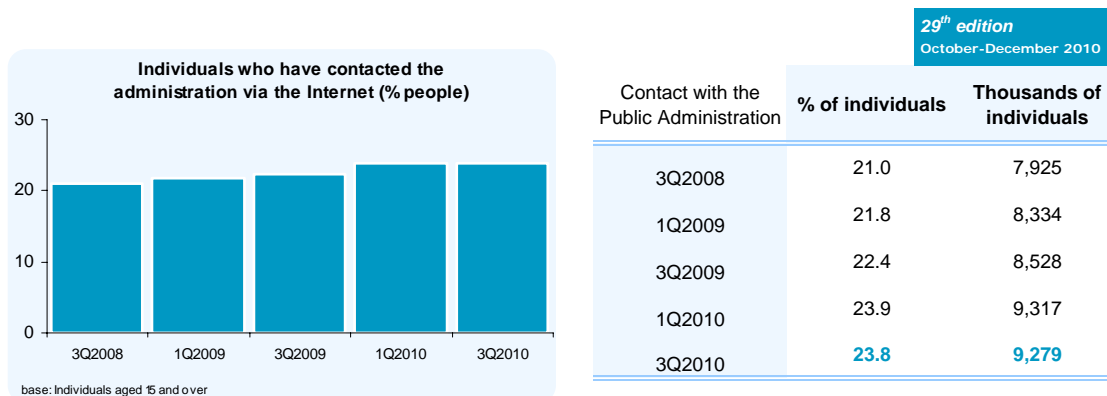
% individuals (Internet users)	I do not know what a blog is			
	Yes	No	I do not know what a blog is	DK/NA
3Q2008	6.8	83.7	7.4	2.1
1Q2009	8.2	81.8	6.7	3.2
3Q2009	9.0	81.9	6.6	2.5
1Q2010	8.2	85.2	5.3	1.2
3Q2010	<b>8.1</b>	<b>85.9</b>	<b>4.9</b>	<b>1.2</b>

Base: users aged 15 and over who have used the Internet at some time.



27.4% of individuals who have ever used the Internet and 74.5% of those who had a personal blog have read a blog. In terms of writing one's own blog (and/or participation in another's blog), this was an activity performed by 10.9% of the user population.

## 10.11. Contact with the Public Administration via the Internet



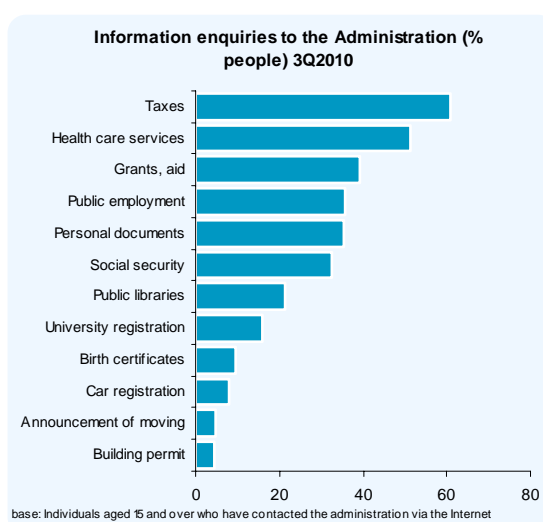
A total of 23.8% of the population aged 15 and over have contacted the public administration (central, regional and/or local) via the Internet at least in one occasion. This means almost 9.3 million people who have contacted the public administration to make a consultation, download a form and/or carry out official procedures.

## 10.12. Information enquiries to the Administration

**29<sup>th</sup> edition**  
October-December 2010

% of individuals	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
Taxes	62.1	60.9	58.9	60.6	60.9
Health care services	32.9	34.2	37.1	45.2	51.4
Grants, aid	39.6	36.8	40.6	42.1	39.3
Social security	32.5	36.0	38.0	39.0	32.6
Public employment	31.0	37.9	35.3	36.0	35.6
Personal documents	28.3	22.8	29.4	34.0	35.5
Public libraries	22.5	21.6	22.9	23.3	21.2
University registration	15.3	14.0	16.7	18.8	16.0
Birth certificates	11.3	9.5	9.6	11.1	9.6
Car registration	6.9	6.5	6.3	9.4	8.0
Announcement of moving	5.6	5.1	8.7	6.6	4.9
Building permit	6.9	6.1	4.9	3.9	4.6

Base: Internet users aged 15 and over who have contacted the e-Administration at least once



