

**Analysis of the data
from the survey on the
equipment and use of
communication and
information
technologies in
households
(CIT-H 2003)**

**(Final report)
(February 2004)**

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1 Household equipment

1.1 ICT equipment in households

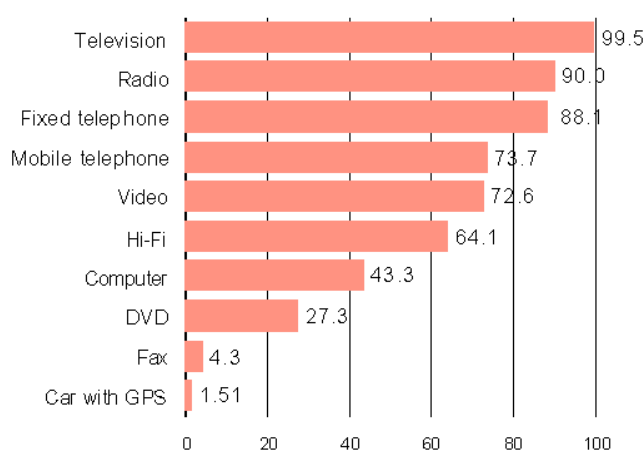
The overall figures show that the implementation of information and communication equipment is extremely widespread in Spanish households. Audiovisual reception equipment such as television and radio is heavily present in households and there is good fixed and mobile telephone communication equipment. Moreover, computer equipment such as the computer reaches notable figures. Only the more recently introduced equipment on the market, such as the DVD or the GPS system in cars offer more modest implementation figures.

The television is the most widespread ICT equipment, given that of the 14,264,600 households studied, it is present in 14,197,040 of them (99.5%). Only 67,560 households do not have a television.

The breakdown of households with television follows the same guidelines in all of the socio-geographic characteristics studied, except in terms of the form of reception of television channels. Almost all receive the signal via a conventional wave aerial (99.1%), 16.4% of households receive it via satellite antenna, 8.8% via optical cable and 2.5% receive digital land television.

The radio equipment, radio cassettes and radio transistors have a high penetration rate, in 90.0% of households, where little percentage differences among the Autonomous Communities.

Information and communication technology equipment in households (% households). 2003

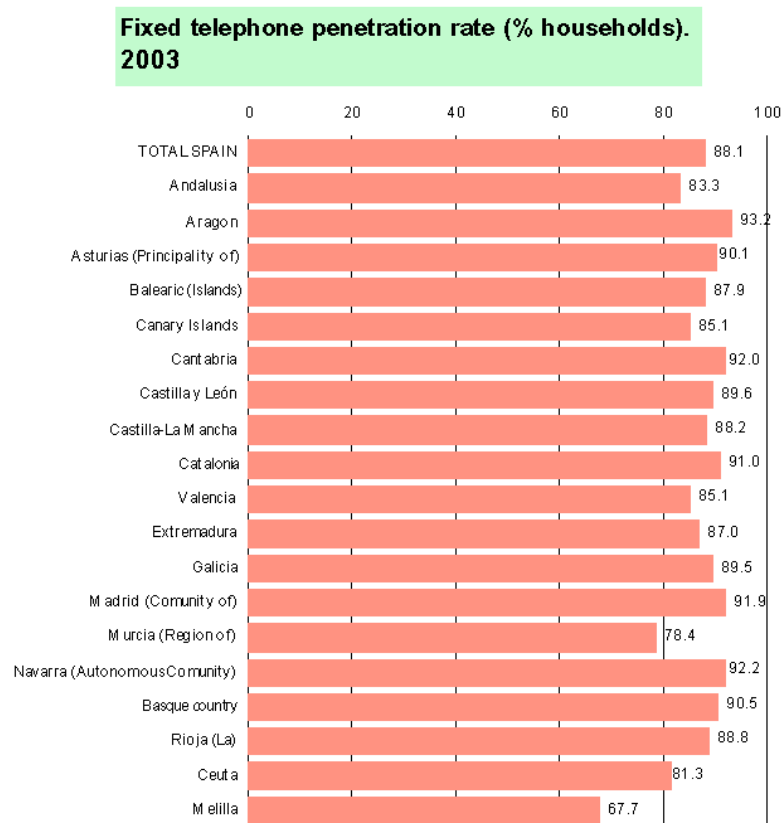


It is worth indicating the film and audiovisual document reproduction equipment such as the video (72.6% of households) and the DVD (27.4%). A strong positive correlation can be seen in the distribution of both pieces of equipment. It can be

inferred that households with a video are incorporating the DVD to the same proportion, thus in the mid-term the DVD could replace the conventional video.

