

ICTs in Spanish households

Study on the demand and use of telecommunication and Information Society services

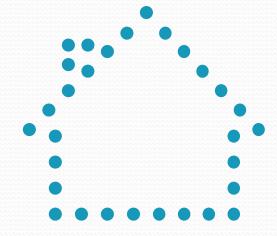


32nd Edition (April-June 2011) Madrid, October 2011

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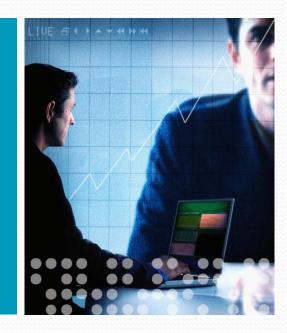
NOTE:

- Data on ICT expenditure is measured in every edition (the four quarters of the year).
- Data on penetration and uses of ICT equipment and services are measured by means of questionnaires in odd editions (first and third quarters of the year).
- For practical purposes, the following convention is used: In even editions, data from the previous odd edition is taken.

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Main Results



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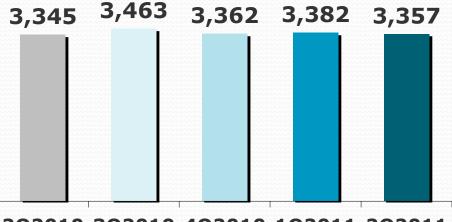
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ontsi



Total expenditure on ICT services this quarter amounts to €3,357 million.

Total expenditure on ICT services (thousands of euros)

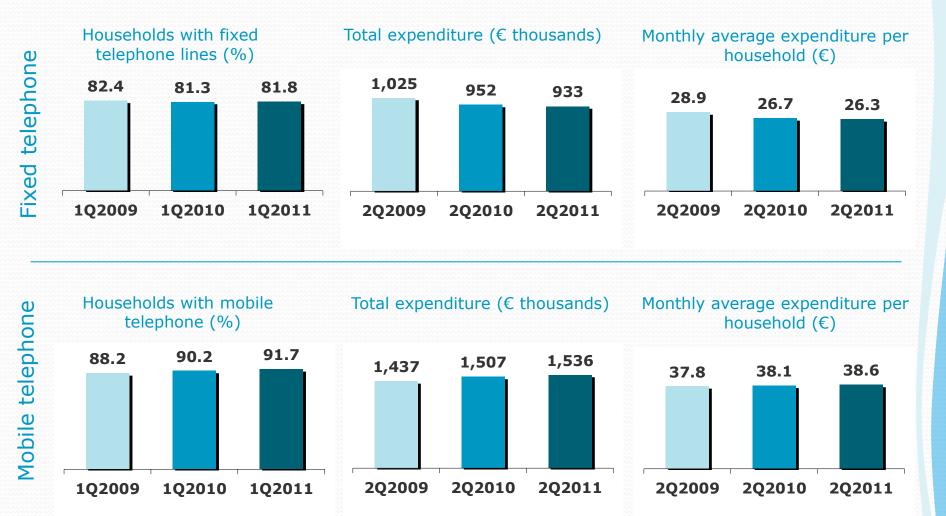


2Q2010 3Q2010 4Q2010 1Q2011 2Q2011

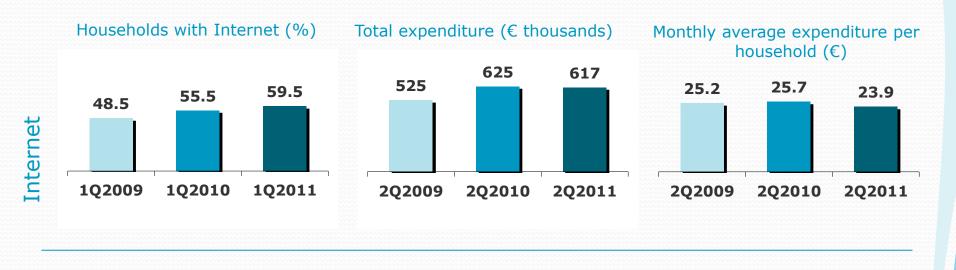
| | | 2010 | | 20 | 11 | % year-on- | |
|------------------|-------|-------|-------|-------|-------|------------|----------|
| | 2Q | 3Q | 4Q | 1Q | 2Q | year var. | |
| ICT Services | 3,345 | 3,463 | 3,362 | 3,382 | 3,357 | 0.4% | 7 |
| Fixed telephone | 952 | 938 | 953 | 938 | 933 | -2.0% | N |
| Mobile telephone | 1,507 | 1,598 | 1,514 | 1,535 | 1,536 | 1.9% | 7 |
| Internet | 625 | 643 | 619 | 641 | 617 | -1.3% | 2 |
| Pay television | 261 | 284 | 276 | 267 | 272 | 4.2% | 7 |

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Expenditure on mobile telephone has grown by 7% over the last year



Almost six out of ten households have access to the Internet



Total expenditure (€ thousands) 30.4 305

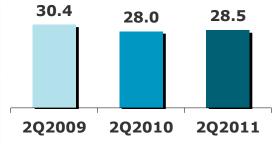


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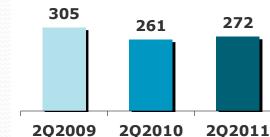
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23.3 21.9 21.3 102009 1Q2010 1Q2011

Pay television

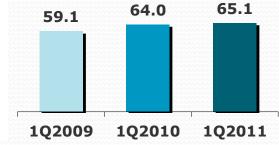
Households with Pay TV (%)



Two out of three persons aged 10 and over has used the Internet at some time

| | 20 | 09 | 20 | 10 | 2011 | % year-on- | |
|----------------------|--------|--------|--------|--------|--------|------------|--|
| | 1Q | 3Q | 1Q | 3Q | 1Q | year var. | |
| In some occasion | 22,538 | 23,329 | 24,966 | 25,214 | 25,417 | 1.8% | |
| In the last week | 17,847 | 17,800 | 20,415 | 19,434 | 21,571 | 5.7% | |
| In the last 15 days | 1,007 | 832 | 798 | 1,104 | 923 | 15.7% | |
| In the last month | 667 | 810 | 538 | 722 | 456 | -15.2% | |
| In the last 3 months | 662 | 986 | 579 | 749 | 401 | -30.7% | |
| A long time ago | 2,355 | 2,901 | 2,636 | 3,205 | 2,066 | -21.6% | |

Internet users aged 15 and over (thousands and %)



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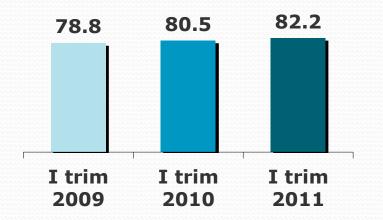
Internet users aged 10 and over (thousands and %)

| | 20 | 09 | 20 | 10 | 2011 | % year-on- | | | | |
|----------------------|--------|--------|--------|--------|--------|------------|---|--------|--------|--------|
| | 1Q | 3Q | 1Q | 3Q | 1Q | year var. | | 60.5 | 65.4 | 66.4 |
| In some occasion | 24,308 | 25,083 | 26,911 | 27,066 | 27,341 | 1.6% | 7 | | | |
| In the last week | 19,095 | 18,933 | 21,906 | 20,774 | 23,173 | 5.8% | 7 | | | |
| In the last 15 days | 1,212 | 921 | 1,045 | 1,212 | 1,050 | 0.5% | 7 | | | |
| In the last month | 757 | 927 | 630 | 797 | 491 | -22.1% | 2 | | | |
| In the last 3 months | 751 | 1,170 | 620 | 882 | 446 | -28.1% | - | 102009 | 102010 | 102011 |
| A long time ago | 2,493 | 3,132 | 2,710 | 3,401 | 2,181 | -19.5% | 2 | 142003 | 142010 | 142011 |



More than 32 million people have used their mobile phones in the last month, with a year-on-year growth of 2.2%

Mobile telephone users (thousands and %)



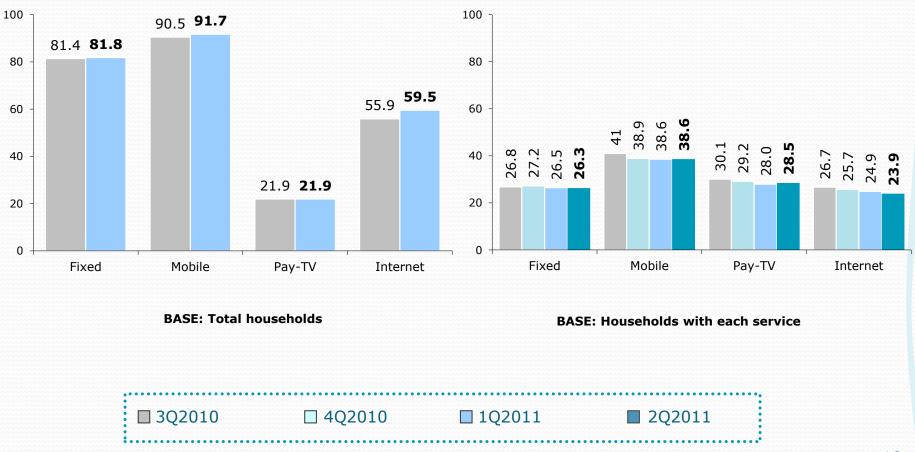
| | 20 | 09 | 20 | 10 | 2011 | | |
|---|--------|--------|--------|--------|--------|-------------------------|---|
| | 1Q | 3Q | 1Q | 3Q | 1Q | % year-on- year var. | |
| Mobile phone users in the last month | 30,052 | 30,372 | 31,415 | 31,996 | 32,119 | 2.2% | 7 |

Penetration and monthly average expenditure per servic ontsi on acional de las telecomunicaciones y de la SI

91.7% of all households have at least one mobile phone

Percentage of households with

Monthly average expenditure per household (€) Including VAT



Summary of the ICT market in households



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Main data

| | 20 | 09 | | 20 | 10 | | 20 | 11 |
|--|------------|-------|------------|-------|------------|-------|------------|-------|
| | Q3 8 | & Q4 | Q1 8 | λ Q2 | Q3 8 | ጷ Q4 | Q1 8 | & Q2 |
| Total households | 16,65 | 0,518 | | 16,93 | 8,727 | | 17,06 | 8,913 |
| Households which have fixed telephones | 13,65 | 5,973 | 13,77 | 2,053 | 13,78 | 9,220 | 13,95 | 5,028 |
| Households with Pay TV | 3,628 | 3,199 | 3,609 | 9,289 | 3,708 | 3,118 | 3,745 | 5,495 |
| Households which have mobile telephones | 14,842,240 | | 15,286,032 | | 15,323,304 | | 15,643,068 | |
| Households which have Internet access | 8,434 | 1,308 | 9,393,091 | | 9,464,070 | | 10,14 | 8,006 |
| | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| Total expenditure on Fixed telephone (€ millions) | 997 | 980 | 979 | 952 | 938 | 953 | 938 | 933 |
| Total call minutes (millions) | 7,425 | 8,263 | 9,039 | 8,329 | 7,042 | 8,376 | 9,412 | 8,576 |
| Expenditure on minutes (€ millions) (*) | 188 | 176 | 171 | 170 | 158 | 166 | 161 | 169 |
| Expenditure on Pay-TV (€ millions) | 277 | 293 | 281 | 261 | 284 | 276 | 267 | 272 |
| Expenditure on Mobile phone (€ millions) | 1,638 | 1,595 | 1,536 | 1,507 | 1,598 | 1,514 | 1,535 | 1,536 |
| Expenditure on Internet (€ millions) | 579 | 587 | 642 | 625 | 643 | 619 | 641 | 617 |

(*) For the calculation of expenditure on minutes used, especial discounts of Telefonica have also been included



Expenditure on end-user services of the ICT sector

- Expenditure on ICT services incurred by Spanish household in the second quarter of 2011 amounts to €3,357 million, 0.7% less than in the previous quarter. However, this represents a year-on- year increase of € 12 million or, what is the same of 0.4%).
- Comparing the four services analysed this quarter with the previous quarter, expenditure on fixed telephone and Internet experiences a decrease of five and twenty-four millions of € respectively, while on mobile telephone and Pay-TV experiences an increase of on and five million of euros respectively.

Data by markets:

- Expenditure on fixed telephone falls with respect to the previous quarter from €938 million to €933 million, which means a quarterly decrease of 0.5% reaching a historical minimum again. Compared to the same period in 2010, we observe a variation of -2.0%. Average expenditure per household on fixed telephone fells by twenty cents standing now at €26.3/ month, –including VAT-.
- As for mobile telephone, expenditure reaches €1,536 million. The quarter-on-quarter increase is of 1 million euros, that is a variation of 0.1%. The year-on-year variation is more substantial, of 1.9%. Average monthly expenditure per household remains as in the previous quarter at €38.6 -including VAT-.
- Total quarterly expenditure of households with Pay-TV services rises this quarter. It goes from €267 million to €272
 million (a quarter-on-quarter variation of 1.9%). The year-on-year increase this quarter is therefore of 4.2%. Per household, average monthly expenditure on pay TV increased by €0.50, standing at €28.5/household/month -including VAT-.
- Lastly, expenditure on Internet services totals €617 million, recording the greatest fall with respect to the first quarter of the year, with a variation of -3.7%. The year-on-year variation is less sharp (-1.3%). And average monthly expenditure stands at €23.9/month per household -including VAT-, an euro less than in the previous quarter.



ICT equipment and expenditure Pyramid

- The **ICT equipment pyramid** represents the number of services per household based on equipment. In the third quarter of 2010, there was a notable rise of four p.p. in the percentage of households with three ICT services, from 39% to 43%. The percentage of households with one or two services fell by 1.8 p.p. and 1,9 p.p. respectively, down to 18.4% and 22.3%.
- The **ICT expenditure pyramid** represents the number of services per household based on expenditure. The distribution of expenditure depending on the number of services in the second quarter of 2011 is the following: households with a single service 16.6%, with two 14.4%, with three 46.0% and with four 23.1% of the total expenditure. Compared to the previous quarter, the expenditure by households with two and four services has fallen by 1.3 p.p. and 0.4 p.p. respectively. However, the expenditure by households with a service increases by 1.2 p.p. and by those with three services in 0.6 p.p.

ICT Equipment: households and individuals

- Compared to the third quarter of 2010, the technologies showing the greatest increase in households are the same: *laptop computers* increase their presence by 3.6 p.p. (they are present in 49.6% of the households), *TFT/Plasma TVs* by five p.p. (52.8% of the households) and *netbooks* in 3.4 p.p. (7.9% of the households). Internet penetration rate in households rises by 3.6 p.p., with 59.5% of the households having Internet connections.
- The latest data from questionnaires on personal equipment reflect stability with respect to the third quarter of 2010, with the exception of *laptops*, which increase by 3.6 p.p. (with 35.2% of individuals having one) and *portable videoconsoles*, which increase in 1.3 p.p. reaching a penetration of 21.2%.

Attitudes

• The perceived cost-benefit ratio has improved compared to the third quarter of 2010. Pay-TV is the service with the best perceived cost/benefit ratio, with 48.5% of the users considering they receive a lot or sufficient in return for the price paid. The perception of this service has improved by 1.5 p.p. Internet is the second service with the best perceived cost/benefit ratio and has experienced an increase of 1.8 p.p., with 47.7% of its users considering they receive a lot or sufficient.

Fixed telephone

Penetration:

• The penetration rate of fixed telephones in households remains at 81.8%.

Expenditure:

- Total expenditure falls by 0.5% compared to the previous edition, **down to €933 million**.
- Average quarterly expenditure per household on calls is €78.9, €0.5 less than the previous quarter. The year-on-year variation is of -€1.3.

Traffic/ Access:

- The number of minutes used falls compared with the previous quarter, from €9,413 to €8,576 million, with a variation of 8.9%. In terms of call-minutes per household, this means a drop of 20 minutes down to 205 minutes/month/household. The year-on-year variation in the total number of minutes used is of 3%.
- If we separate call minutes in fixed and mobile, fixed telephone call minutes fall to 615 minutes/household/quarter (59 minutes less). On the contrary, mobile telephone call minutes increase from 388 to 403 minutes/household/quarter (15 minutes more).

Traffic/Type of call:

- There is an important decrease in the volume of *metropolitan* calls compared to the previous year, from 5,548 to 4,760 millions of minutes, which represents a quarter-on-quarter variation of -14.2%.
- Additionally, *interprovincial* calls fall from 1,651 to 1,464 millions of minutes, a decrease of 11.3%.

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Mobile telephone

Penetration:

• The number of households with at least one mobile phone user is 15.6 millions (91.7% of the total), this means 300,000 more than in the third quarter of 2010. The number of individuals with at least one active mobile telephone continues to rise (specifically, 122,000 new users) and stands now at 32.1 millions. This means 82.2% of all individuals aged 15 and over.

Expenditure:

- Expenditure on end-user mobile services in the second quarter of 2011 remains quite stable compared to the previous quarter, going from €1,535 to €1,536 million. However, the year-on-year variation amounts to +1.9%.
- Differentiating expenditure on *pay as you go* (€405 million) and *contract* (€1,131 million), we observe variations of -1.5% (a decrease of €6 million) and 0.6% (an increase of €7 million) respectively.

Use and functionality:

 As for mobile telephone functions, the use and desire for multimedia functionalities like the photo camera, video recording, and music reproduction (FM radio or MP3) records high scores. And as for the connection technology, bluetooth and handsfree car kits are very desirable.

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Penetration:

• Pay TV has a penetration rate in the first half of 2011 of 21.9%, as in the previous six months.

Expenditure:

- The penetration of Pay-TV in households is very stable. This is reflected in the historical evolution of the expenditure on this service, which has risen slightly during this quarter. Specifically, it has increased by €5 million from €267 million to €272 million, which means a variation of +1,9% with respect to the previous quarter.
- Average household expenditure on this service is €28.5 per month (including VAT), with and increase of €0.5 on the first quarter of 2011.
- As for the access technology, expenditure of households on satellite TV increases, on cable TV falls and on ADSL remains stable. Quantifying and comparing these variations with respect to the previous quarter, satellite technology accounts for €158 million with a 5.3% increase, cable falls from €84 million to €81 million (-3.6%) and expenditure on ADSL TV remains the same as in the previous quarter, at €33 million.