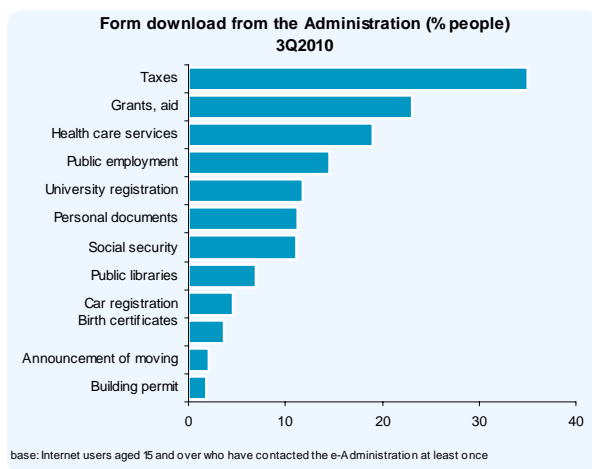
The consultations via the Internet with the greatest year-on-year increases in percentage of users were about healthcare services and personal documents, with increases of 14 and 6 points respectively. They are followed by consultations about taxes and car registration, both with increases of around two points, and those about public employment with a slight increase. Consultations about social security and changes of address decrease by around 5 and 4 points respectively.

### 10.13. Official administration form downloads

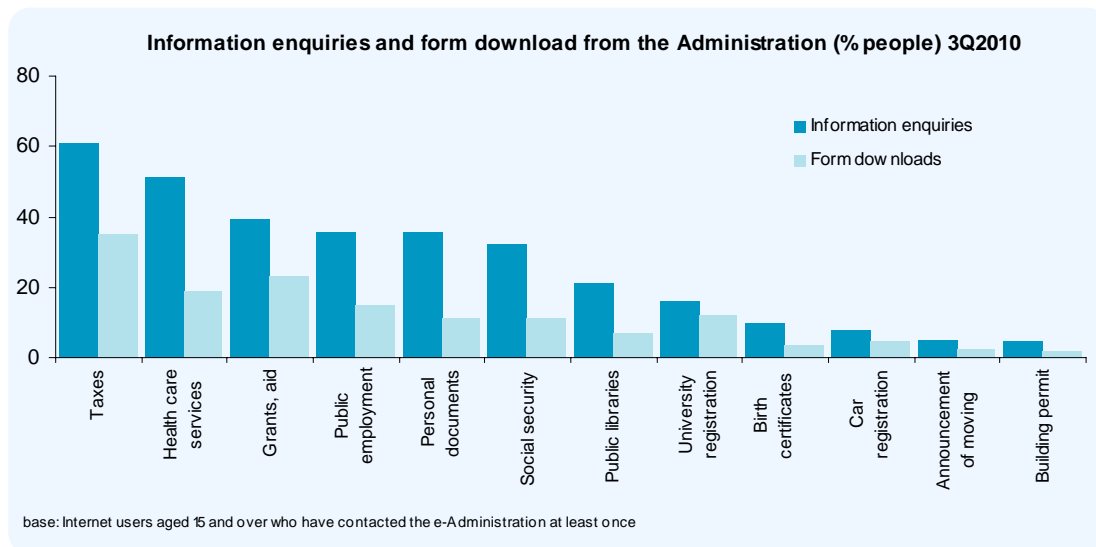
29<sup>th</sup> edition  
October-December 2010

% of individuals	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
Taxes	30.7	32.1	33.1	35.6	35.0
Grants, aid	17.2	17.8	19.9	22.8	23.1
Health care services	9.6	13.5	13.3	19.9	19.0
Public employment	9.9	13.3	16.4	15.8	14.6
Social security	10.7	13.6	15.5	13.9	11.2
University registration	9.8	9.6	9.8	12.9	11.8
Personal documents	4.8	7.0	7.7	12.3	11.3
Public libraries	5.6	6.8	5.1	6.8	7.0
Birth certificates	4.0	3.9	5.3	6.0	3.7
Car registration	2.1	2.7	2.4	4.1	4.6
Announcement of moving	2.0	2.3	5.2	3.7	2.1
Building permit	1.5	1.6	1.4	1.5	1.9

Base: Internet users aged 15 and over who have contacted the e-Administration at least once



The aforementioned increases of consultations via the Internet are reflected in a greater downloading of official forms. There is a greater downloading of official forms compared to the same period of the previous year for grants, financial aid, university registration, public libraries, and, to a lesser extent, building permits.