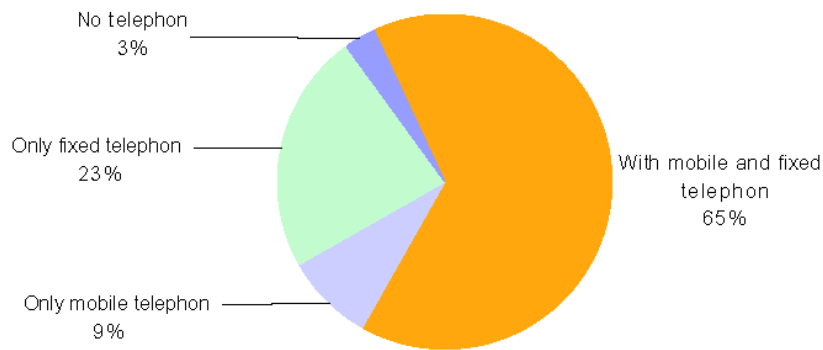
1.2 Telephone equipment in households

88.1% of households have a fixed telephone and 73.7% of households include an adult aged over 15 with a mobile telephones, both exemplary figures of a strong penetration rate. However, measuring the households with some type of telephone together, almost all of them 96.9%, have this equipment.

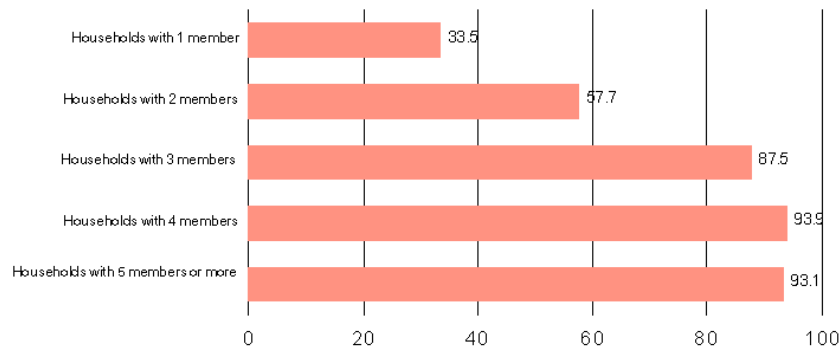


This shows that both types of telephone are used in addition to each other. 23.2% of households only have a fixed telephone and 8.8% of households only have a mobile telephone. Furthermore, 65.0% of households have both types of telephone. It can be seen from this data that the purchase of a mobile telephone by household members involves a certain incipient drop in the presence of fixed telephones in the household due to the relatively recent appearance of the former.

Households with telephone (% households)



Households with a member aged over 15 with a mobile telephone (% households). 2003

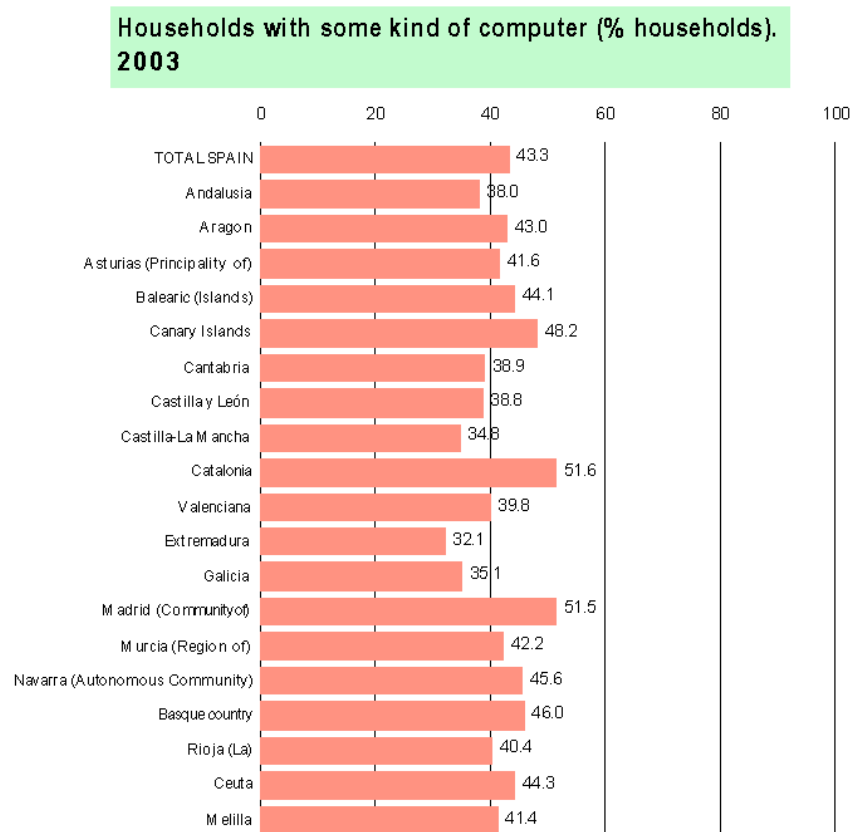


1.3 Computer equipment in households

The main conclusion that can be reached in terms of computer equipment in Spanish households is that almost half have some type of computer, more specifically 6,176,274, representing 43.4% of the total number of households, although this data can be split up into most households with a desktop computer or PC (41.4% of households) and a smaller amount with a laptop (6.5%) and other type of computer (1.9%).