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Main results of this quarter

Internet

Penetration:

- 59.5% of households have Internet access (3.6 p.p. more than in the previous semester). 65.1% of the population aged 15 and over has used the Internet at some time. Taking into account individuals aged 10 and over, this number rises to 66.4%.
- 90% of households with Internet access connect via a fixed broadband connection. 81.6% of all broadband connections are ADSL. Internet access via mobile broadband in households stands at 13.6%.
- 19.4 million Internet users (76.2%) started using the Internet more than three years ago.

Expenditure:

- In the second quarter of 2011, total household expenditure on Internet services reached **€617 million.** This represents a decrease of €24 million compared to the previous quarter, a variation of -3.7%.
- The historical evolution of average monthly expenditure per household is negative. In this quarter, it falls to €23.9 including VAT-, a euro less than in the previous quarter.

Access and use:

- The home continues to be the most usual location to access the Internet (with 80.7% of the users who access from their homes). The workplace is the second location with 35.1% of the users.
- As for the equipment used to access the Internet, we observe a notable and continued rise in laptop computers (six million users) and an increasing presence of mobile telephones (24.5%).
- Indicators on Internet use, experience and expectations remain stable.

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Main results of this quarter

Internet

• Regarding Internet uses, there is an important rise in activities related to online banking, search engines, news, e-mail and streaming content.

Security:

• The IT security problems that affect the Internet population the most are, as in the previous quarter, computer viruses and unwanted e-mail. This quarter, we observe a generalised drop of Internet security measures.

eGovernment:

- Almost ten million individuals have contacted the public administration via the Internet, with an increase of 423,000 users on the previous edition.
- Additionally, we observe a slight increase in the preference for virtual contact with the Administration via the Internet.
- As for the use of the services offered by the Administration via the Internet, we observe a slight drop in info searches about taxes, public employment and grants. At the same time, downloads of official forms for birth/marriage certificates or Social Security issues increase.

Internet and health:

• Lastly, searches about health issues on the Internet also experience a slight increase. This increase is most notable in searches for information about nutrition, prevention of illnesses and public institutions and services.

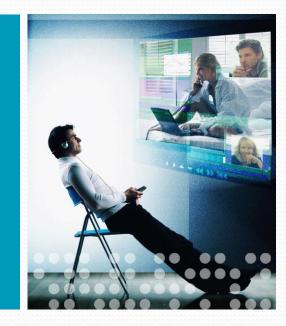
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<u>slides</u>

Attitudes towards new technologies



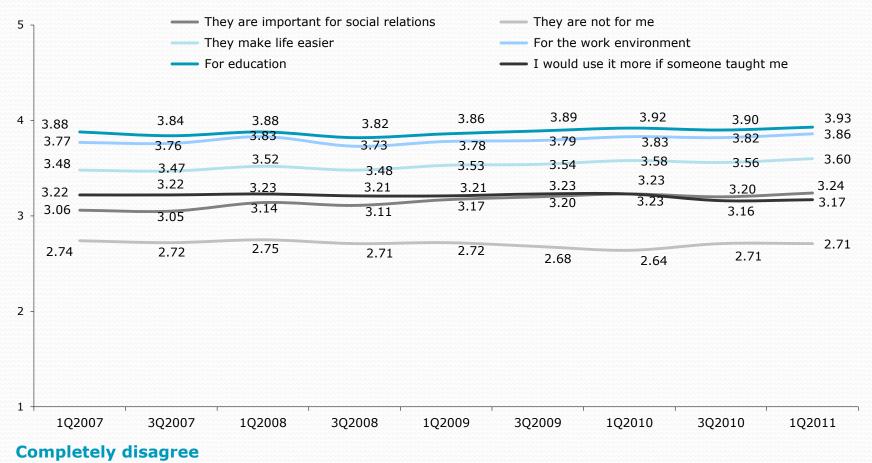
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Evolution of attitudes

New technologies are considered essential in the field of education

Completely agree



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Knowledge on NTs / eSkills

%

Three out of ten individuals consider themselves as advanced computer users

expert user of the following activities /

programs?

Do you consider yourself a beginner, advanced or

| Computer handling | 27.2 | 30. | 7 8. | 3 26.4 | 7.4 | |
|--|------|----------|------|--------|------|---|
| Internet | 22.9 | 27.3 | 10.5 | 30.6 | 8.7 | |
| Word processors | 21.3 | 25.4 | 7.9 | 36.6 | 8.9 | · |
| Browsers | 20.5 | 25.7 | 9.6 | 34.6 | 9.6 | Beginner |
| Spread sheets | 23.9 | 18.3 6 | 5.2 | 42.3 | 9.3 | Advanced |
| Graphic presentations | 22.6 | 14.1 5.4 | | 48.3 | 9.6 | Expert |
| Electronic mail programs | 17.8 | 17.7 6.7 | | 48.1 | 9.6 | |
| Databases | 23.6 | 12.5 3.9 | ļ | 50.7 | 9.3 | Non-user |
| Messaging programs | 17.4 | 19.2 7.3 | | 46.7 | 9.4 | DK/NA |
| Antivirus/firewall protection programs | 25.6 | 12.2 3.9 | | 48.4 | 9.9 | ••••••••••••••••••••••••••••••••••••••• |
| Graphic design | 22.4 | 8.1 3.4 | 56 | .4 | 9.7 | |
| File exchange programs | 16.9 | 12.3 5.2 | 55 | .6 | 10.0 | |
| Digital audio/video processing | 19.8 | 9.0 3.1 | 57. | .5 | 10.6 | |
| Intranet/local network handling | 18.2 | 10.6 4.9 | 56 | .3 | 10.0 | |
| 00 | ⁄₀ 2 | 0% 40% | 60% | 6 80% | 100% | |

Results of 1Q2011 (Jan-Mar 11) observatorio

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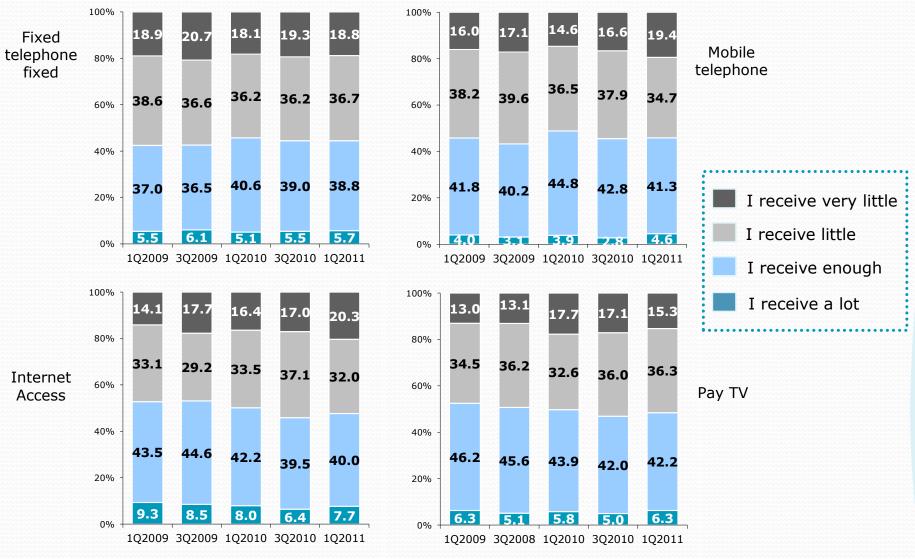
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Cost/benefit ratio

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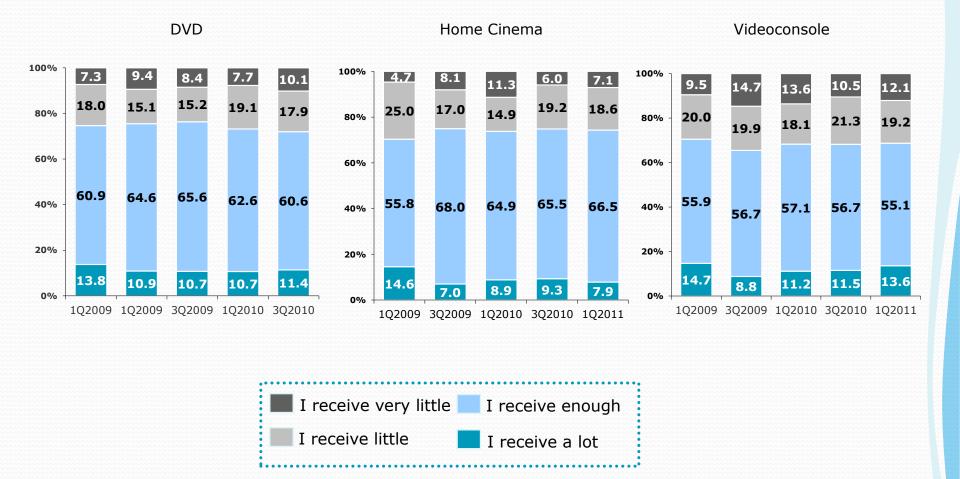
48.5% of the individuals are satisfied with their Pay-TV service



BASE: Individuals aged 15 and over who have the service



Three out of four individuals are satisfied with the cost/benefit ratio of Home Cinema



BASE: individuals aged 15 and over who have the equipment

ICT Equipment



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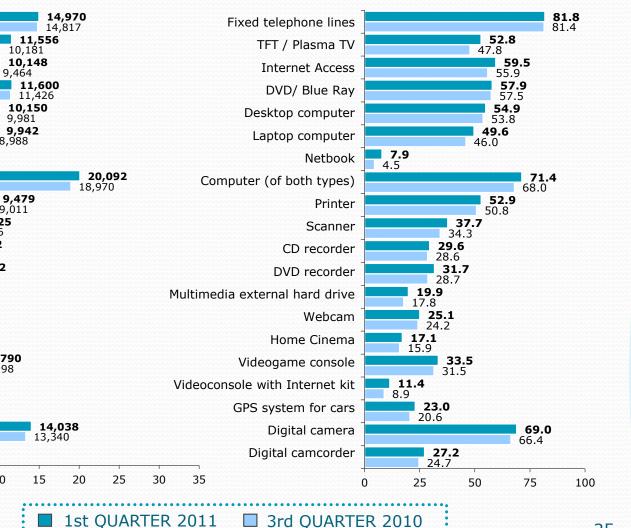
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There are more than 20 million computers in Spanish households

Millions of equipments

Fixed telephone lines 14,970 14,817 11,556 TFT / Plasma TV 10,181 10,148 Internet Access 9,464 11,600 DVD/ Blue Ray 11,426 10,150 Desktop computer 9,981 9,942 Laptop computer 8,988 **1,495** 0,796 Netbook Computer (of both types) 20,092 18,970 9,479 Printer 9,011 6,525 Scanner 5,906 5,372 CD recorder 5,208 5,842 DVD recorder 5,258 3,631 Multimedia external hard drive 3,263 4,652 Webcam 4,391 Home Cinema 2,963 2,700 7,790 Videogame console 7,198 Videoconsole with Internet kit 2,289 1,685 4,100 GPS system for cars 3,572 14,038 **Digital** camera 13,340 4,828 Digital camcorder 4,305 25 35 15 20 30 0 5 10

% of households with



BASE: Total households

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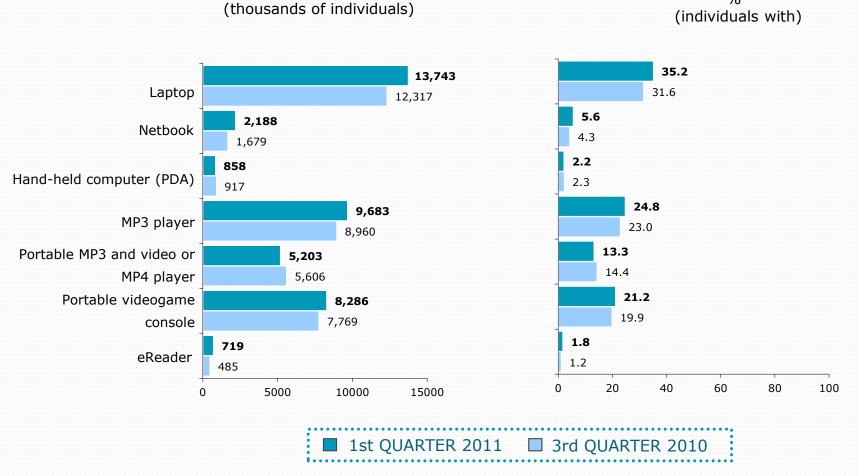
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Personal ICT equipment

More than 8.2 million individuals have a portable video games console

Absolute



BASE: Individuals aged 15 and over

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C

%

ICT Services Pyramid



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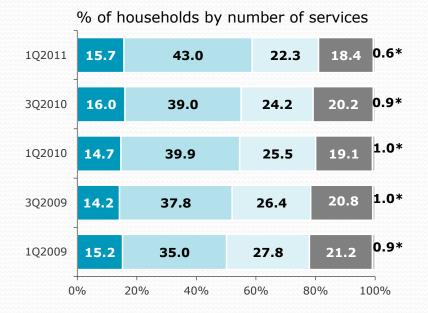
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Evolution of services in households and expenditure

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Total expenditure on ICT services has increased by 0.4% over the last year

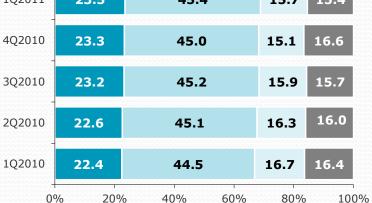


* Percentage of households with 0 services

Total expenditure by number of services

2Q2011 23.1 46.0 14.4 16.6 1Q2011 23.5 45.4 15.7 15.4 23.3 45.0 4Q2010 15.1 16.6

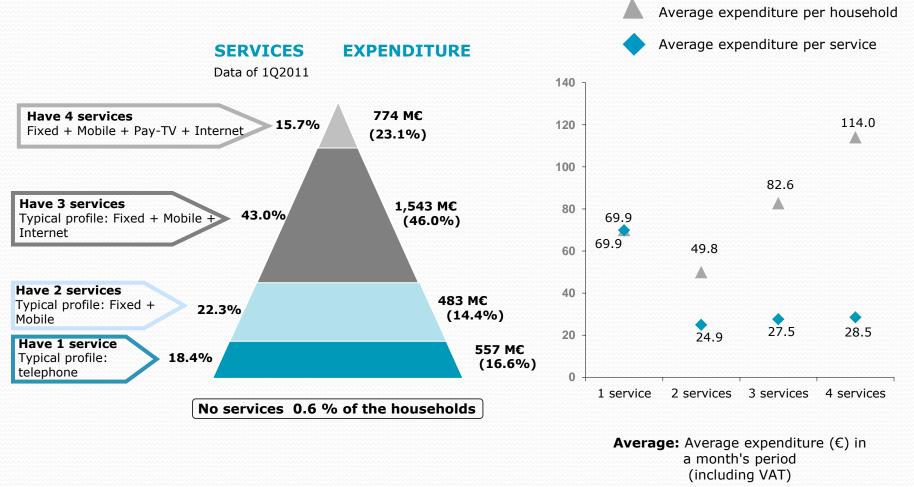
% of expenditure by number of services



| | € millions | 1Q2010 | 2Q2010 | 3Q2010 | 4Q2010 | 1Q2011 | 2Q2011 |
|-------------|---|--------|--------|--------|--------|--------|--------|
| 1 Service | Typical profile: Mobile phone | 564 | 536 | 543 | 560 | 521 | 557 |
| 2 Services | Typical profile: Fixed + mobile phone | 574 | 543 | 551 | 507 | 532 | 483 |
| 3 Services | Typical profile: Fixed + mobile phone + Internet | 1,530 | 1,508 | 1,567 | 1,512 | 1,534 | 1,543 |
| 4 Services | Typical profile: Fixed + mobile phone + Internet + Pay-TV | 771 | 757 | 802 | 783 | 795 | 774 |
| BASE: Total | Total ICT market | 3,439 | 3,345 | 3,463 | 3,362 | 3,382 | 3,357 |

Average expenditure per household and number of servicentsi

43% of households are subscribed to three ICT services

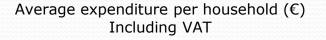


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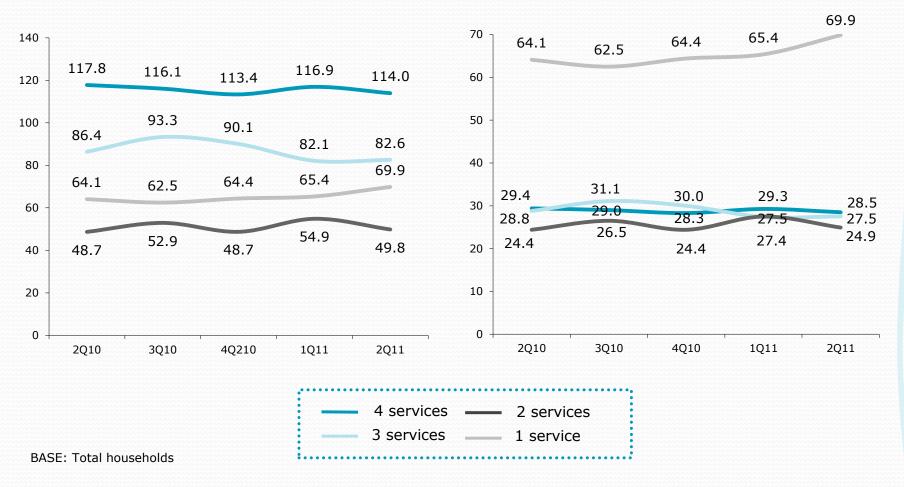
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nacional de las telecomunicaciones Average expenditure per household and number of services

Households with 4 services have an average monthly expenditure of €28.5 per service



Average expenditure per num. of services (\in) Including VAT



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nacional de las telecomunicaciones

Fixed telephone



| | | <u>slides</u> |
|----|------------------------------------|---------------|
| 1. | Main Results | 4 |
| 2. | Attitudes towards new technologies | 19 |
| 3. | ICT Equipment | 24 |
| 4. | ICT services pyramid | 27 |
| 5. | Fixed telephone | 31 |
| 6. | Mobile telephone | 44 |
| 7. | <u>Audiovisual</u> | 62 |
| 8. | <u>Internet</u> | 70 |
| 9. | Objectives and Methodology | 109 |
| | | |