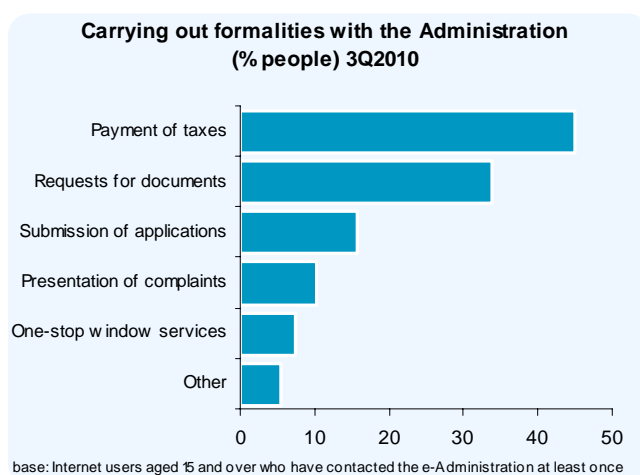
The proportion between information consultations and form downloading is influenced by the nature of the public service in question. For instance, in health services the relation is unbalanced, while in university registration it is more balanced.

## 10.14. Carrying out formalities with the administration

29<sup>th</sup> edition  
October-December 2010

% of individuals	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
Payment of taxes	37.5	35.6	40.8	36.6	45.0
Requests for documents	31.8	34.0	37.0	35.6	33.9
Submission of applications	12.9	14.6	14.7	16.6	15.7
Presentation of complaints	10.1	8.7	10.0	10.6	10.3
One-stop window services	4.3	4.2	8.4	7.0	7.4
Other	3.7	4.0	3.6	5.1	5.4

Base: Internet users aged 15 and over who have contacted the e-Administration at least once



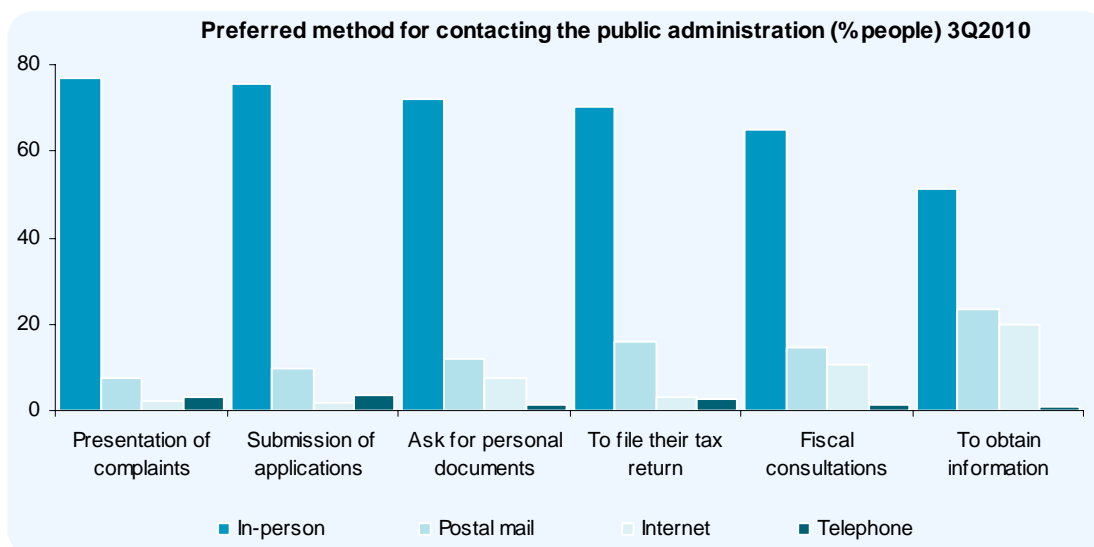
Payment of taxes records the greatest year-on-year increase in terms of percentage of users who have used e-Administration services (over a 4 point increase, reaching 45% of the users). On the contrary, requests for documents, certificates, etc. record the greatest year-on-year decrease (a 3 point drop, down to 33.9% of the users).