Focusing on the households with more than one type of computer (5.9% in relation to the total number of households), it can be seen that most have both a laptop and a desktop computer. Therefore, the households with only one type of

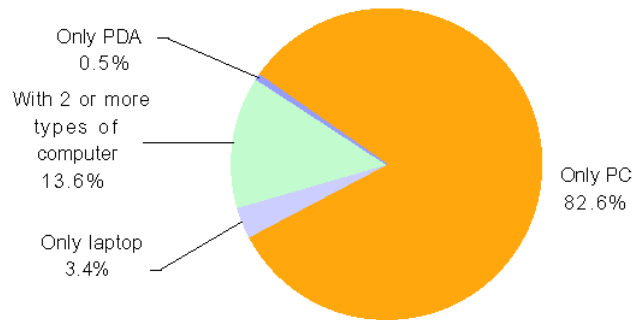
computer have mostly chosen a desktop computer and represent 35.7% in relation to the total number of households, i.e. 8.2 households for every 10 households with a computer.



Although there are no great differences among the autonomous communities, Cataluña (51.6%) and Madrid (51.5%) stand out in terms of computer equipment, although in Madrid the laptop computer is much more widespread than in the rest of Spain.

In general, the more members in the household the more likely the household is to have a desktop computer, with significant differences between single-member households (12.9% of households with a computer) and households with 5 members or more (60.8%).

Households with computers (% households)

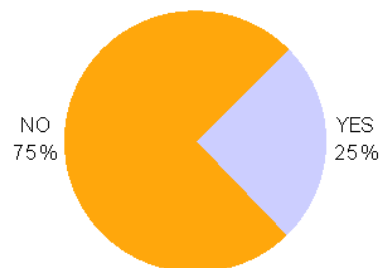


In terms of residential habitat, the percentage in large municipalities is higher than in smaller ones. However, the difference between these percentages is not as significant as would be imagined, which indicates that in municipalities of less than 10,000 inhabitants computer equipment is relatively high (31.0% of households).

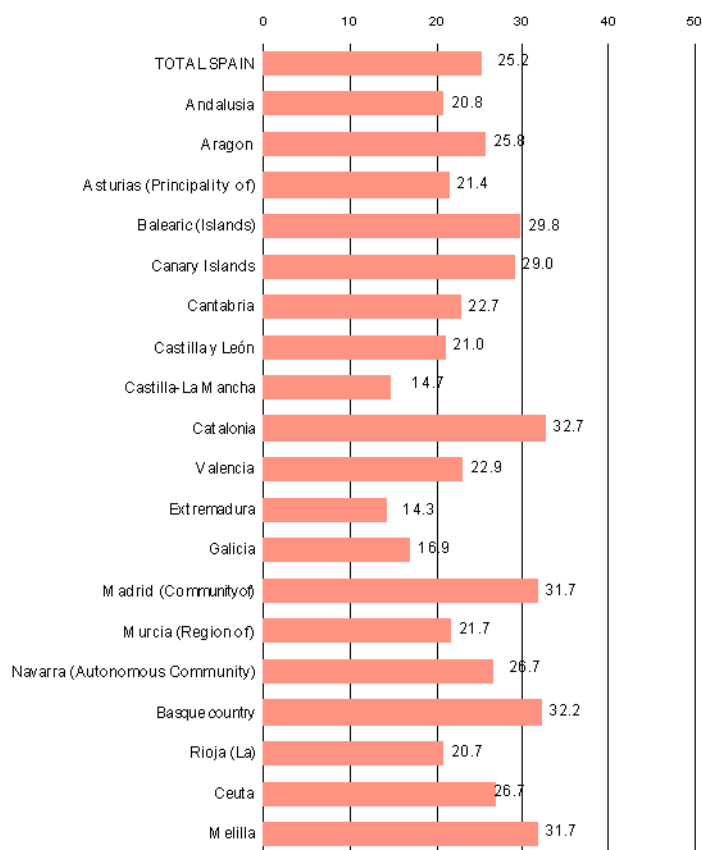
1.4 Internet access in households

The most relevant data is that there are 3,599,054 households with internet access, representing 25.2% of the total. This access is more widespread in Cataluña (32.7% of households), the País Vasco (32.2%), Madrid (31.7%) and Ceuta (31.7%).

Households with internet access (% households)



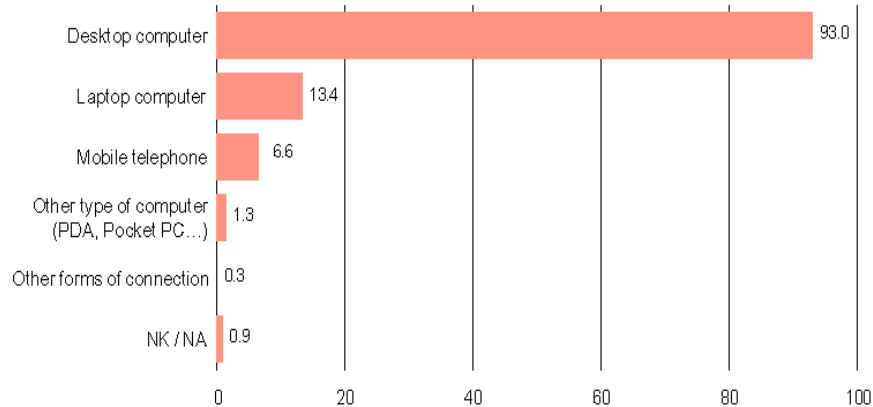
Households with internet access (% households). 2003



Most of these households connect to the internet using a desktop computer (93.0%) or a laptop computer (13.4%). However, this percentage could increase in the future if we note the number of households with some type of computer and with internet access, which amounts to 57.5% (3,553,957 households). This suggests that there are another 2,609,330 potential households that could connect to the internet in the future, depending on the configuration of the computer.