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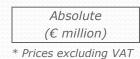
ontsi

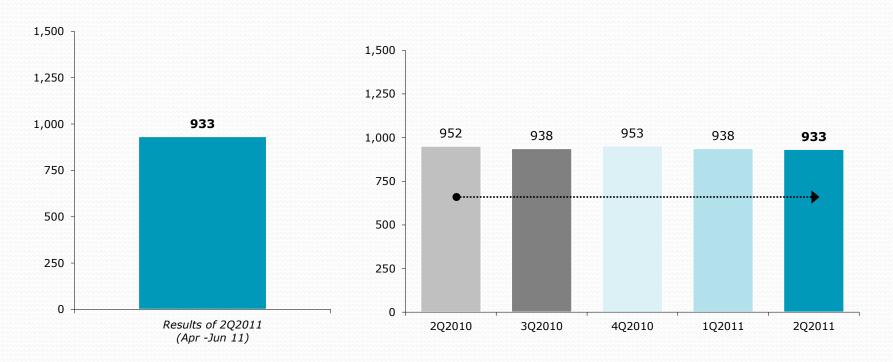
Expenditure on end-user services

SI observatorio nacional de las telecomunicaciones y de la SI

Expenditure on fixed telephone in the second quarter of 2011 totals €933 million (excluding VAT)

Households which have fixed telephones 13,955,028



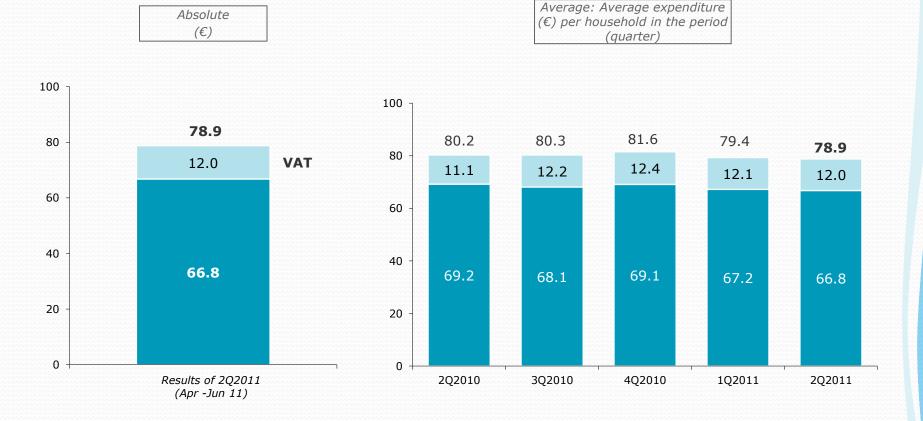


BASE: Households which have fixed telephones

Expenditure on end-user services. Average

tsi velecomunicaciones y de la SI

Average household expenditure on fixed telephone in the second quarter of 2011 is €78.9 per month



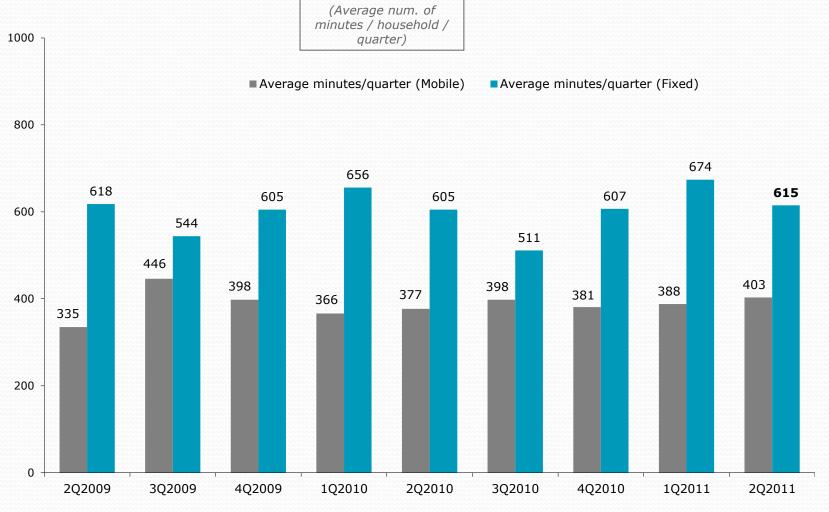
Households which have fixed telephones 13,955,028

BASE: Households which have fixed telephones



Si observatorio nacional de las telecomunicaciones y de la SI

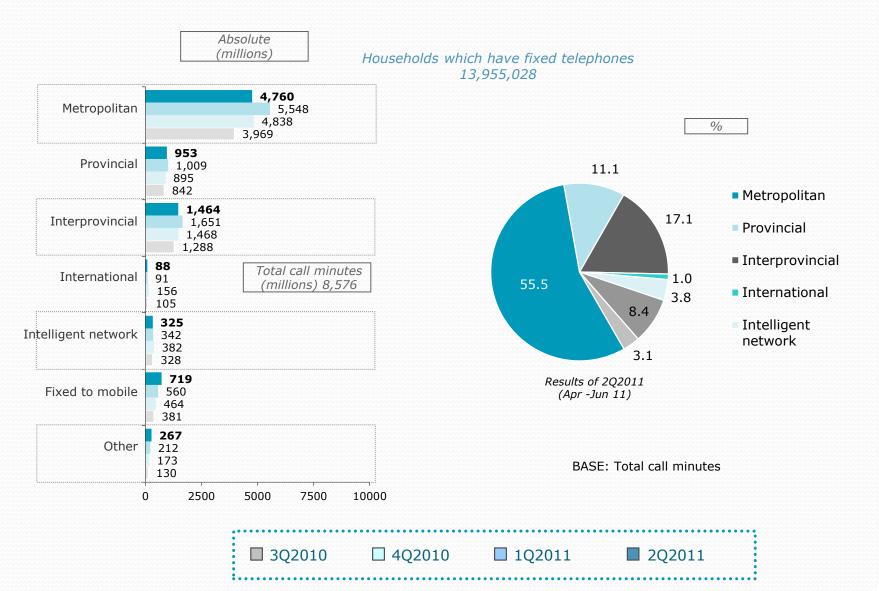
The average number of minutes used per quarter in fixed telephone has increased by ten minutes compared to the same quarter of the previous year



BASE: Households which have fixed telephones

Minutes used by call types

The number of minutes from fixed to mobile phones amounts to 719 million



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TCI

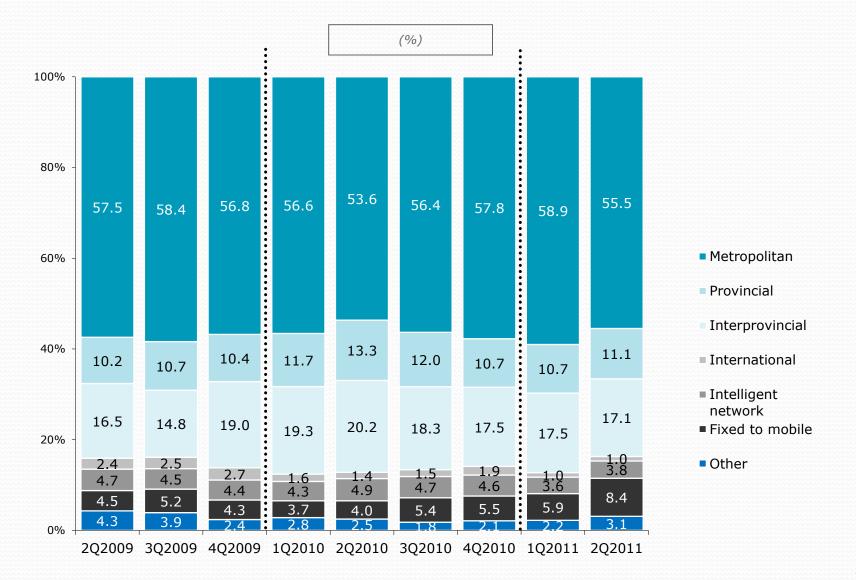
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telecomunicaciones

Evolution of the distribution of quarterly traffic

ontsi observatorio nacional de las telecomunicaciones y de la SI

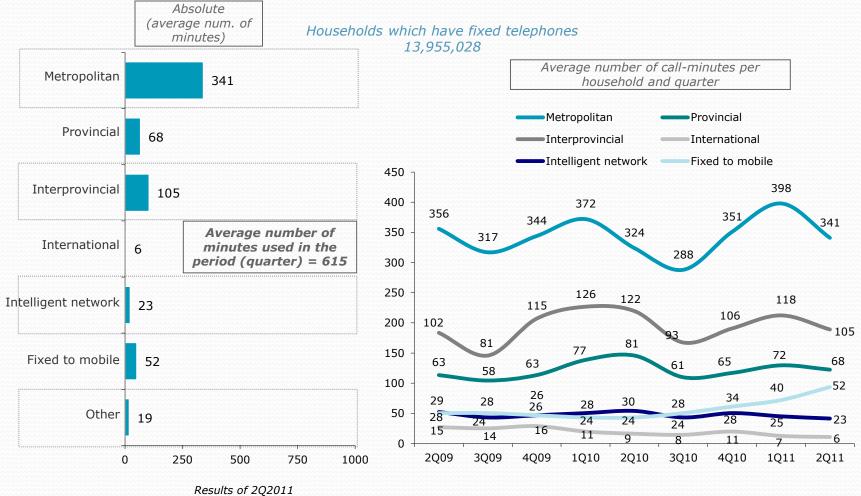
55.5% of all calls made by fixed telephone customers are metropolitan calls



Average minutes used by call types

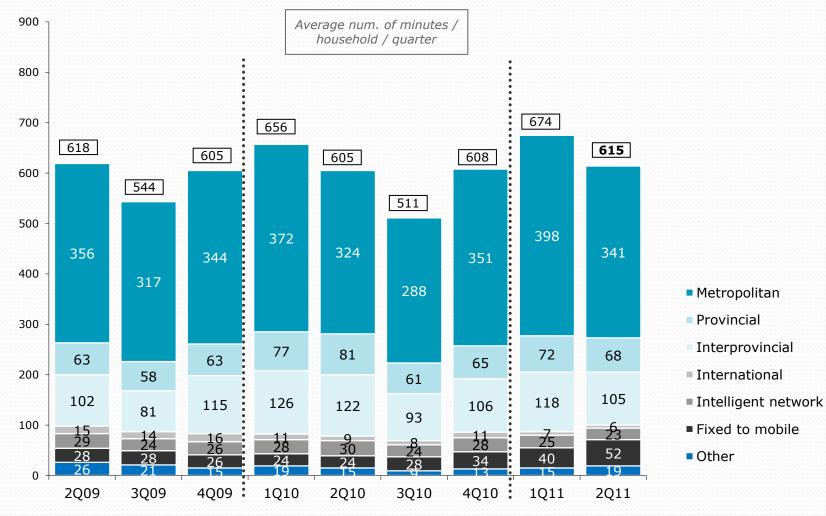
tsi vobservatorio nacional de las telecomunicaciones y de la SI

In the second quarter of 2011 Spanish households made calls amounting to 10 hours and 15 minutes on average



(Apr -Jun 11)

The average number of minutes in metropolitan calls in the period April-June 2011 amounts to 341



BASE: Households which have fixed telephones

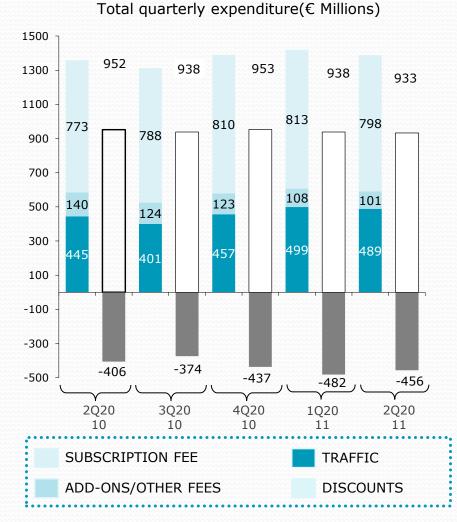
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Expenditure on services

Average household expenditure on fixed telephone is €26.3 per month

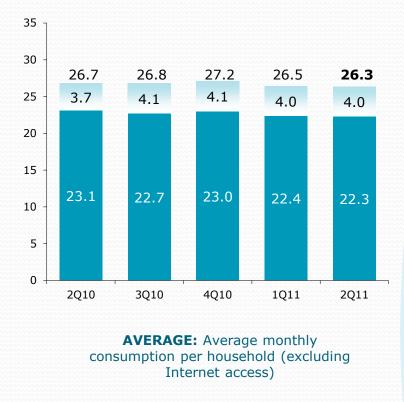


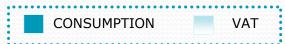
Monthly average per household (€, including VAT)

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nacional de las telecomunicaciones



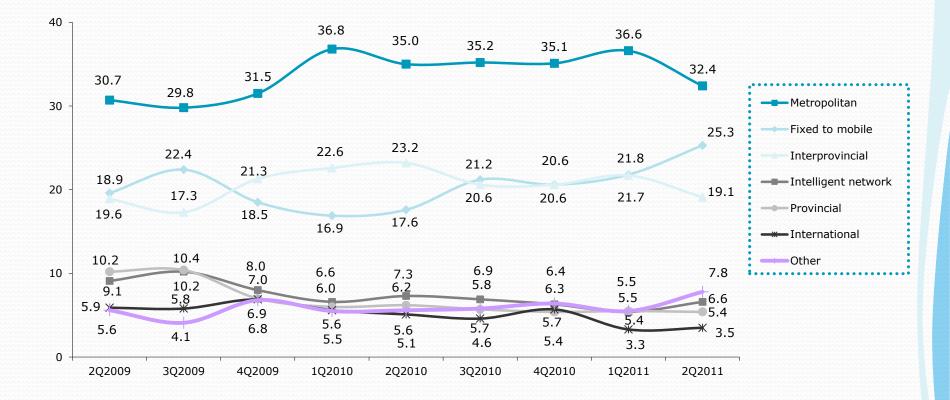


BASE: Households which have fixed telephones



In the second quarter of 2011, one out of four euros spent on fixed telephone corresponded to calls to mobile phones

Percentage in relation to total expenditure on traffic

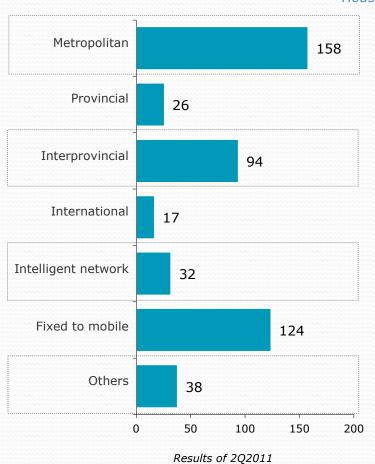


Expenditure on minutes by call type

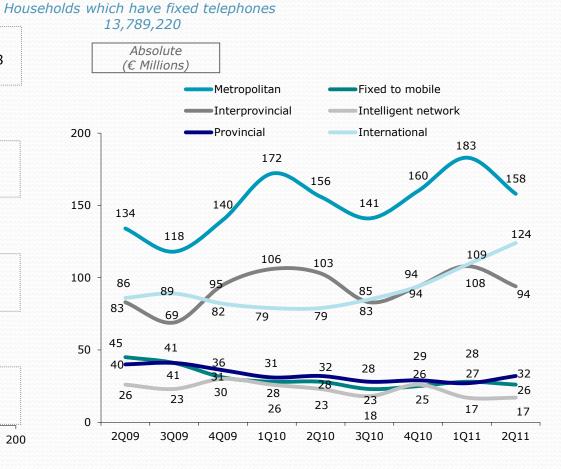
observatorio nacional de las telecomunicaciones y de la SI

121

Spanish households as a whole spend 158 million quarterly on metropolitan calls



(Apr -Jun 11)

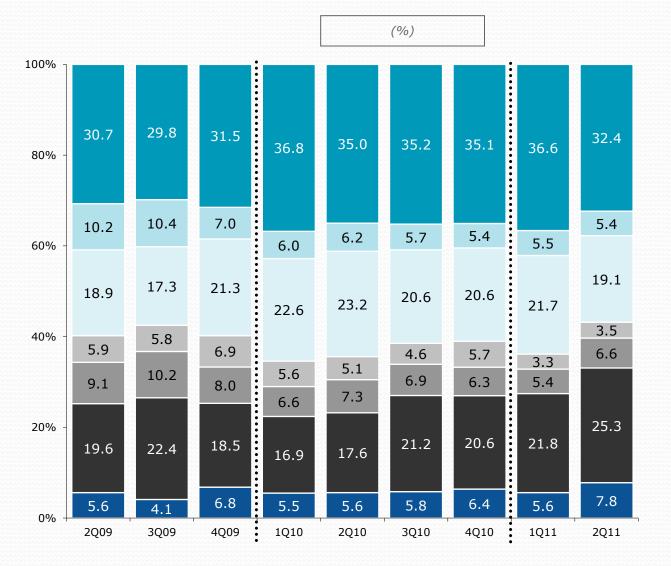


NOTE: Expenditure is based on direct expenses, discounts on call traffic are not taken into account

41

Evolution of the distribution of quarterly expenditure

A third of the quarterly expenditure incurred by Spanish households on fixed telephone corresponds to metropolitan calls



- Metropolitan
- Provincial
- Interprovincial
- International
- Intelligent network
- Fixed to mobile
- Other