## 10.15. Preferred method for contacting the public administration

% of individuals	Tipo de contacto	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
To obtain information	In-person	49.2	49.6	50.1	48.5	51.1
	Telephone	21.5	20.6	19.3	18.4	19.8
	Postal mail	1.2	1.1	0.9	1.1	1.1
	Internet	19.3	19.9	20.9	23.5	23.5
To file their tax return	In-person	68.7	69.2	67.7	66.5	70.2
	Telephone	3.0	3.1	3.0	3.5	3.1
	Postal mail	2.7	3.0	2.1	3.0	2.7
	Internet	13.7	12.6	15.0	14.4	16.0
Fiscal consultations	In-person	64.6	64.5	63.9	63.9	65.1
	Telephone	9.9	9.7	9.8	8.9	10.4
	Postal mail	1.3	1.3	0.8	1.0	1.4
	Internet	11.1	11.5	12.5	13.5	14.7
Ask for personal documents	In-person	71.4	69.7	69.6	69.1	71.9
	Telephone	6.6	7.2	6.8	6.5	7.7
	Postal mail	1.6	1.7	1.2	1.2	1.3
	Internet	9.8	10.2	11.7	13.0	12.1
Submission of applications	In-person	73.0	71.5	72.2	70.8	75.6
	Telephone	1.7	1.6	1.7	2.4	1.7
	Postal mail	3.7	3.6	3.3	3.4	3.5
	Internet	8.0	9.6	9.8	9.9	9.8
Presentation of complaints	In-person	74.1	72.1	72.5	71.1	76.8
	Telephone	2.5	2.6	2.1	3.1	2.4
	Postal mail	3.0	3.4	3.1	3.0	3.3
	Internet	6.2	7.6	8.1	7.7	7.5

Base: Internet users aged 15 and over who have contacted the e-Administration at least once

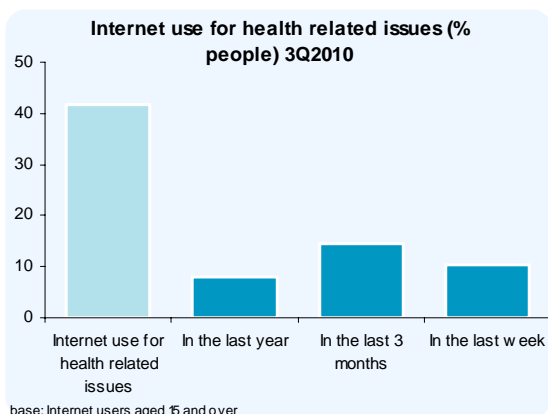
In-person contact continues to be the preferred way to interact with Public Administrations for carrying out official procedures and obtaining information. However, virtual contact over the Internet continues to show year-on-year increases, except for presentation of complaints (experiencing a drop) and submission of applications (that remains the same).



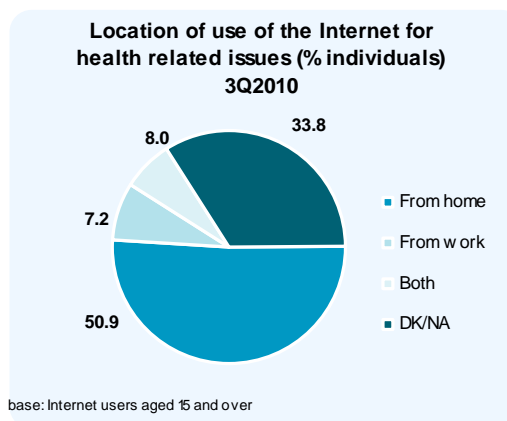
Base: Internet users aged 15 and over who have contacted the e-Administration at least once

### 10.16. Internet use for health related issues

29<sup>th</sup> edition  
October-December 2010



base: Internet users aged 15 and over



base: Internet users aged 15 and over

41.7% of Internet users aged 15 and over said that they had used the Internet for health related issues at some time.

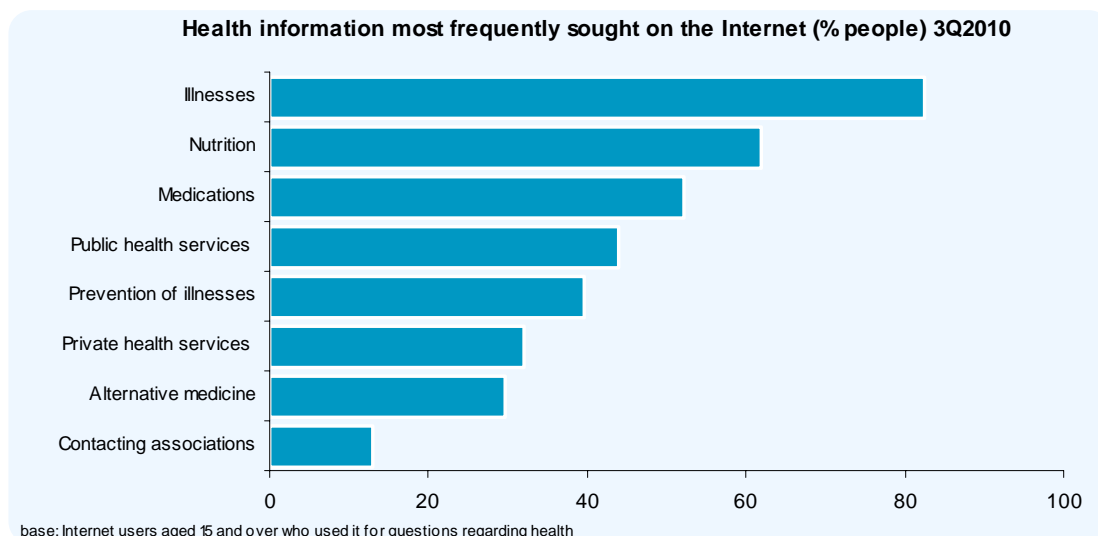
Over half of these users (50.9%) declared to have carried out this virtual contact for health related issues from home.