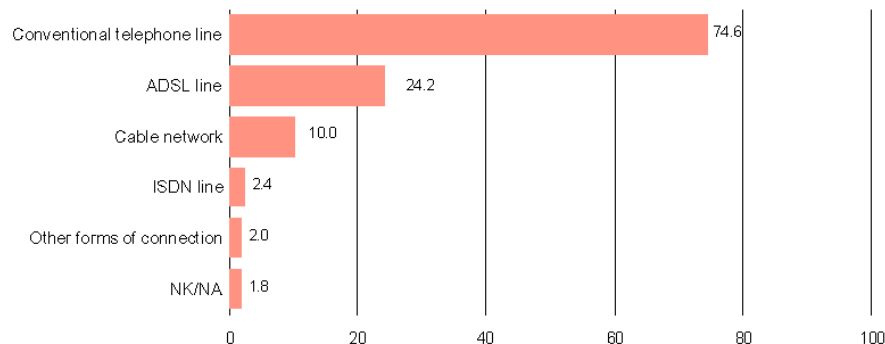
The total of computers with internet access through Broadband lines is 1.275.790. This amount represents 35,5% among the households who have internet access. By Broadband line is meant ADSL, IDSN lines and cable network.

Equipment used for internet connection (% households). 2003



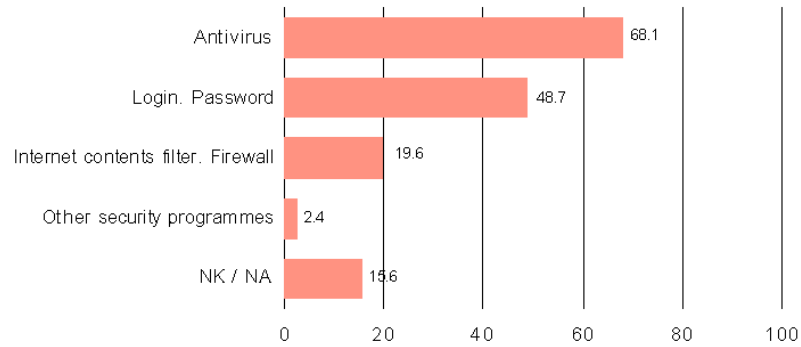
The most commonly used form of connection for internet access continues to be the conventional telephone line and a modem (74.6%), although there has been an increase in the number of Broadband lines such as ADSL (24.2% of households) and the cable network (10.1%).

Forms of internet connection (% households). 2003



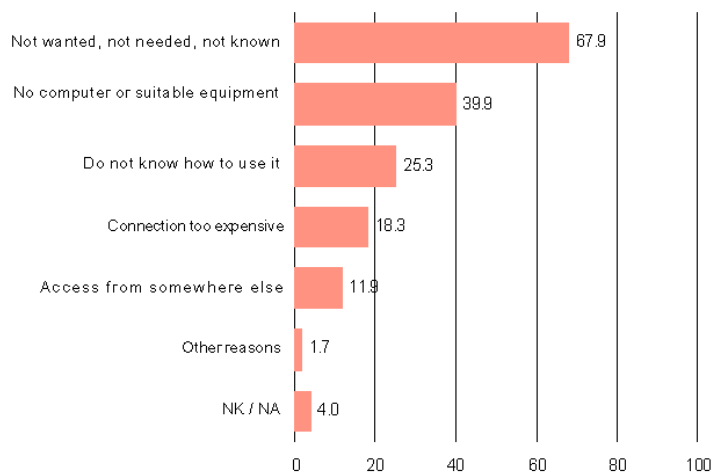
The security problems during connection to the internet have motivated residential users to install some kind of computer system security programme. More specifically, *antivirus* programmes are installed on 68.1% of the computers in households, 48.7% of which had some kind of *login* and 19.6% had some *internet content filter* installed.

Security programmes installed on the computer over the past three months (% households). 2003



For their part, residents in households without internet access give the main reason (for not having access) as being because *they do not want it, do not need it or do not know about it* (67.9%), *do not have a computer or do not have suitable equipment* (39.9%), *do not know how to use it* (25.3%) and a significant 11.9% answered that they *access from somewhere else*, i.e. at least 1,265,312 people use the internet from somewhere other than their household due to a lack of access.