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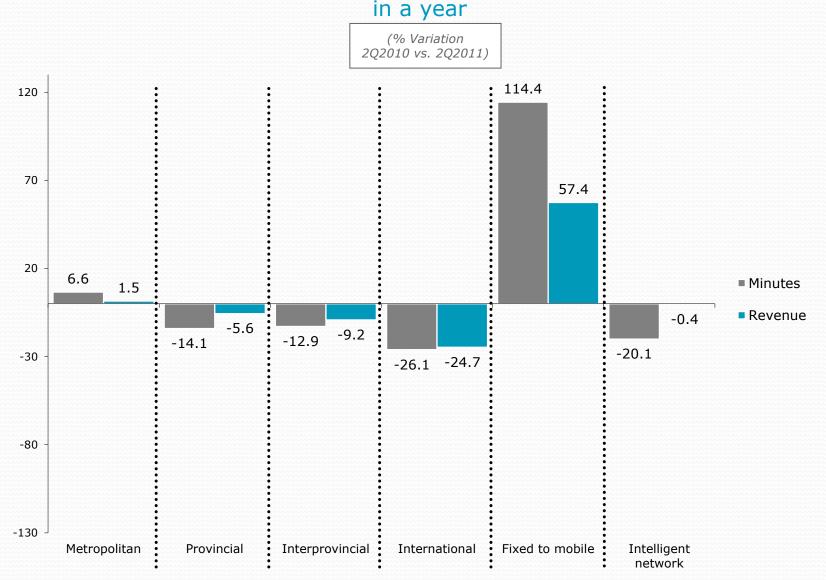
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Year-on-year traffic and revenue variation

The number of call minutes from fixed to mobile phones has increased by 114%



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y de la SI

nacional de las telecomunicaciones

Mobile telephone



| | | <u>slides</u> |
|----|------------------------------------|---------------|
| 1. | Main Results | 4 |
| 2. | Attitudes towards new technologies | 19 |
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| 7. | <u>Audiovisual</u> | 62 |
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| 9. | Objectives and Methodology | 109 |
| | | |

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Main data of the mobile telephone market



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| | 2009 | | 2010 | | 2011 |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | Q1 | Q3 | Q1 | Q3 | Q1 |
| Total Households | 16,650,518 | | 16,938,727 | | 17,068,913 |
| Households with any mobile user | 14,688,051 (88.2%) | 14,842,240 (89.1%) | 15,286,032 (90.2%) | 15,323,304 (90.5%) | 15,643,068 (91.6%) |
| Users with an active mobile phone > 10 and over | 31,120,124 | 31,497,631 | 32,641,450 | 33,224,079 | 33,355,224 |
| Users with an active mobile phone > 15 and over | 30,051,703 | 30,372,392 | 31,415,112 | 31,995,915 | 32,118,504 |
| Total lines > 10 years | 33,392,350 | 33,559,878 | 37,724,398 | 37,623,941 | 37,569,078 |
| Total lines > 15 and over | 32,308,466 | 32,530,219 | 36,441,829 | 36,242,551 | 36,268,206 |
| Total mobile handsets > 15 and over | 39,232 mill | 40,834 mill | 42,439 mill | 44,318 mill | 42,875 mill |
| Active mobile phones > 15 and over | 33,298 mill | 33,858 mill | 34,950 mill | 35,416 mill | 35,291 mill |

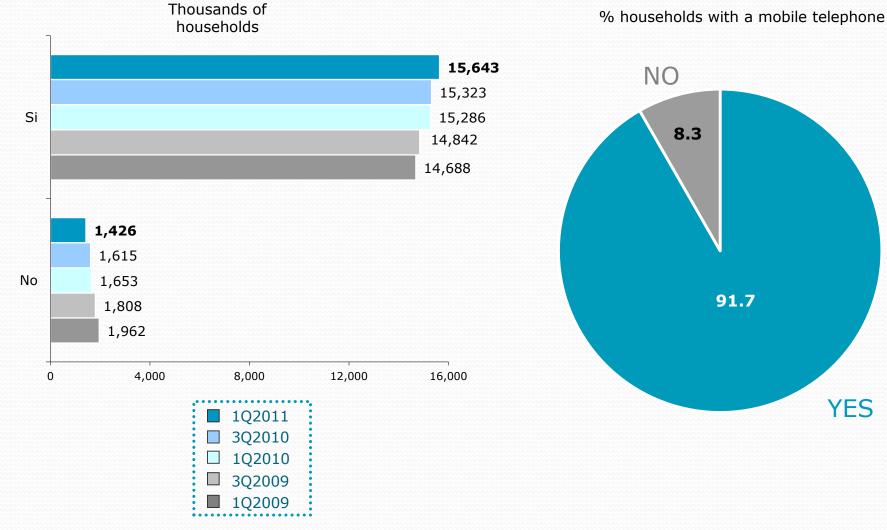
Households with an active mobile phone (used in the last month)

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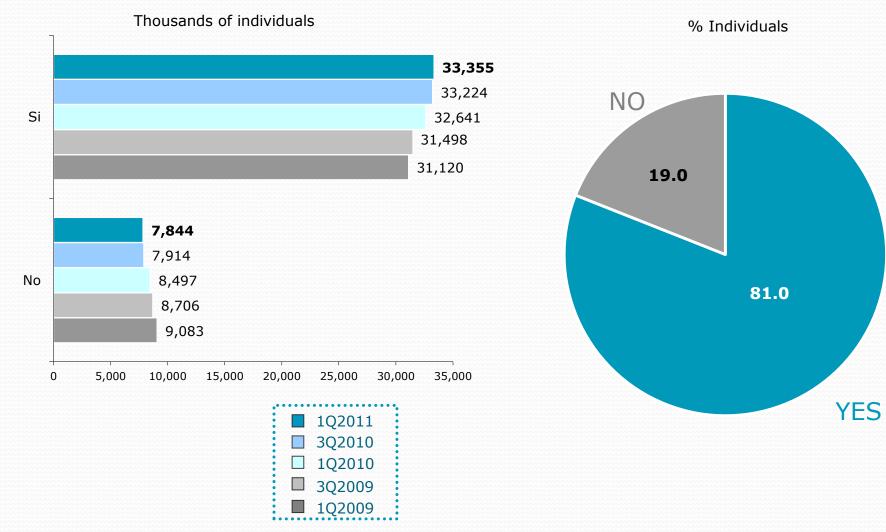


The number of households with at least one active mobile phone is 15.6 millions

BASE: Total households

Individuals aged 10 and over with an active mobile phone

The number of individuals aged 10 and over who have at least one active mobile telephone exceeds 33.3 million



BASE: Individuals aged 10 and over

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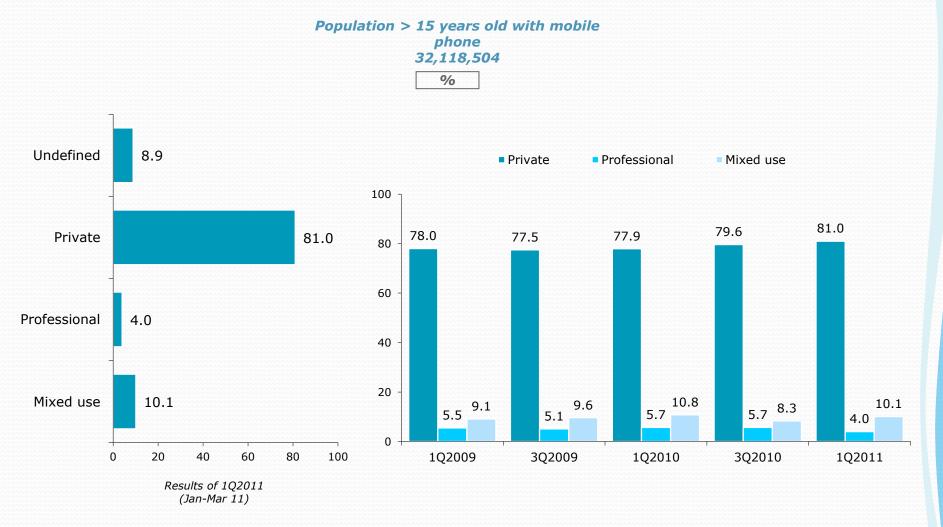
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telecomunicaciones

Main uses of the mobile telephone

observatorio
 nacional de las
 telecomunicaciones
 y de la SI

10% of individuals use the mobile phone for both personal and professional affairs



BASE: Individuals aged 15 and over with a mobile phone

Expenditure on mobile telephone by payment method

Average household expenditure on mobile telephone is €38.6 per month

1,536 1,535 Total 1,514 1,598 1,507 405 411 PAYG 396 442 413 1,131 1,124 Contract 1,118 1,156 1,095 0 200 400 600 800 1,000 1,200 1,400 1,600 1,800 2Q2011 1Q2011 4Q2010 3Q2010 2Q2010

Total quarterly expenditure(€ Millions)

BASE: Households with mobile telephone

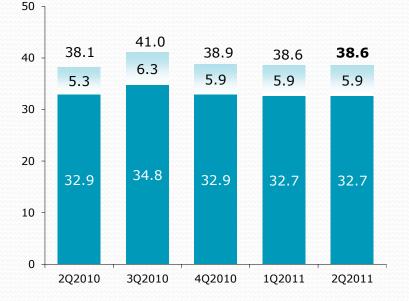
Monthly average per household (€, including VAT)

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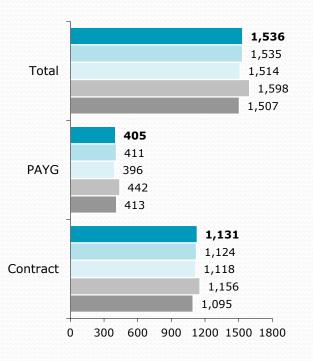
AVERAGE: Average monthly expenditure per household

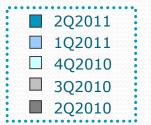


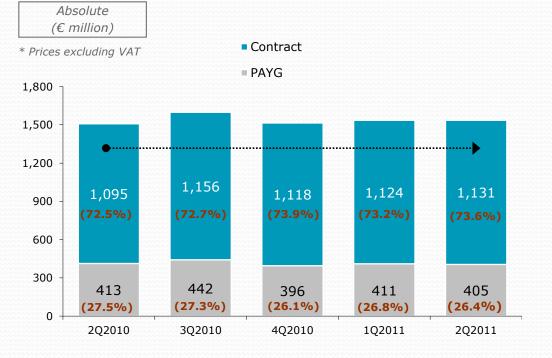
Expenditure on mobile telephone by payment method

Total household expenditure on mobile telephone through the contract option totals €1,131 million

Households with mobile telephone 15,643,068







observatorio

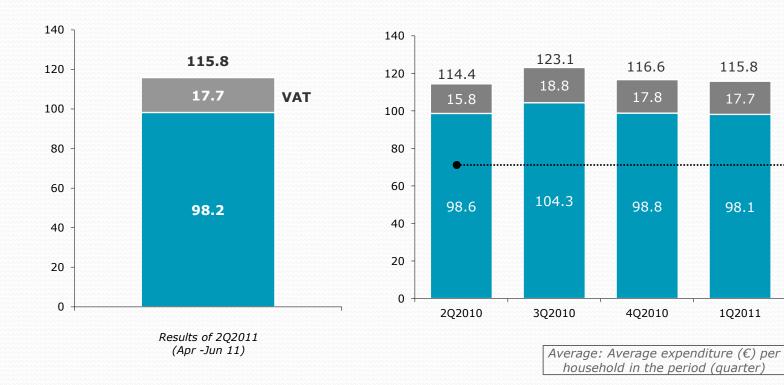
v de la SI

nacional de las telecomunicaciones

Expenditure on end-user services. Average per household ontsi

During the second quarter of 2011, average expenditure on mobile telephone per household stands at €115.8

Households with mobile telephone 15,643,068



Absolute (€) observatorio

v de la SI

115.8

17.7

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98.2

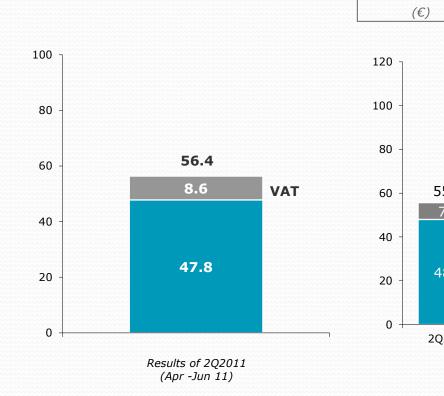
2Q2011

nacional de las telecomunicaciones Expenditure on end-user services. Average per individual Ontsi

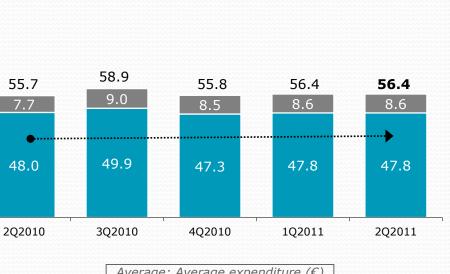
Average quarterly expenditure on mobile telephone of individuals aged 15 or over is €56.4

Population > 15 years old with mobile phone 32,118,504

Absolute



Average: Average expenditure (€) per individual in the period (quarter)



observatorio

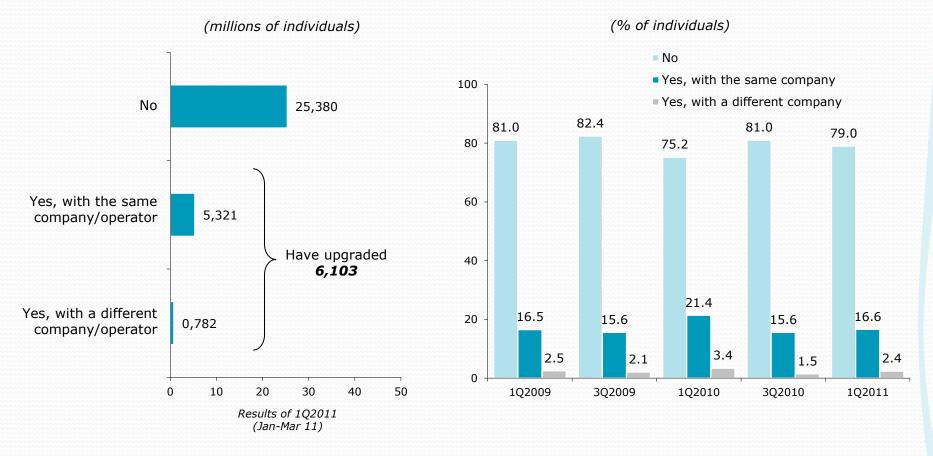
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nacional de las telecomunicaciones Handset upgrade. Upgrade Plan/Loyalty Program

observatorio
 nacional de las
 telecomunicaciones
 y de la SI

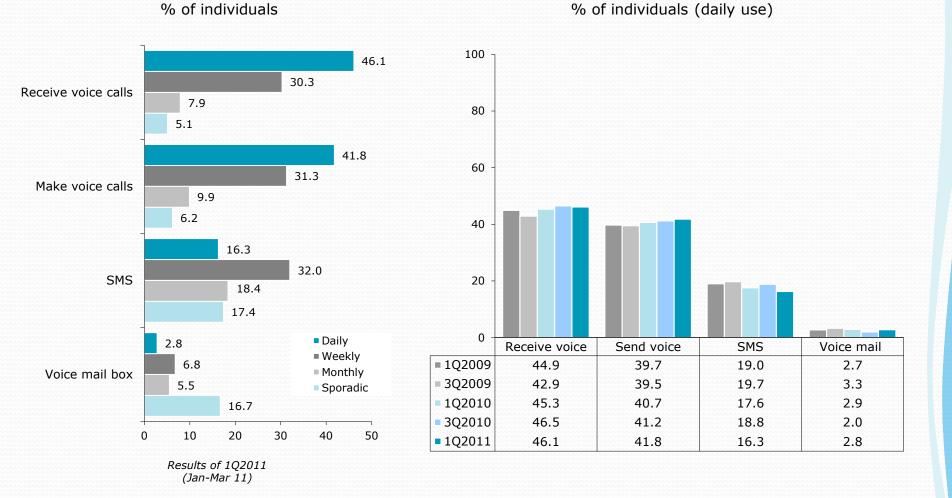
Over 6 million mobile phone users upgraded their handsets in the last six months through an upgrade plan/loyalty program

In the last six moths, have you upgraded your handset through an upgrade plan, loyalty program, etc.?