% of individuals	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
Internet use for health issues	38.8	39.3	41.4	41.7	41.7
In the last year	8.6	7.9	9.4	8.1	8.1
In the last 3 months	14.3	13.5	13.3	13.3	14.6
In the last week	8.3	10.8	10.8	13.4	10.4

Base: Internet users aged 15 and over

	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
From home	52.6	55.1	56.4	53.2	50.9
From work	12.2	12.1	10.6	9.8	8.0
Both	6.7	7.3	7.5	7.0	7.2
DK/NA	28.5	25.5	25.6	30.0	33.8

Base: Internet users aged 15 and over



The health information most frequently sought on the Internet was about illnesses, with a percentage of 82.8% of Internet users. Also, 66.9% of users sought about nutrition. And 52.1% sought about medications, which is the value recording the greatest increase, 7 points more than the previous year.

All types of healthcare information consultations have increased, except about prevention of illnesses, which has dropped.

% of individuals	3Q2008	1Q2009	3Q2009	1Q2010	3Q2010
Illnesses	84.1	78.7	79.9	82.8	82.4
Nutrition	60.6	58.5	57.3	66.9	62.0
Medications	44.9	43.9	44.9	50.8	52.1
Prevention of illnesses	38.5	38.5	42.4	41.3	39.6
Public health services	38.0	38.0	42.5	41.4	44.0
Private health services	24.3	25.3	29.5	29.4	32.1
Alternative medicine	25.8	21.9	25.3	28.0	29.6
Contacting associations	10.1	12.8	9.8	12.4	13.0

Base: Internet users aged 15 and over who used it for questions regarding health



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## 11. OBJECTIVES AND METHODOLOGY

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### 11.1. Scope of the study

A dynamic sector such as this requires a group of uniform, reliable and comprehensive indicators that will be a benchmark for establishing regulatory initiatives, designing promotion policies and supporting business decisions.

Since 2003, Red.es, in collaboration with Taylor Nelson Sofres (TNS) has been conducting a survey panel to analyse the demand for telecommunication and Information Society services in Spanish households. The survey provides indicators of the penetration of equipment, services and technologies, consumption levels and average expenditure, in addition to uses and attitudes towards technology, classified under five areas: fixed telephony, mobile telephony, Internet, audiovisual and pay TV, and ICT services and devices.

In March 2008 Red.es signed an agreement with the Telecommunications Market Commission (CMT) to jointly prepare and conduct this sample panel survey.

This analysis of demand in the residential segment and the use by individuals inside and outside the household gives greater insight into the sector and complements surveys conducted by and indicators obtained from other entities and institutions regarding the offer of services both in residential and business areas.

### 11.2. Data definitions

**Universes:** 16,938,727 households. Individuals aged 15 and over: 39.038 million. Individuals aged 10 and over: 41.138 million.

The data published in this quarterly report refers to individuals aged 15 and over.

**Sample:** 3,102 households and 6,599 individuals aged 10 and over were included in the questionnaire analysis, 6,203 individuals aged 15 and over. A total of 2,849 households fulfilled the requirements for their invoices to be included in the analysis.

**Scope:** Mainland Spain, the Balearic Islands and the Canary Islands

**Sample design:** Proportional stratification by type of home, with social segment quotas, number of persons per household and presence of children under 16 years in the household, for each autonomous region.

**Questionnaires:** In addition to quarterly collection of invoices, a postal survey is carried out every six months including a household questionnaire and another questionnaire directed at all the members of the household aged 10 and over. The first questionnaire collects data on technological

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equipment in the household and the second asks about individuals' uses, habits and attitudes.

**Field work:** The field work and data processing has been carried out by Taylor Nelson Sofres (TNS). The collection of invoices for the period October-December 2010 was completed during February 2011.

**Sampling error:** Assuming simple random sampling, for the case of maximum uncertainty ( $p=q=50\%$ ) and a confidence level of 95%, sampling errors were  $\pm 1.76\%$  for households and  $\pm 1.21\%$  for individuals aged 15 and over.