Reasons why households have no Internet connection (% households). 2003

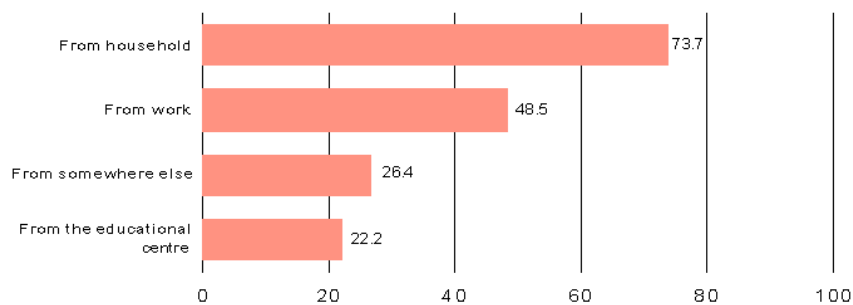


2 Habits of the population in the usage of ICT

2.1 Computer usage by the population

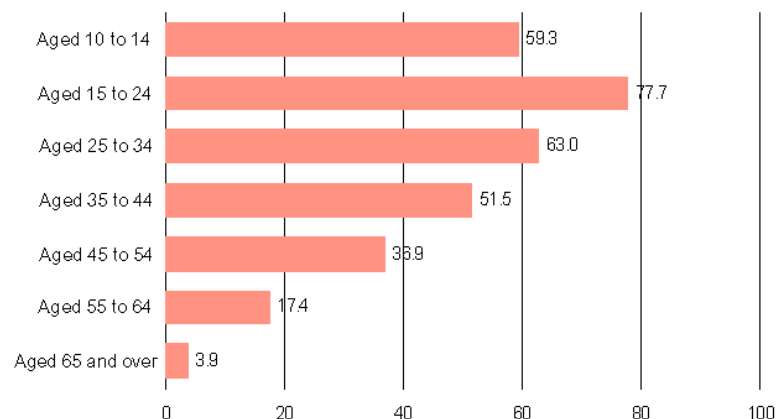
Over the past three months, a total of 15,149,530 people have used a computer in Spain. These people basically used them from their own households (73.7%), 48.5% of users did so from their work, 22.2% from their educational centre and 26.4% from somewhere else such as libraries, cyber-café, households belonging to families or acquaintances, ...

Place of computer usage over the past three months (% people). 2003

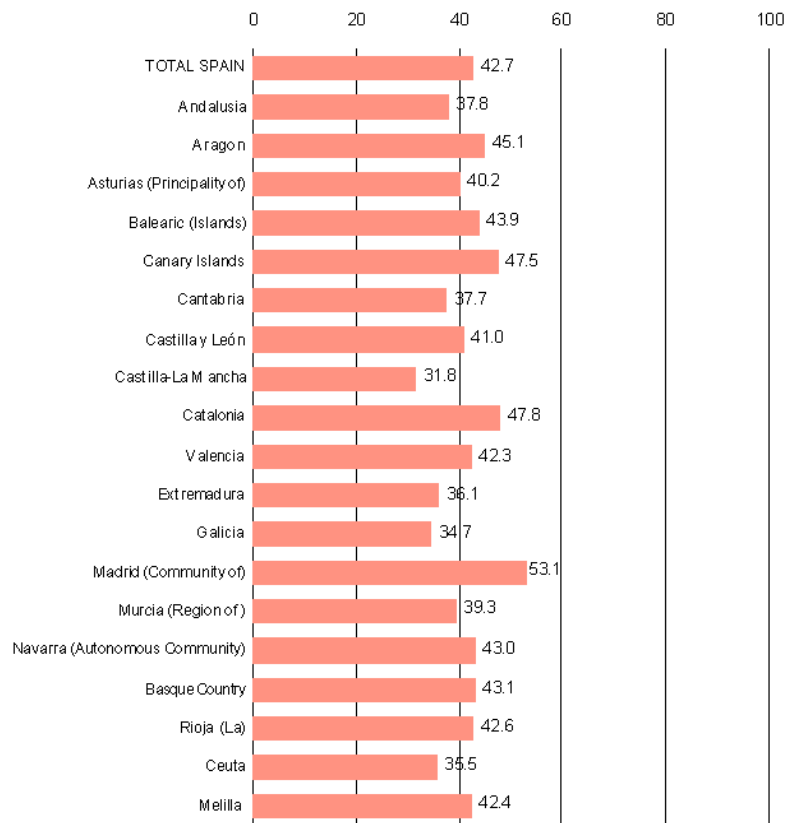


The computer user profile indicates that it is the younger population that most uses it, varying from 77.7% of users aged between 15 and 24 to 5.5% of users aged between 65 and 74. More men than women use them (47.1% compared with 38.5%). The geographic distribution of users indicates that the autonomous communities most notable for the usage of computers by their populations are Madrid (53.1%), Cataluña (47.8%), Canarias (47.5%) and Aragón (45.1%).

People to have used the computer over the past three months (% people). 2003

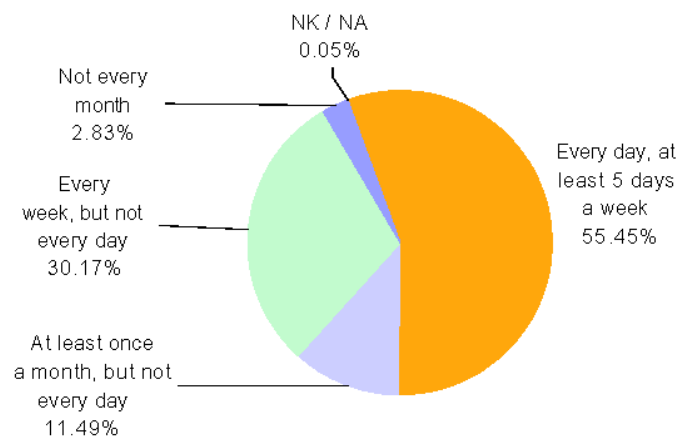


People to have used the computer over the past three months (% people). 2003



These users frequently use the computer, half of them using it every day (55.5% of users). The concept *daily* should be understood as being at least five times a week. Users using the computer every week amount to a percentage of 85.6%.