Main uses of mobile telephones and frequency of use

46.1% of mobile users receive calls every day



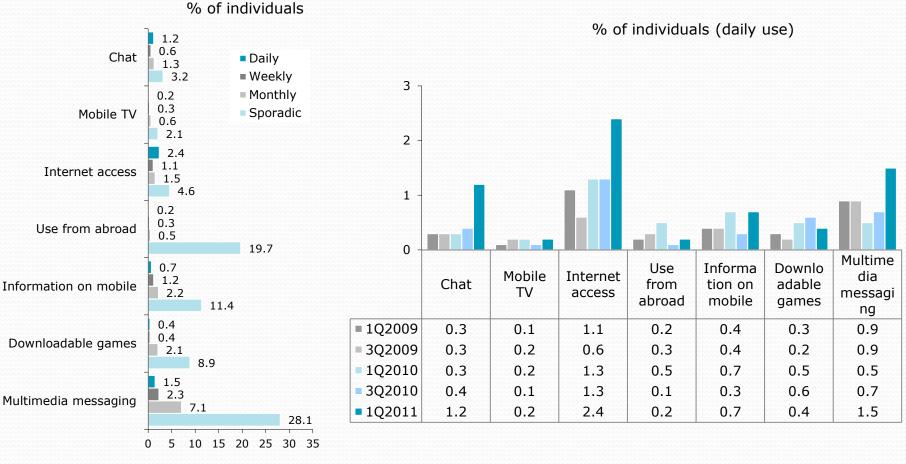
observatorio

v de la SI

nacional de las telecomunicaciones

Main uses of mobile telephones and frequency of use

28.1% of the users sporadically send or receive multimedia messages (MMS)

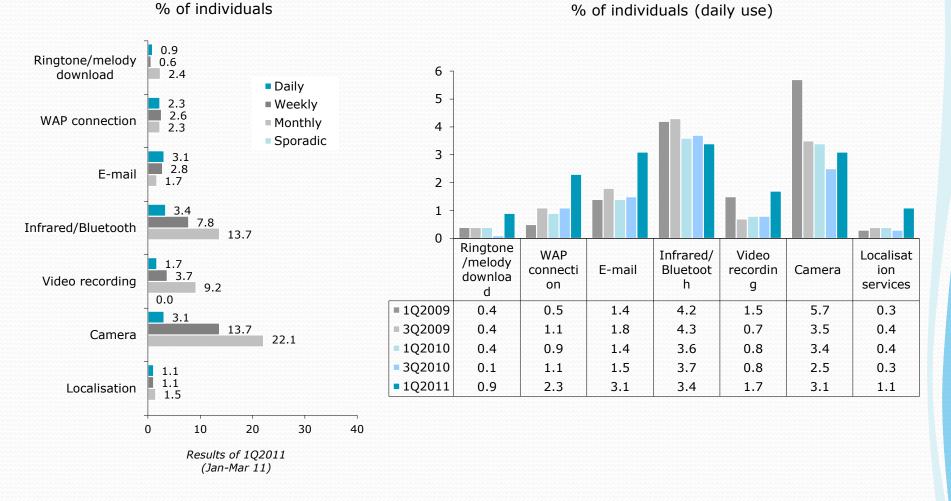


Results of 1Q2011 (Jan-Mar 11) observatorio

v de la SI

nacional de las telecomunicaciones Main uses of mobile telephones and frequency of use

Daily use of e-mail via the mobile phone experiences a year-on-year increase of 1.7 p.p.



observatorio

v de la SI

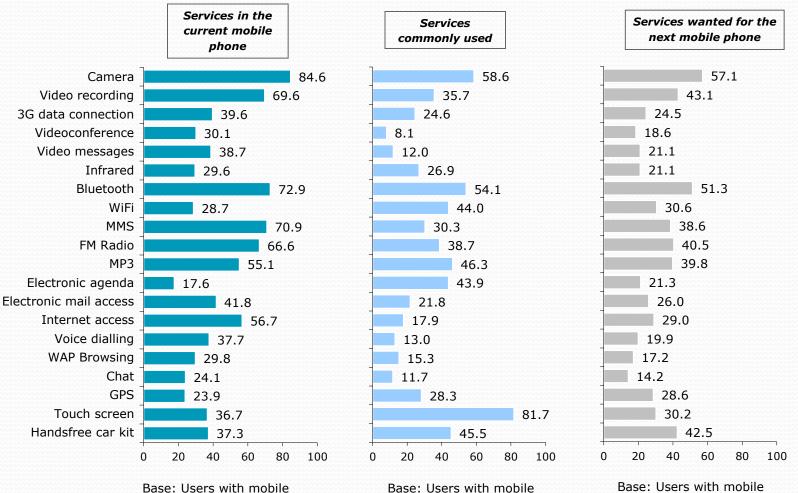
nacional de las telecomunicaciones

Current mobile phone vs. next mobile phone

SI observatorio nacional de las telecomunicaciones y de la SI

The camera is the most common feature in mobile phones and the most desired characteristic for future handsets

Population > 15 years old with mobile phone 32,118,504



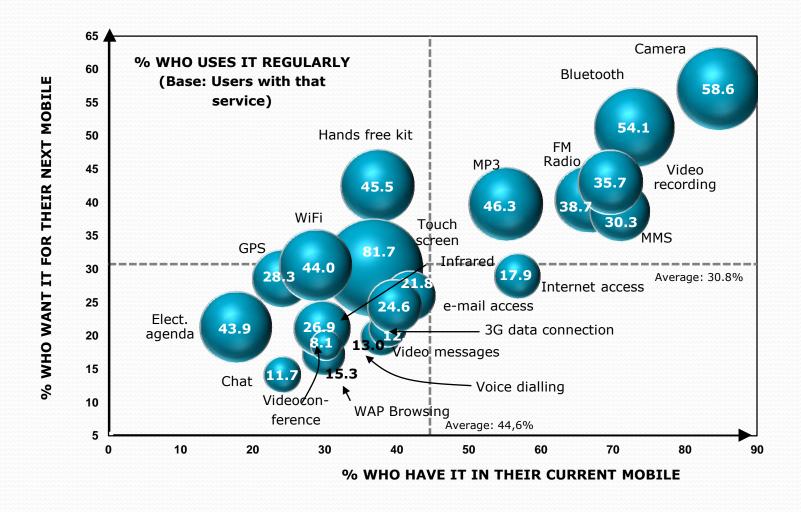
phone

Base: Users with mobile phone service

Base: Users with mobile phone

Current use of the mobile telephone vs. use of the next mobile

65% of mobile users who have bluetooth use it regularly

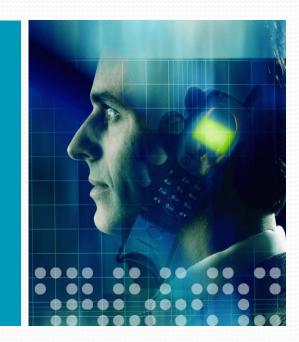


observatorio

v de la SI

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Audiovisual



| | | <u>slides</u> |
|----|------------------------------------|---------------|
| 1. | Main Results | 4 |
| 2. | Attitudes towards new technologies | 19 |
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| 4. | ICT services pyramid | 27 |
| 5. | Fixed telephone | 31 |
| 6. | Mobile telephone | 44 |
| 7. | Audiovisual | 62 |
| 8. | <u>Internet</u> | 70 |
| 9. | Objectives and Methodology | 109 |
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observatorio nacional de las telecomunicaciones y de la SI

onțsi

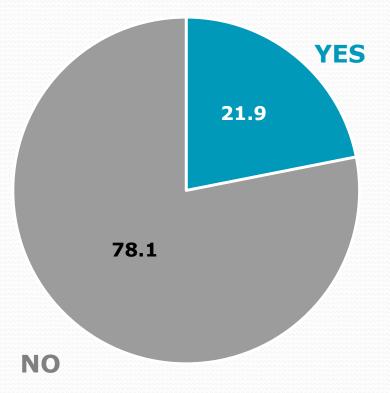
Households with Pay TV



22% of Spanish households have Pay-TV

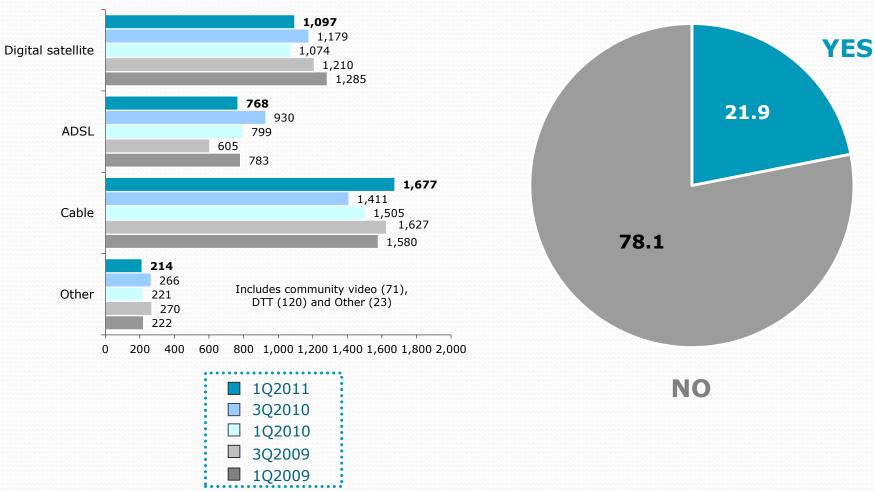
Households with Pay TV 3,745,495

% of households with Pay TV



Households with Pay TV

Cable pay television is present in more than 1.6 million households



Thousands of households

BASE: Total households

observatorio

y de la SI

TC

% of households with Pay TV

nacional de las

telecomunicaciones

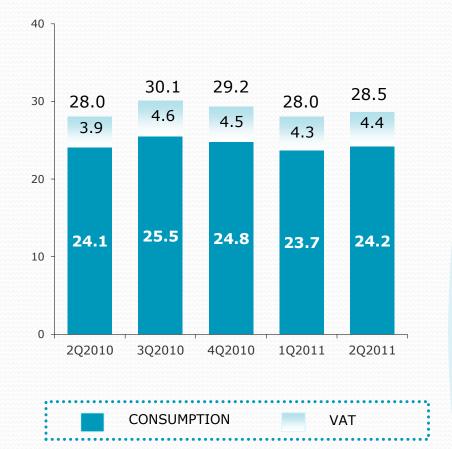
Expenditure on pay TV services

Average household expenditure on Pay-TV is €28.5 per month



Total quarterly expenditure(€ Millions)

Monthly average expenditure per household (\in) Including VAT



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nacional de las telecomunicaciones



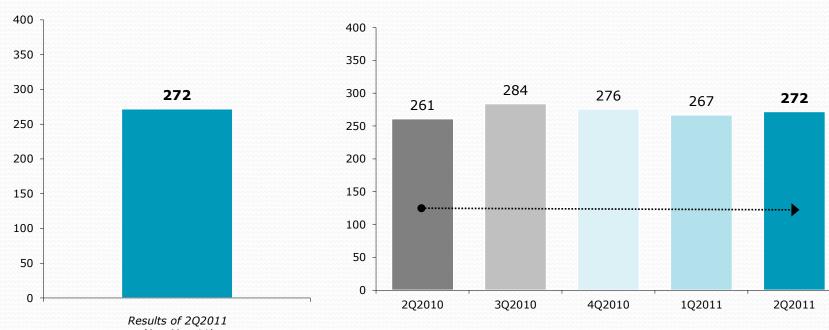
observatorio nacional de las telecomunicaciones y de la SI

C

Quarterly expenditure on pay TV by Spanish households is €272 million

Households with Pay TV 3,745,495





(Apr-May 11)

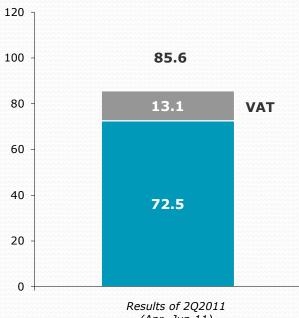
Expenditure on pay TV services. Average

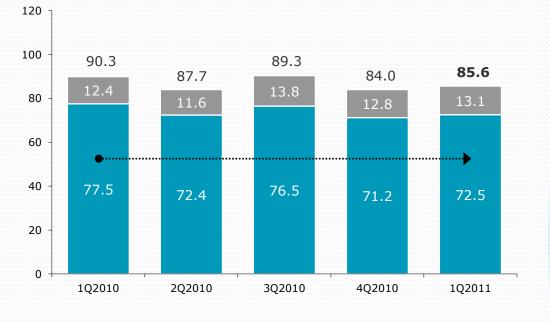
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Average expenditure on Pay-TV per household amounts to €85.6 in the period April-June 2011

Households with Pay TV 3,745,495

Average: Average expenditure (€) per household in the period (quarter)



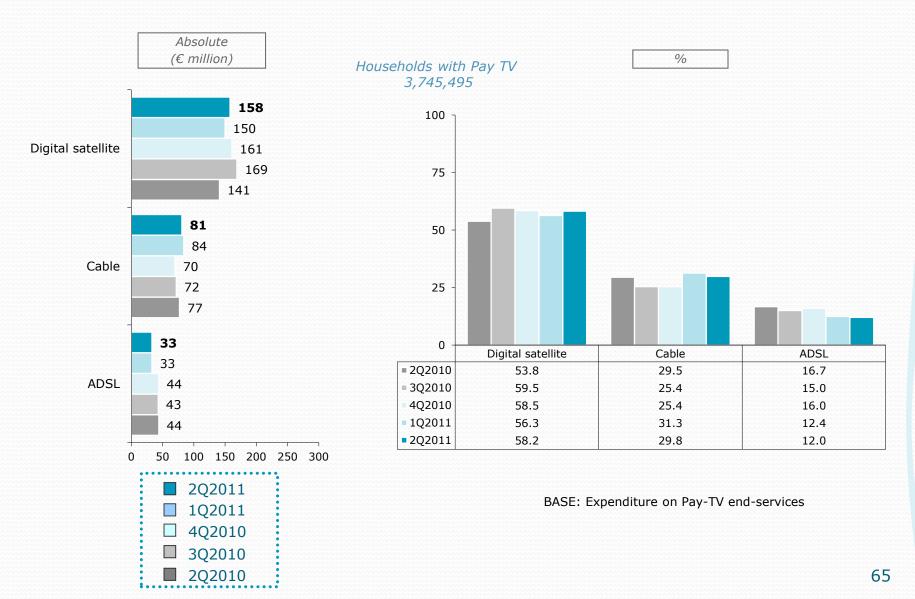


Consumption on digital satellite Pay-TV amounts to €158 million

observatorio

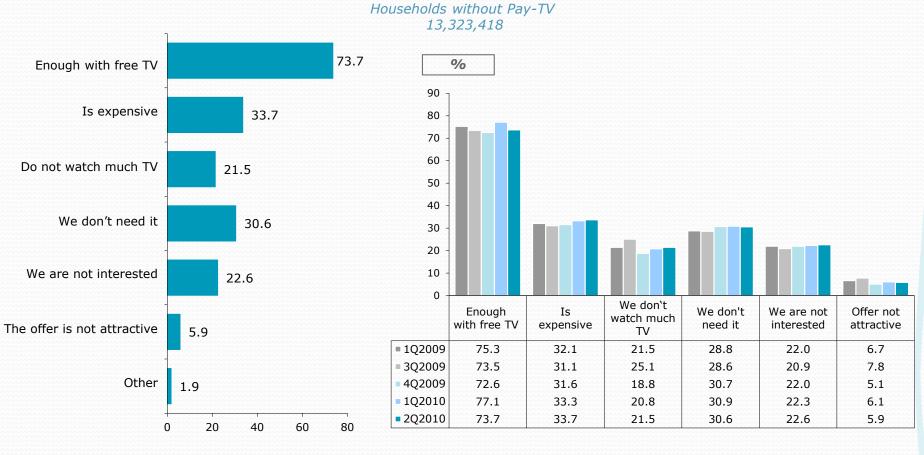
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nacional de las telecomunicaciones



Si observatorio nacional de las telecomunicaciones y de la SI

Almost three fourths of all households that do not have Pay-TV say they have enough with free TV



Results of 1Q2011 (Jan-Mar 11)

Internet



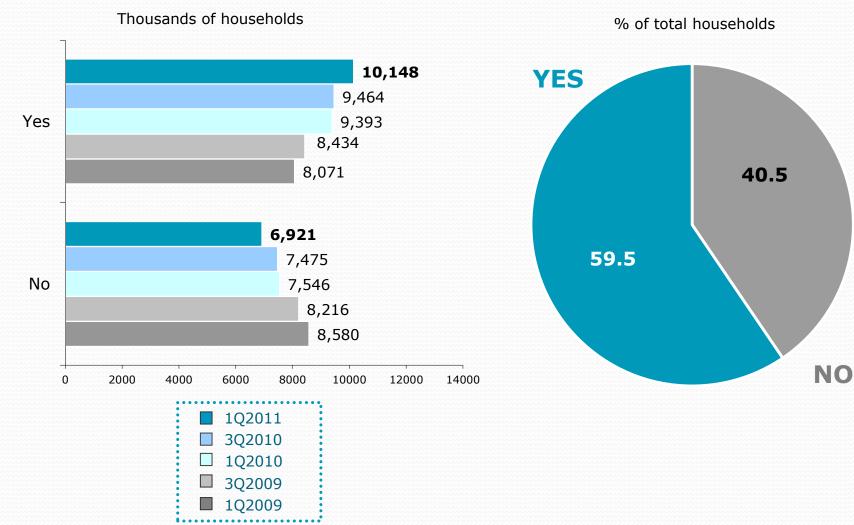
| | | <u>slides</u> |
|----|------------------------------------|---------------|
| 1. | Main Results | 4 |
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Six out of ten households have access to the Internet



BASE: Total households

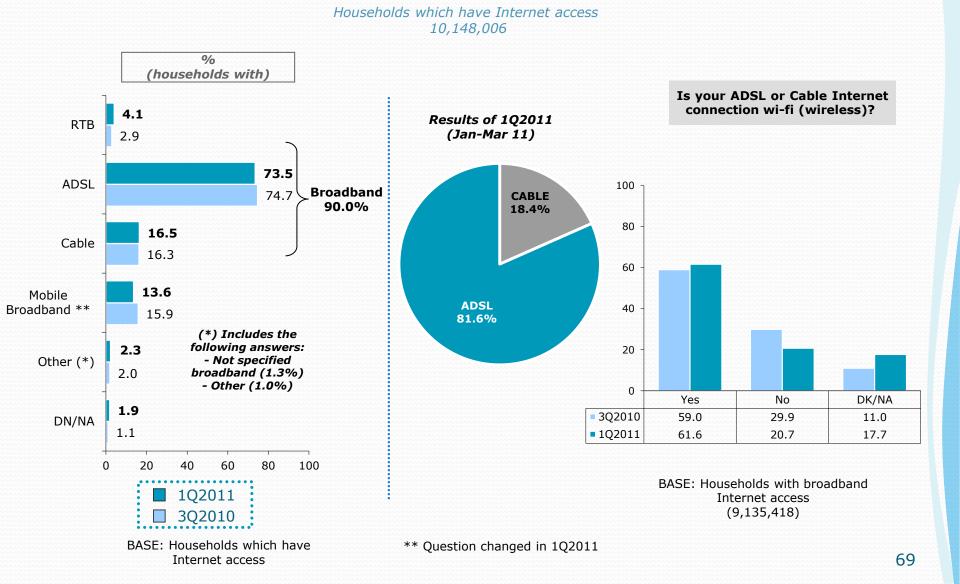
Internet access type

61.6% of households with broadband Internet access have a Wi-Fi connection

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Expenditure on end-user services

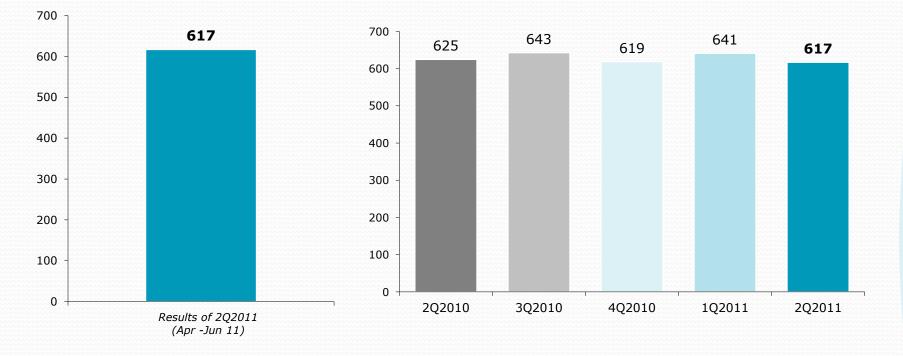
Si observatorio nacional de las telecomunicaciones y de la SI

Quarterly expenditure on Internet services by Spanish households amounts to €617 million in the period April-June 2011

Households which have Internet access 10,148,006

Absolute (€ million)



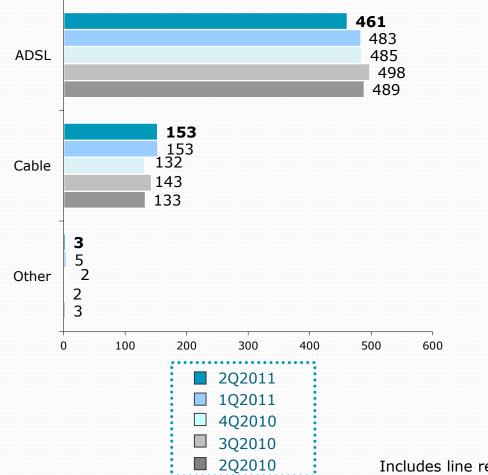


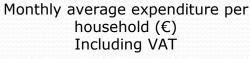
Expenditure by type of technology

Average household expenditure on Internet services is €23.9 per month

30

Total quarterly expenditure(€ Millions)

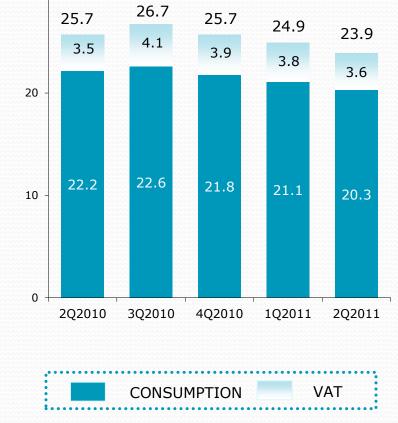




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nacional de las telecomunicaciones

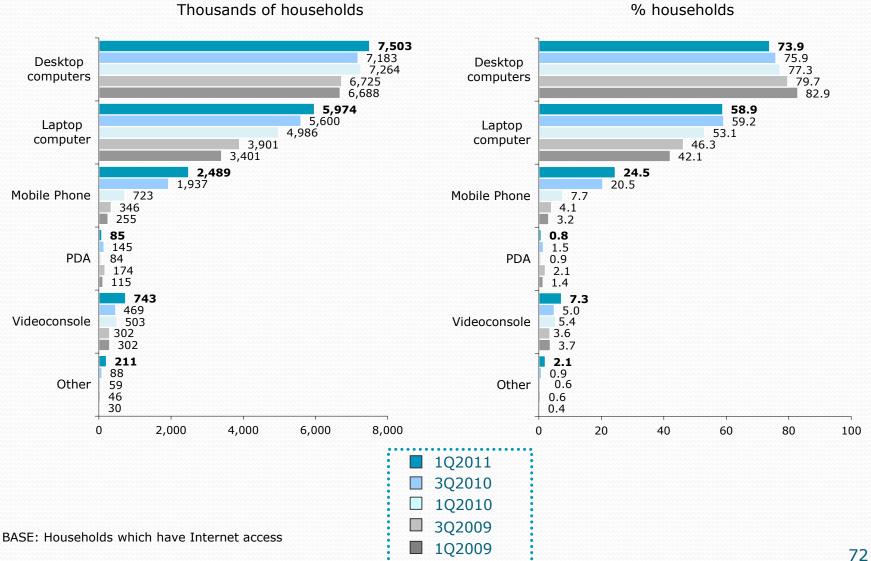


Includes line rental fee

BASE: Households which have Internet access

Internet access devices

Six million households connect to the Internet via a laptop computer, a million more than in the previous year

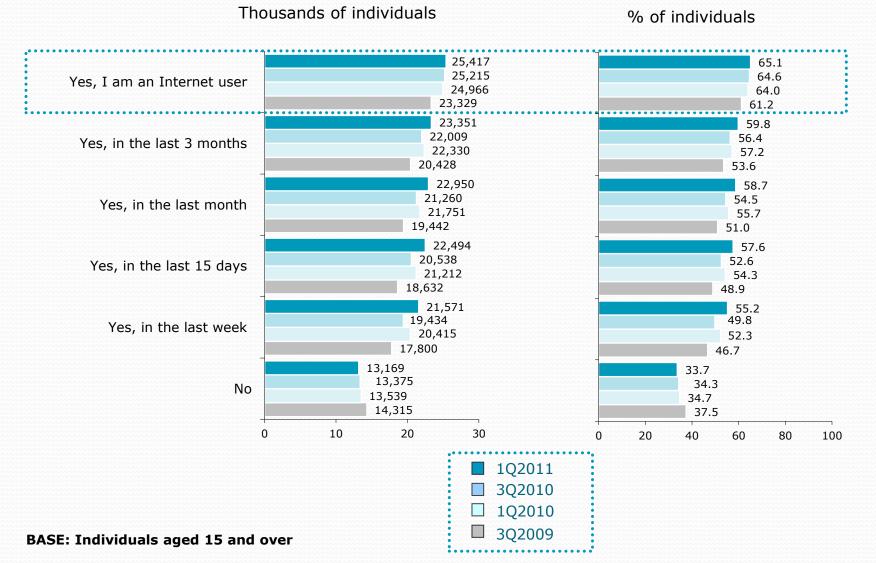


% households

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v de la SI

nacional de las telecomunicaciones 65.1% of the population aged 15 or over has used the Internet at some time



observatorio

v de la SI

nacional de las telecomunicaciones

TCI

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27.3 million people aged ten and over have accessed the Internet at some time

| Thous | | % of individuals |
|---------------------------------|--|------------------------------|
| Yes, I am an Internet user | 27,342 27,067 26,911 25,083 | 66.4 65.8 65.4 62.4 |
| Yes, in the last 3 months | 25,160 23,666 24,202 21,951 | 61.1 57.5 58.8 54.6 |
| Yes, in the last month | 24,715 22,784 23,581 20,781 | 60.0 55.4 57.3 51.7 |
| Yes, in the last 15 days | 24,223 21,986 22,951 19,854 | 58.8 53.4 55.8 49.4 |
| Yes, in the last week | 23,173 20,774 21,906 18,933 | 56.2 50.5 53.3 47.1 |
| No | 13,349 13,612 13,672 14,579 | 32.4 33.1 33.2 36.3 |
| | ☐ 1Q2011 ☐ 3Q2010 ☐ 1Q2010 ☐ 2Q2000 | 0 20 40 60 80 100 |
| SE: Individuals aged 10 and ove | r 502009 | |

Thousands of individuals

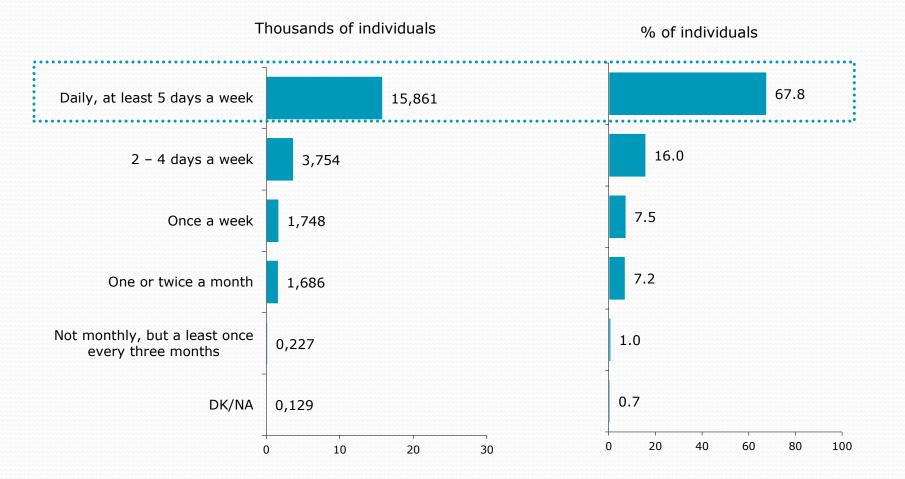
0/ of individuals

on

BAS



Over 15.8 million individuals use the Internet every day



BASE: Individuals aged 15 or over who have used the Internet in the last three months

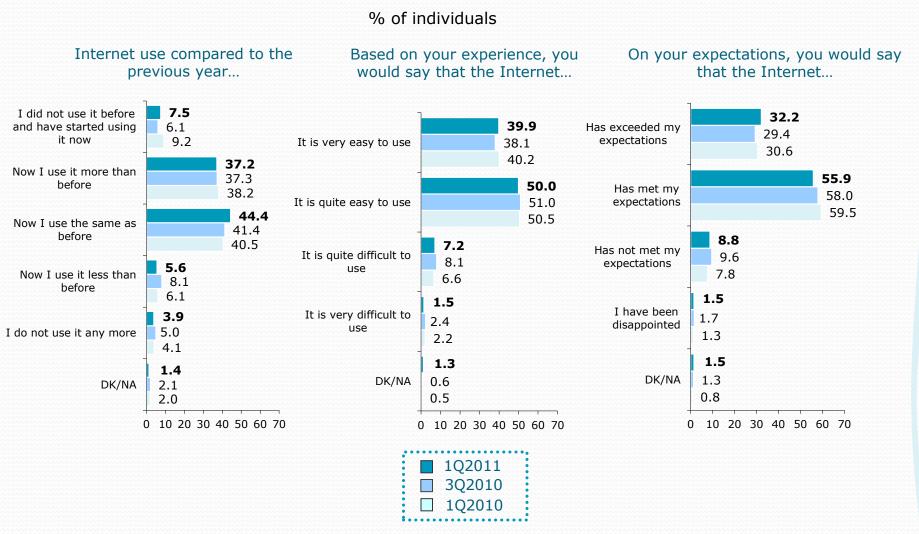
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Internet use, simplicity and expectations

nacional de las telecomunicaciones y de la SI

The Internet has met or exceeded the expectations of over 88% of Internet users

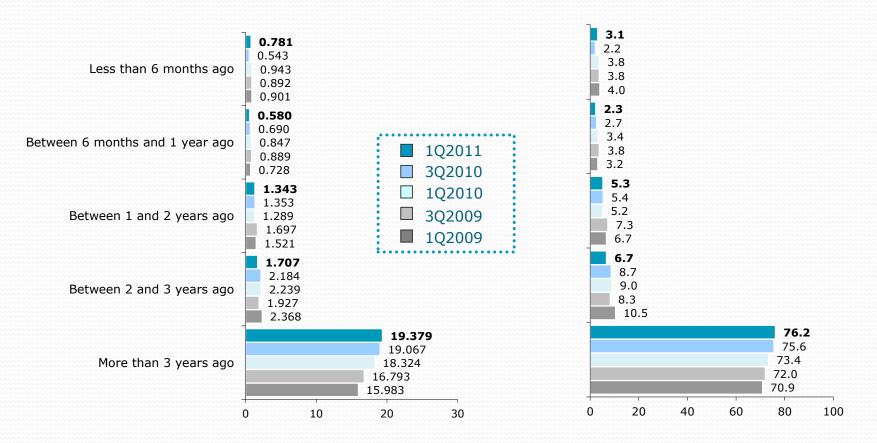


First use of the Internet

Almost 20 million individuals state that they started using the Internet more than three years ago

Millions of individuals

% of individuals



observatorio

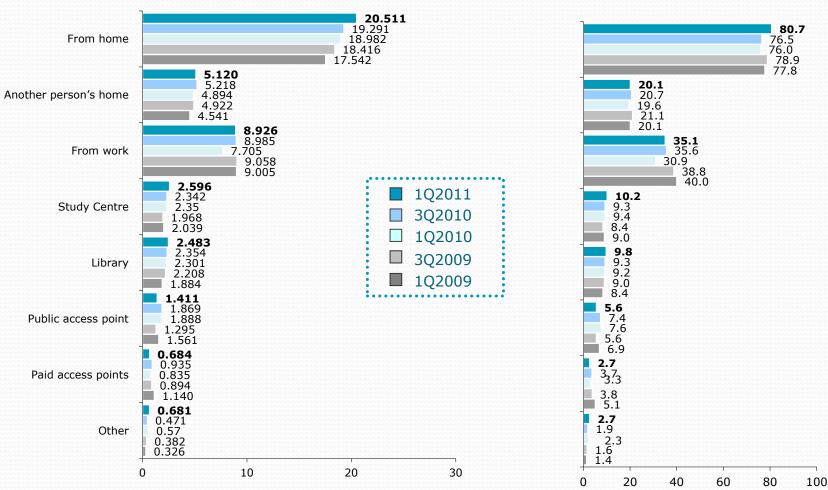
v de la SI

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telecomunicaciones

Internet access place

Eight out of ten users connect to the Internet from their homes



Millions of individuals

% of individuals

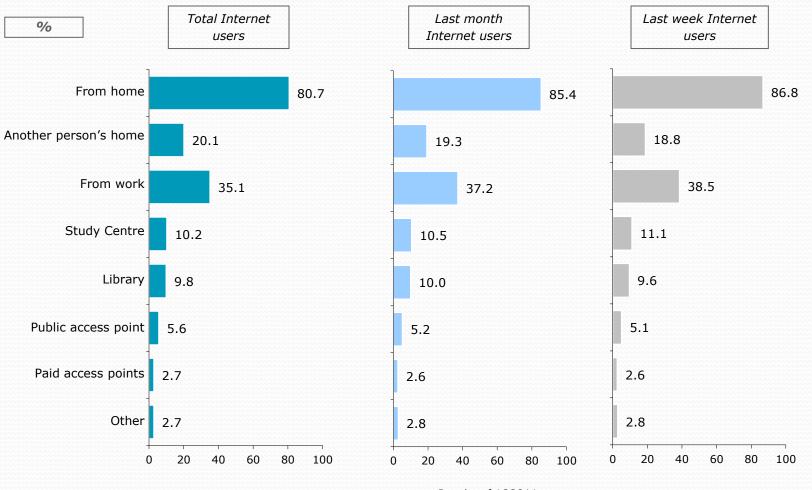
observatorio

y de la SI

Internet access place

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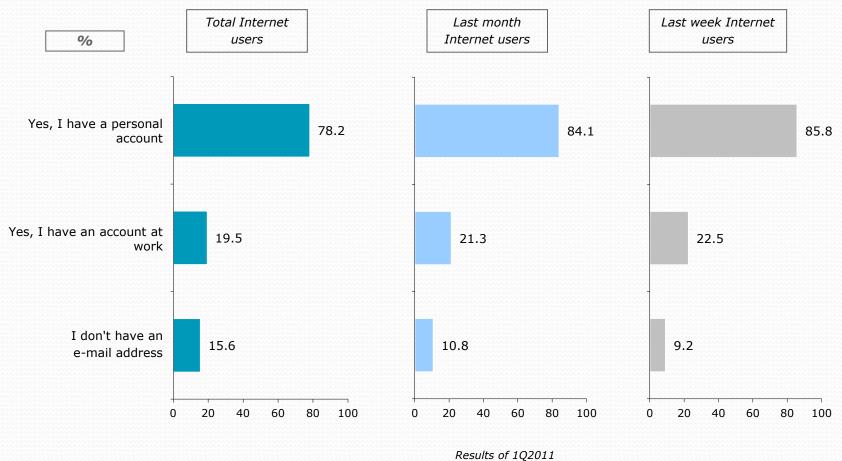
The greater the frequency of use at home, the greater the frequency of use work



Results of 1Q2011 (Jan-Mar 11)

Do you have an e-mail address?