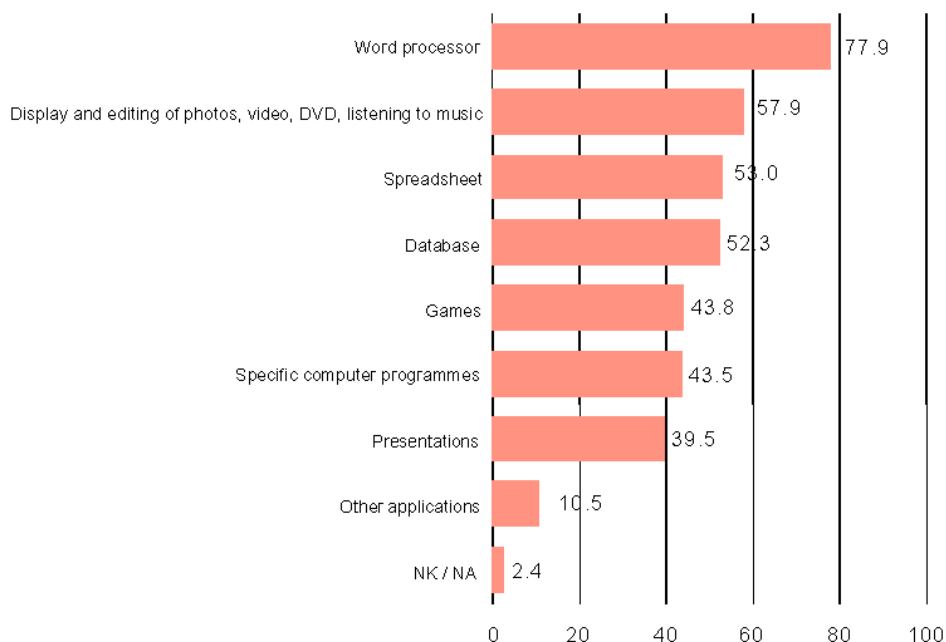
Frecuency of computer usage over the past three months (% people). 2003



This frequency is lower in people with primary education and progressively increases as the level of education rises. Likewise, the employed make intensive use of the computer –even more than students– and, of the employed group, the employed use ITC more frequently than the self-employed.

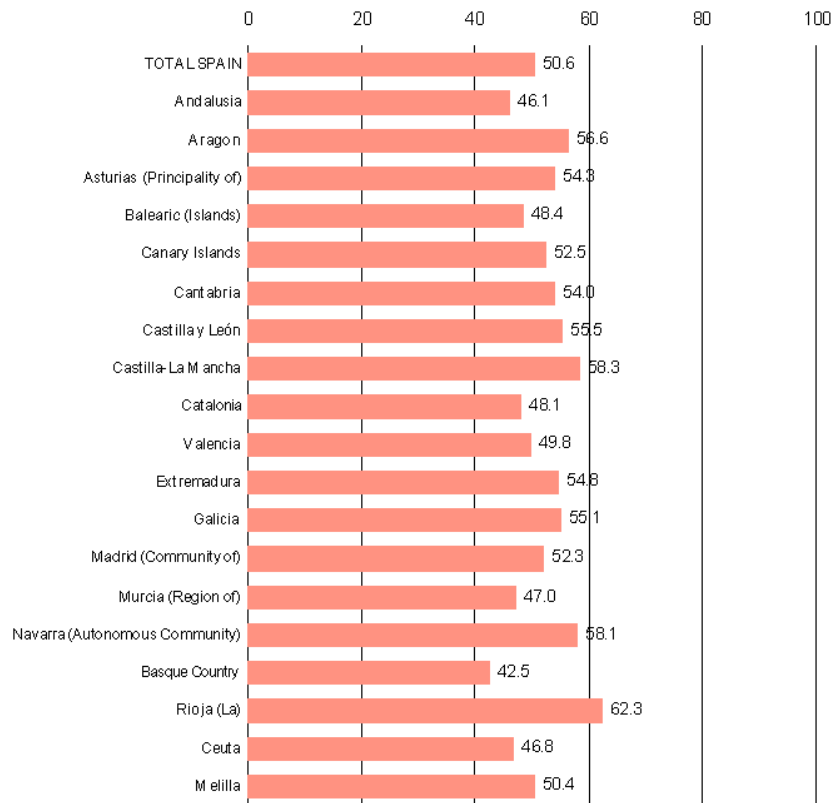
In computer usage, different programmes or applications are used, although the most frequently used are mostly the *word processor*, which is used by 77.9% of users, followed by *photo, video and DVD display and editing and music listening programmes* (57.9%) and *spreadsheets* (53.0%) and *databases* (52.3%).

Programmes or applications used on the computer in the past three months (% people). 2003



Half of the users have taken some kind of computer course lasting for at least four hours and 17.9% during the past year, while 32.1% took a course over a year ago. However, we find that 49.4% of computer users have taken specific computer courses, from which it can be deduced that 7.5 million users may not obtain the utmost output of the programmes or applications they use.