85.8% of the most regular Internet users have a personal e-mail account



(Jan-Mar 11)

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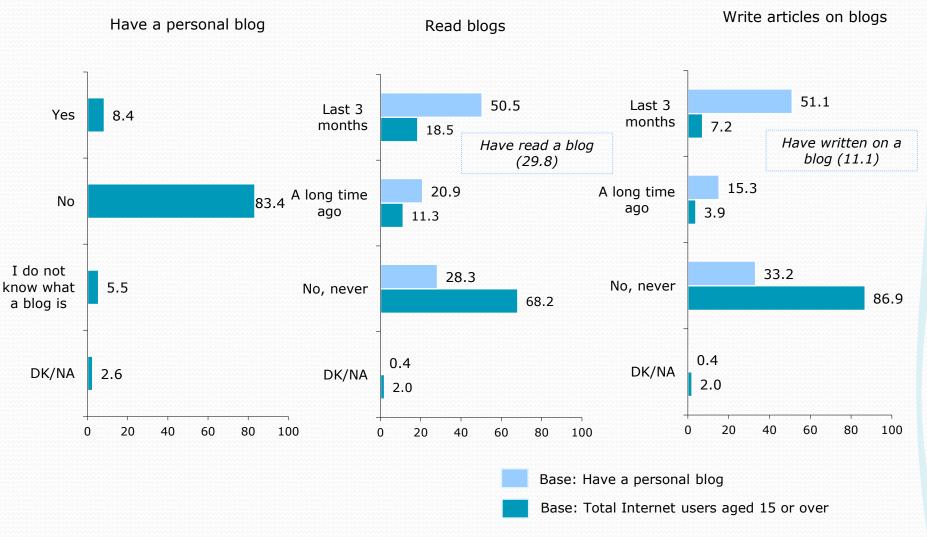
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telecomunicaciones

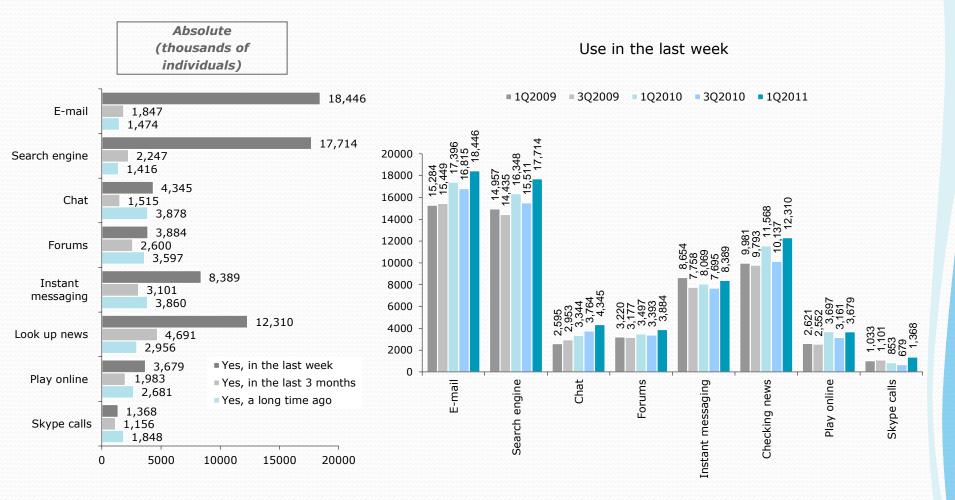
Blogs

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Three of ten Internet users have read a blog at some time



18.5 million people have used the e-mail in the last week

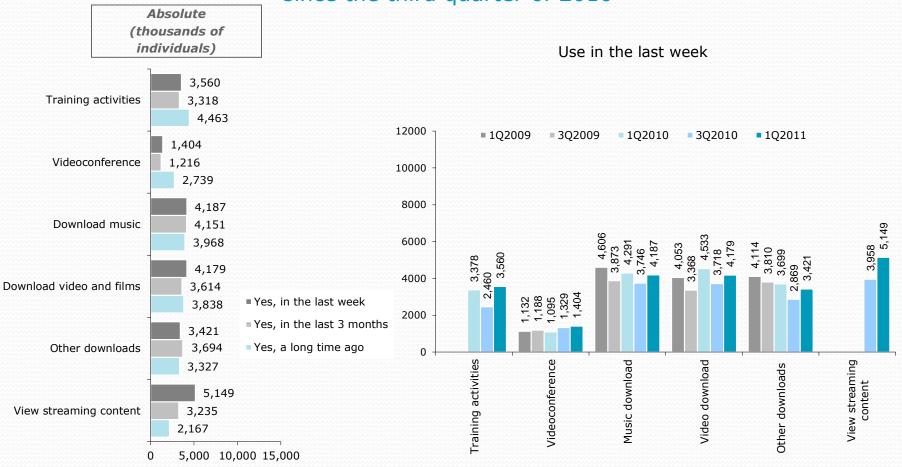


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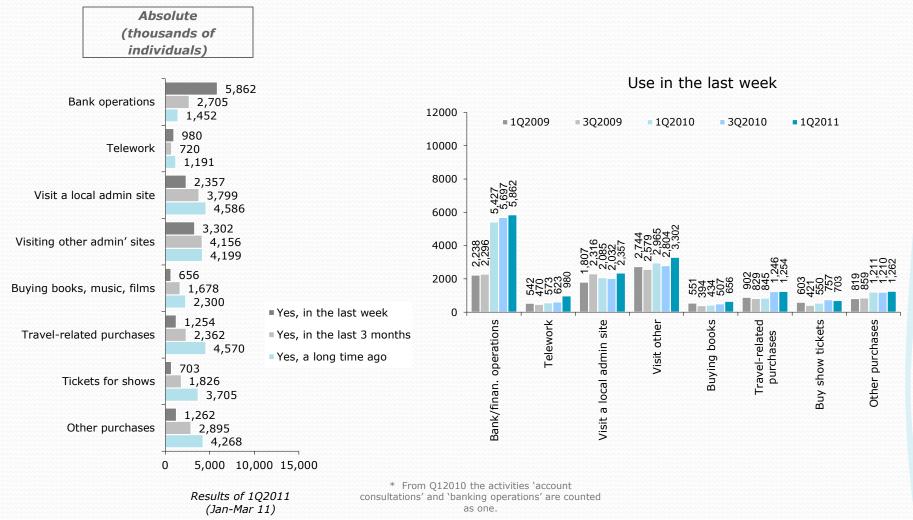
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The consumption of streaming content increases by 1.2 million weekly users since the third quarter of 2010



Results of 1Q2011 (Jan-Mar 11)

5.9 million individuals have made banking operations via the Internet in the last week



84

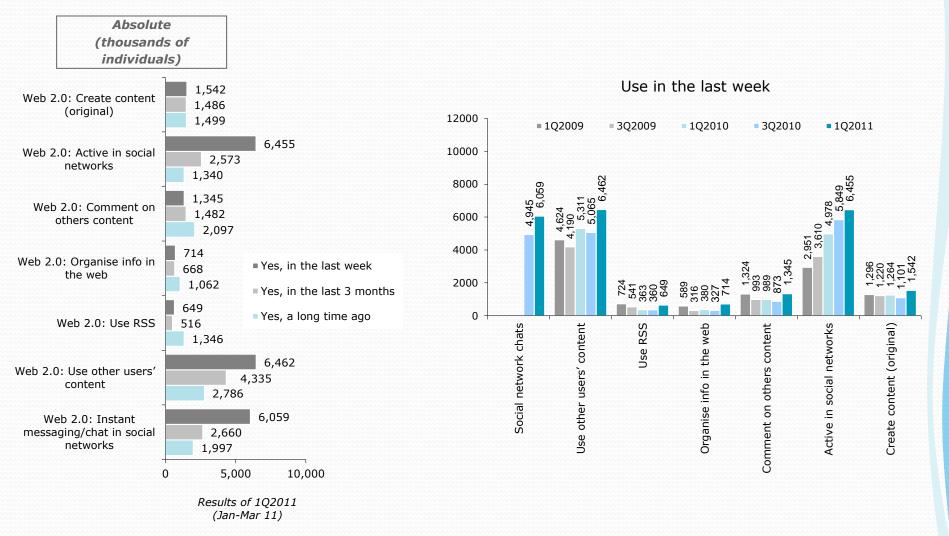
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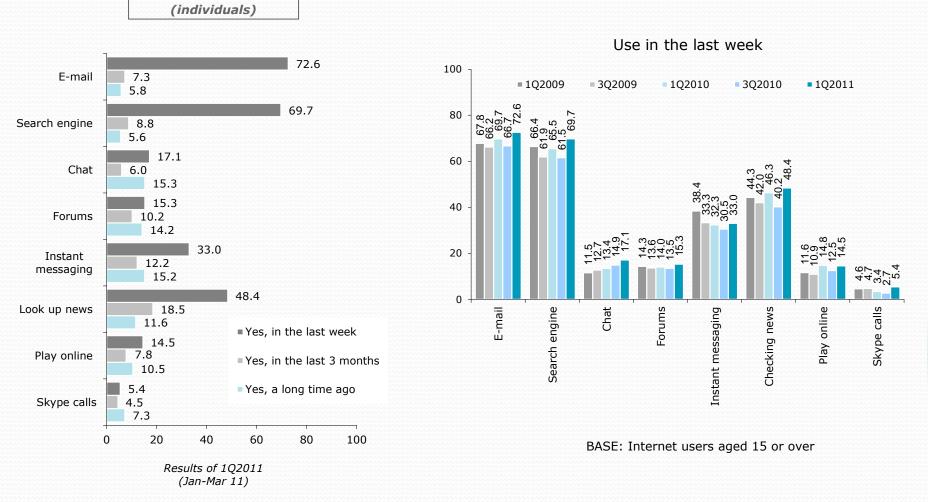
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6.5 million Internet users actively participate on social networks, 1.5 millions more than the previous year



%

70% of Internet users uses a search engine regularly

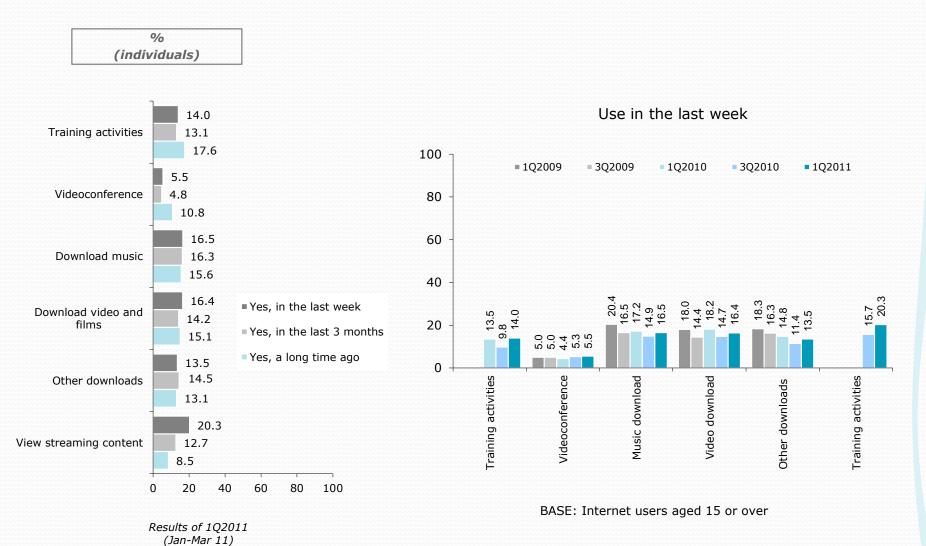


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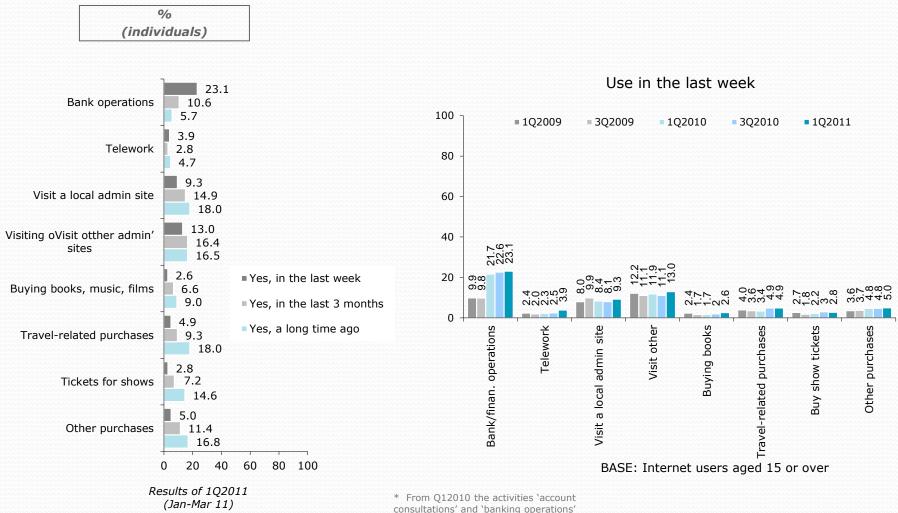
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One out of five Internet users views digital content without storing it regularly



87

Town and city council web sites are visited by 9.3% of the Internet user population in the last week

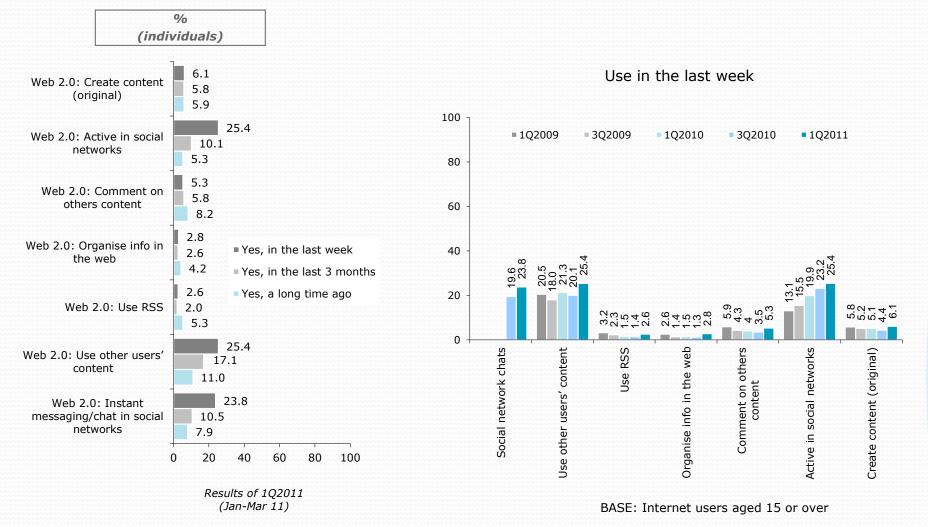


Iltations' and 'banking operat are counted as one. observatorio

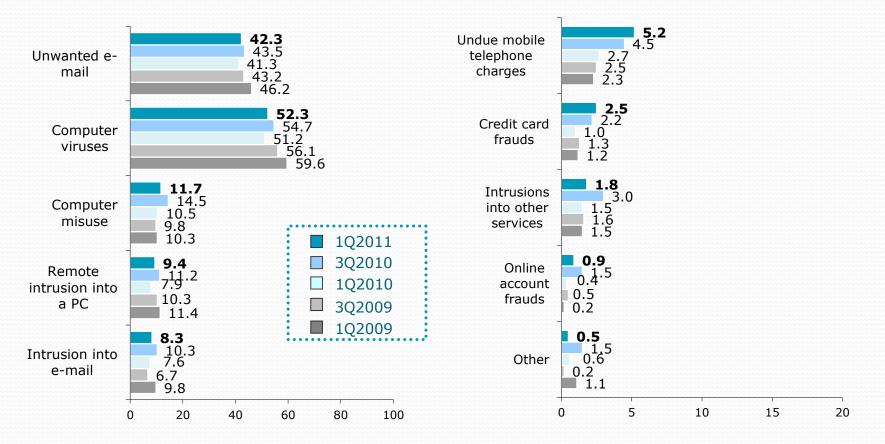
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A quarter of the Internet user population says they frequently consume other users' content



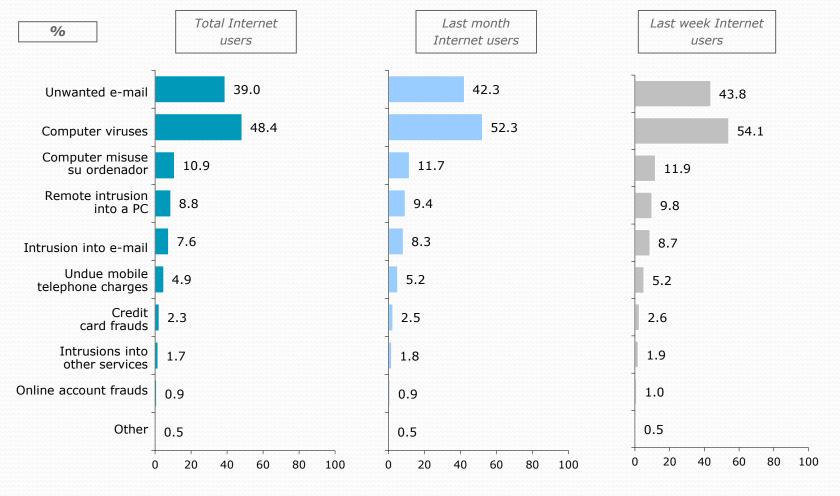
Computer virus incidents have fallen by 2.4 percentage points over the last six months



% of individuals

Have experienced security problems

43.8% of intensive Internet users has received some unwanted email



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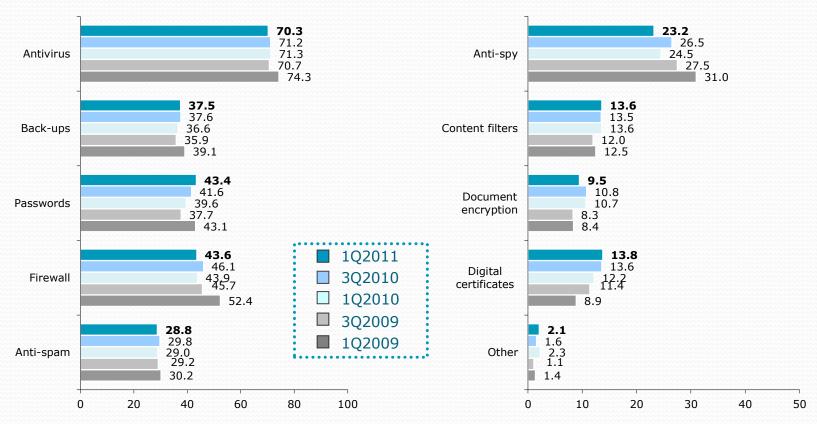
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Have taken security precautions

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The most widely used security precaution is the antivirus, seven out of ten users have one in place

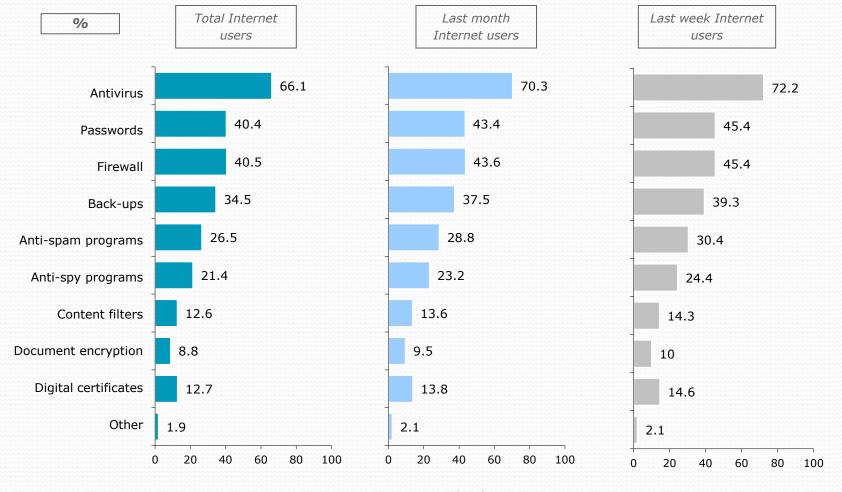


% of individuals

BASE: Individuals aged 15 or over who have used the Internet in the last month

Have taken security precautions

The greater the frequency of use, the more security precautions are taken



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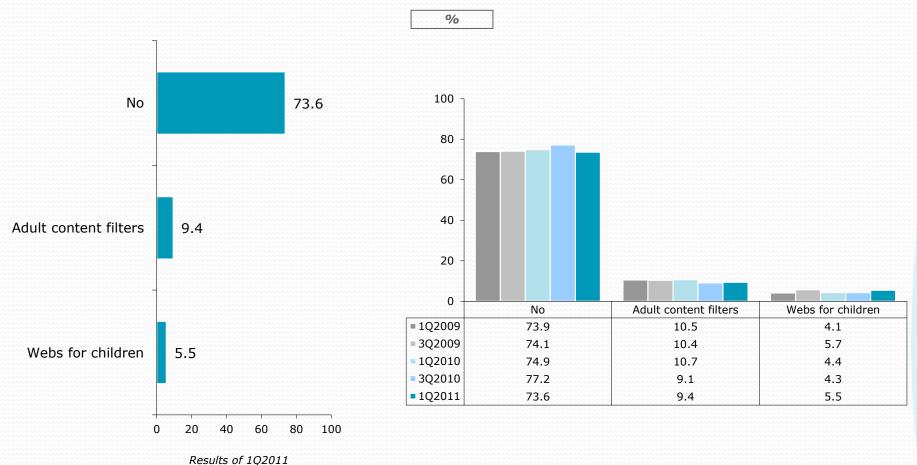
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73.6% of Spanish households does not have any measure in place to control access to online content

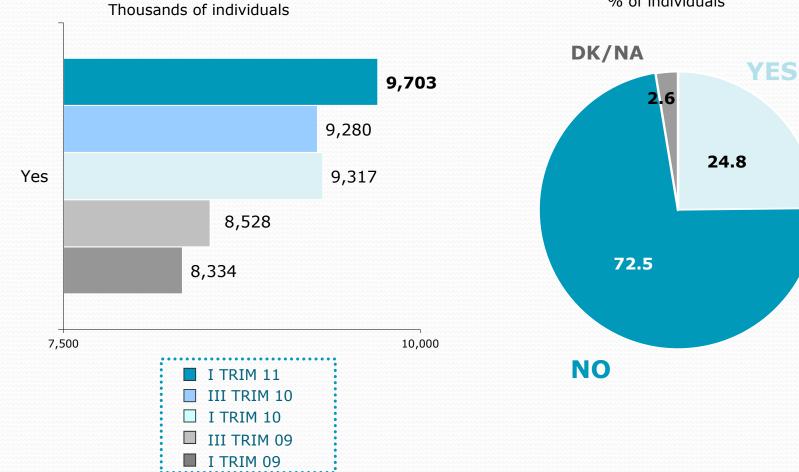


(Jan-Mar 11)

BASE: Households with Internet

Contact with the Public Administration via the Internet

9.7 million individuals aged have contacted the Public Administration via the Internet at some time



% of individuals

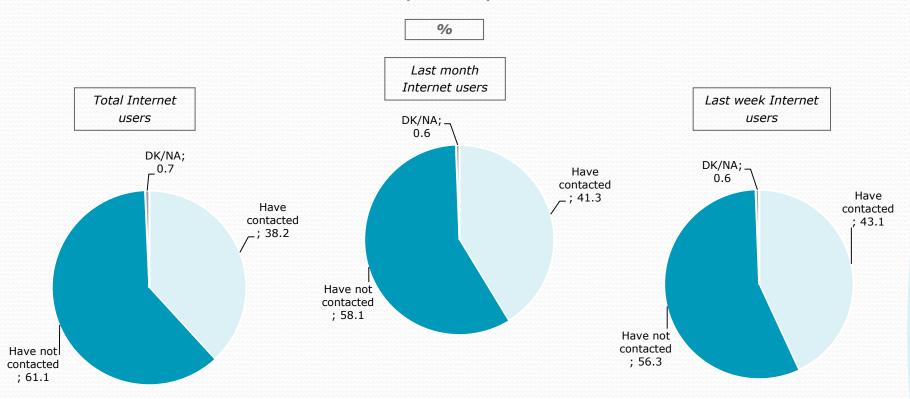
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Contact with the Public Administration via the Internet ontsi

38.2% of Internet users have contacted the Public Administration via the Internet at some time



Results of 1Q2011 (Jan-Mar 11)

BASE: Internet users aged 15 or over

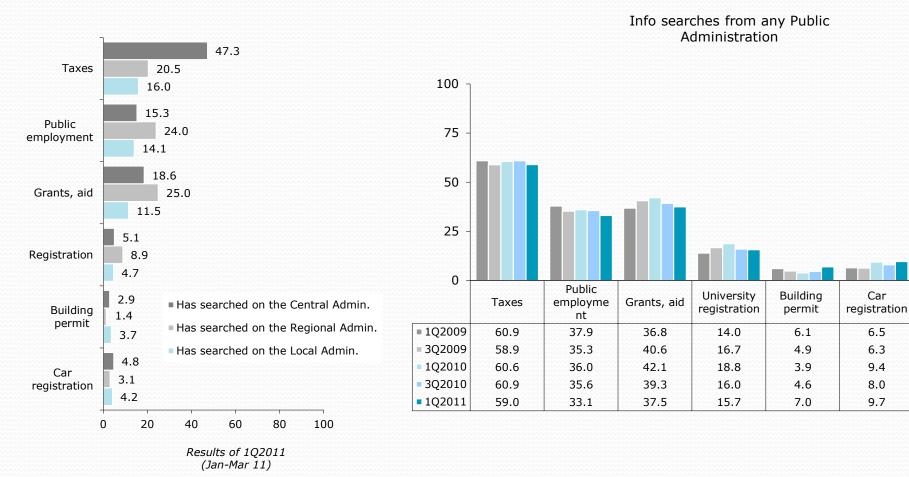
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Searches by service and type of Administration

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Six out of ten users who had ever contacted the e-Administration did it to search for information about taxes

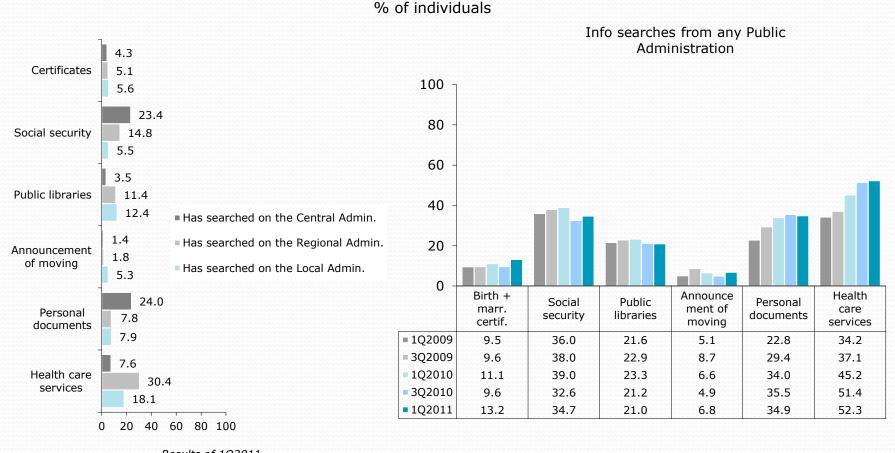


% of individuals

Searches by service and type of Administration

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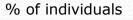
Over half of Internet users who use the e-Administration, do it for searching for information on healthcare services

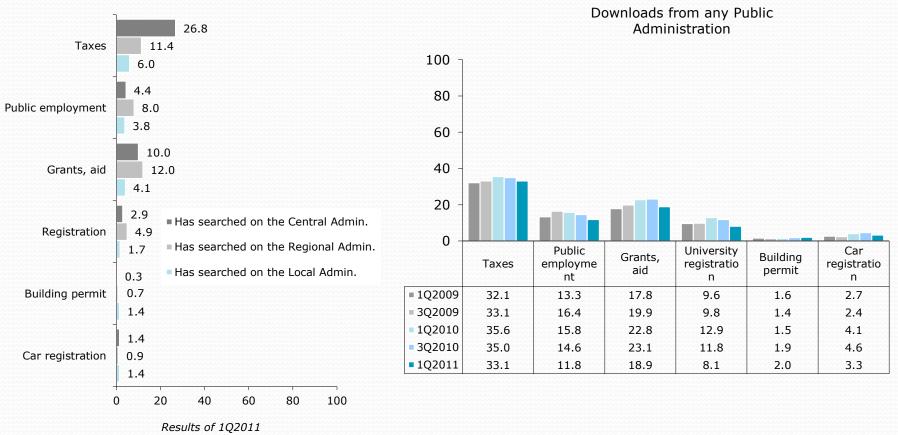


Results of 1Q2011 (Jan-Mar 11)

BASE: Internet users aged 15 and over who have contacted the Adm. via de Internet

A third of all users has downloaded forms related to taxes





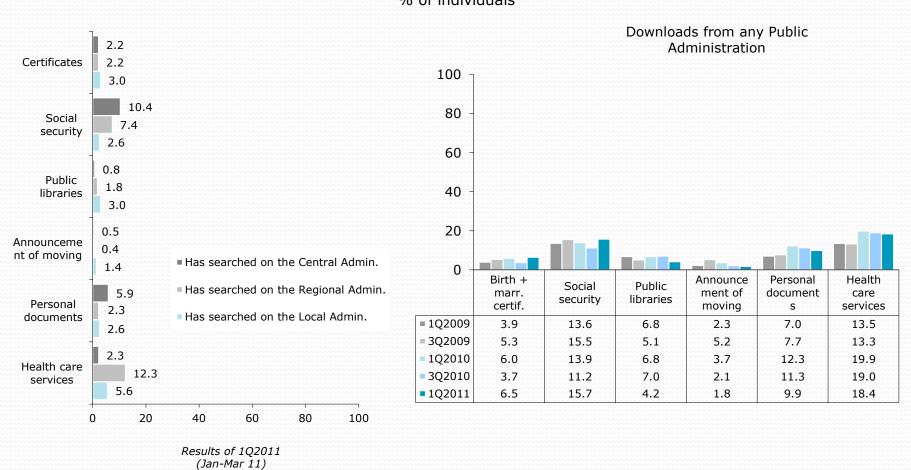
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Form downloads by service and type of Administration

15.7% of the users who have contacted the e-Administration at some time has downloaded a social security form



% of individuals

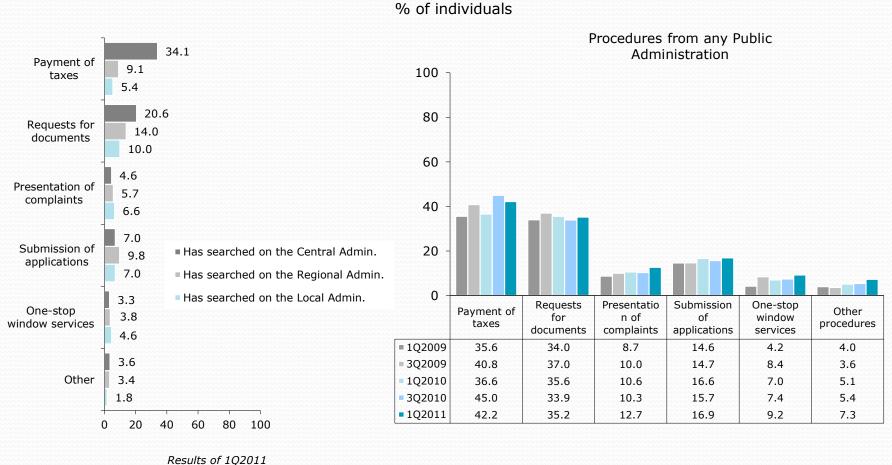
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Procedures by service and type of Administration

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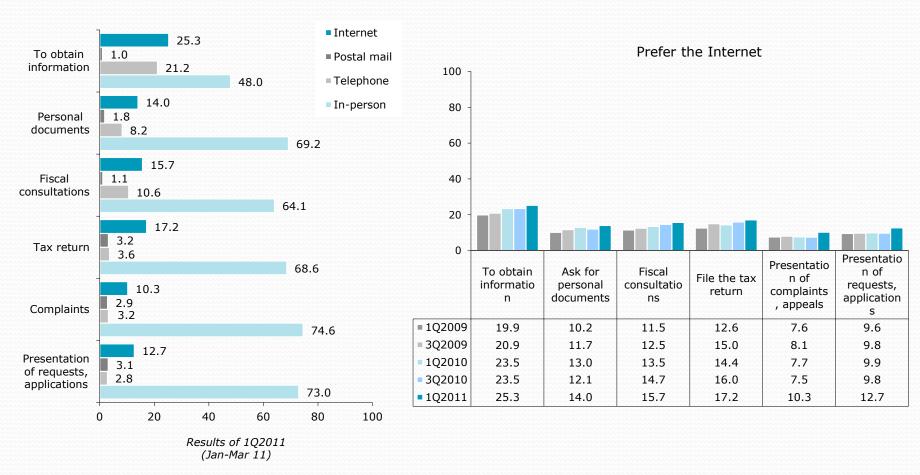
Four out of ten Internet users who have contacted the Administration via the Internet, do it to pay a tax



(Jan-Mar 11)

Preferred method for contacting the public administration

Internet was the preferred method for obtaining information from the Public Administration for a fourth part of the population



% of individuals

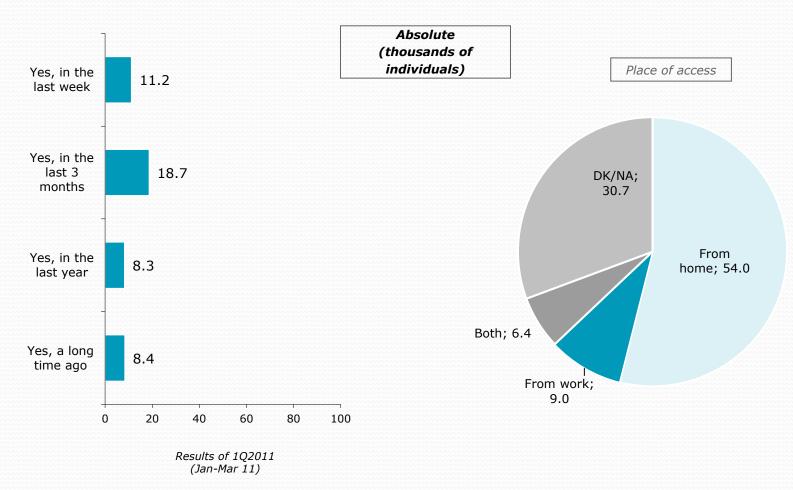
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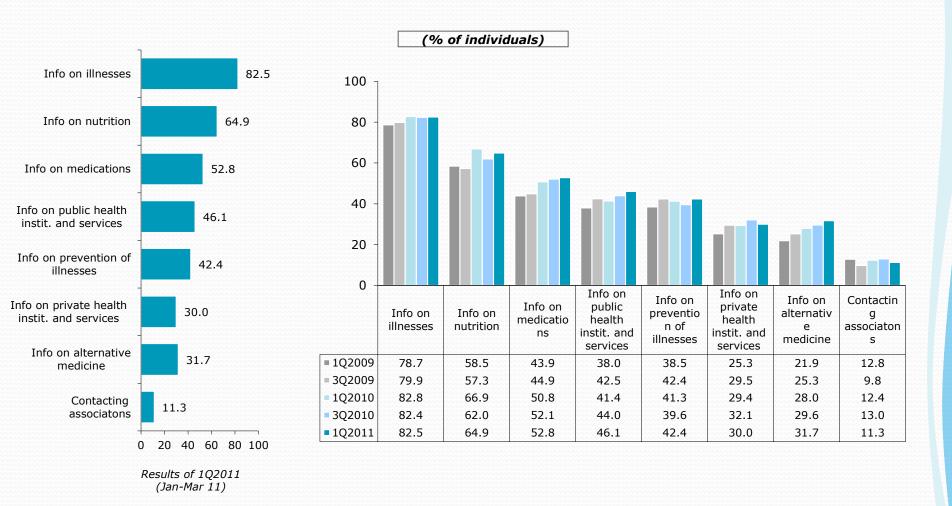
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46.6% of Internet users state they have used the Net for health-related issues

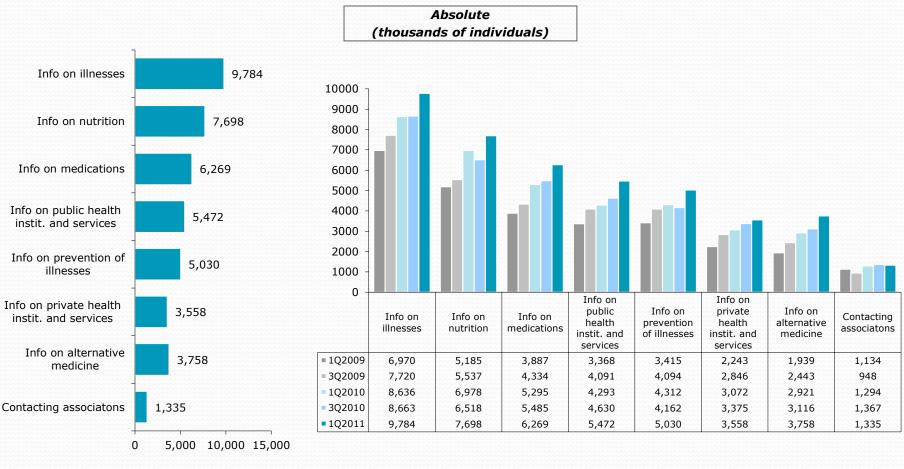


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The health information most frequently sought on the Internet was about illnesses, with a factor of eight out of ten Internet users.



Over 6.2 million individuals use the Internet to search for information on medications



Results of 1Q2011 (Jan-Mar 11)



Objectives and Methodology



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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 telephone, mobile telephone, 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.



Data definitions

Universes: 17,068,913 households. Individuals aged 15 and over: 39.066 million. Individuals aged 10 and over: 41.200 million.

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

Sample: 3,164 households and 6,723 individuals aged 10 and over were included in the questionnaire analysis, 6,345 individuals aged 15 and over. A total of 2,772 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 equipment in the household and the second asks about individuals' uses, habits and attitudes. That is to say, while data on ICT expenditure is measured in every edition (the four quarters of the year), data on penetration and uses of ICT equipment and services are measured by means of questionnaires in odd editions (first and third quarters of the year). For practical purposes, the following convention is used: In even editions, data from the previous odd edition is taken.

Fieldwork: The field work and data processing has been carried out by Taylor Nelson Sofres (TNS). Collection of invoices for the period April-June 2011 was completed during August 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 ±1.74% for households and ±1.23% for individuals aged 15 and over.

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This report on the 32nd 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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Translated by María Pérez

ISSN 1989-7766



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