Computer users to have taken a computer course (% people). 2003

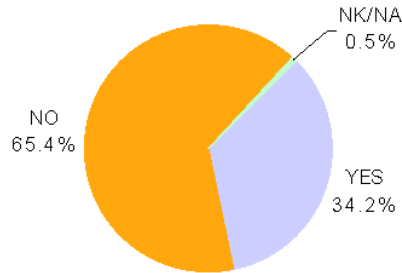


2.2 Internet usage by the population

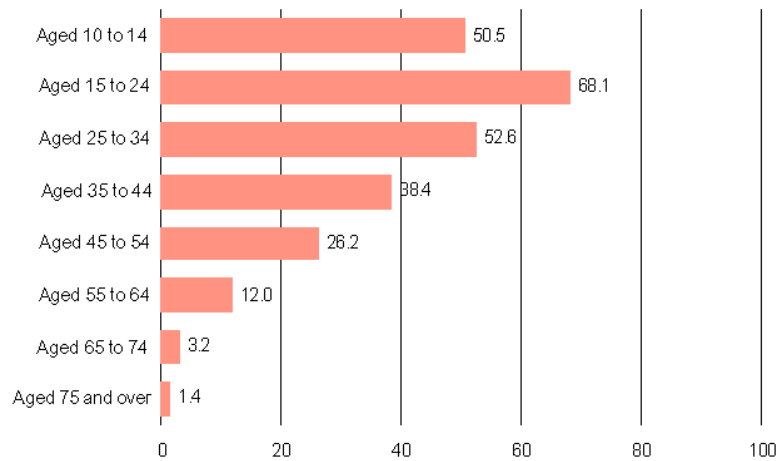
Internet usage has become extremely widespread among the Spanish population aged over 15, given that 34 people of every 100 declared to having used it over the past three months. This implies a figure of 12,130,100 people.

It is used more by men than women (37.9% men compared to 30.7% women), particularly among the young population (68% of users aged from 15 to 24), which is in line with the 82.4% of student users who have accessed the internet.

People to have used the internet in the past three months (% people)

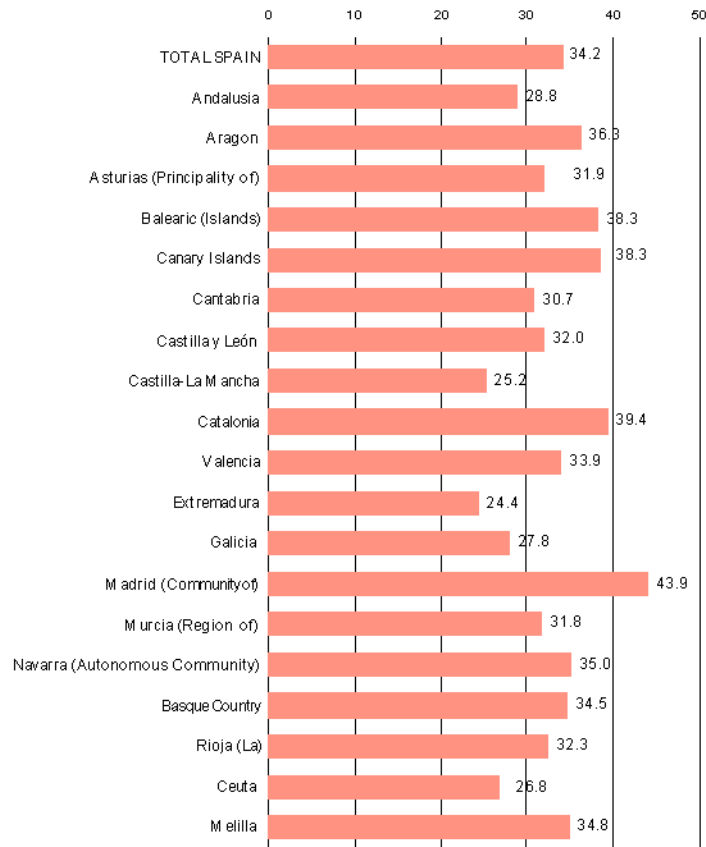


People to use the internet in the past three months (% users). 2003



The breakdown by autonomous community geographically illustrates the use of internet with a higher proportion of users in Madrid (43.9%) followed by Cataluña (39.4%), Canarias (38.3%) and Balears (Illes) (38.3%). More specifically, it is in the municipalities of over 100,000 inhabitants and the provincial capitals where there is a greater proportion of users (40.2%), this proportion decreasing in smaller municipalities.

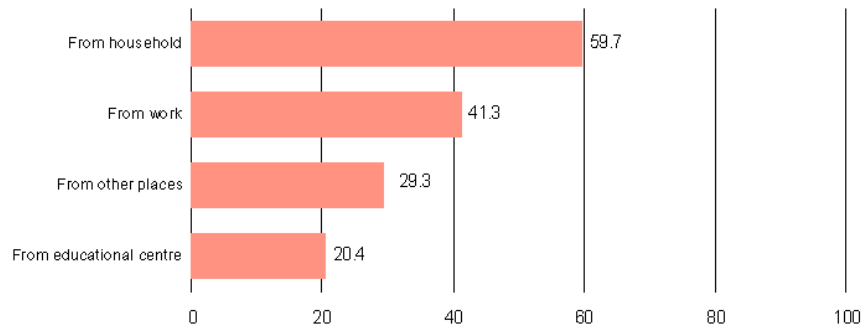
**People to have use the in the past
threemonths(% people). 2003**



15.2% of people living in single-person households use the internet, compared with 43.6% of people living in households of four members. This apparent anomaly can be explained by the fact that households with one or two members present two very different typologies: one, that of households in which either middle aged or young employed people live (the members of these households preferably use internet, 61.1%, from their work, when the average usage from work is 41.3%) and the other, that of households in which retired people live. Given that the latter use the internet significantly less, the average percentage of usage in these one or two-member households is lower than that of households with more than two members.

More specifically, the place of usage shows internet usage like no other variable on the segmentation of the Spanish population. 59.7% of users accessed the internet from their households, 41.3% from their work, 20.4% from their educational centre and 29.3% from other places such as paying internet centres, cyber-café, libraries, households of families or acquaintances, public centres, ...

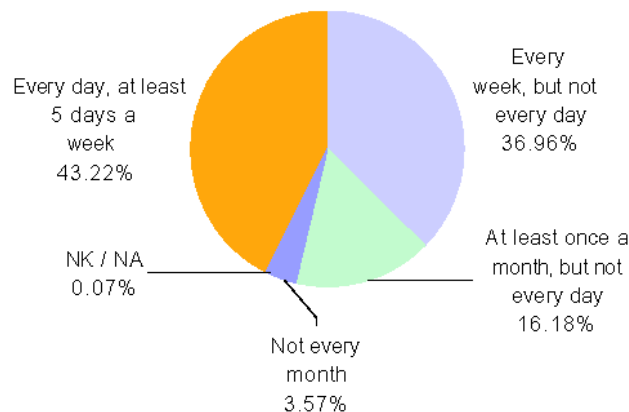
Place internet was used over the past three months (% users). 2003



More specifically, middle aged users at work, a lot of young users (aged from 15 to 24) in the educational centre, a relatively uniform group of all ages using it from their households and a group of people aged below 34 using it from other places such as paying internet centres, cyber-cafes, libraries, households of families and acquaintances, public centres, ...

The intensity of usage of the internet by Spanish users is relatively high according to the usage frequency and time spent data. On one hand, there is a group of 9,726,202 *frequent* users (using the internet every week) and, on the other, a group of 2,395,759 more *sporadic* users (using it occasionally every month). Therefore, the frequency with which Spanish people access the internet is mostly weekly, 80.2% of users, of which 43.2% of users access every day and 36.9% every week. These frequent users devote an average of between one and five hours to the internet.

Internet usage frequency over the past three months (% users). 2003

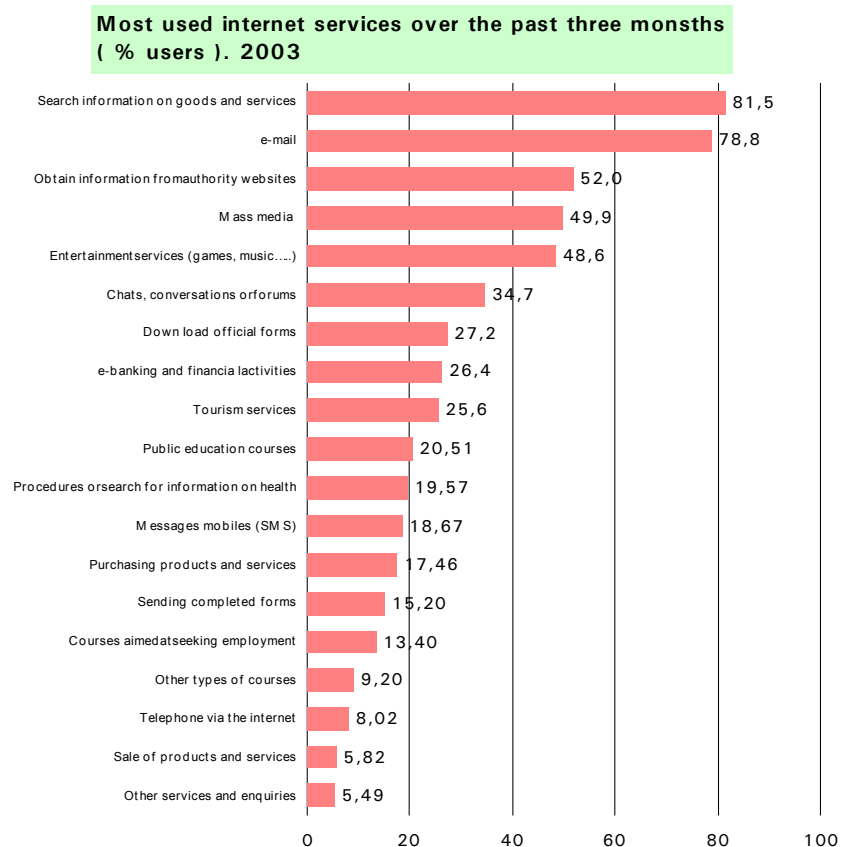


Studying the usage of the internet, we find two dominant trends that motivate people to use the internet: *communications* and the *search for information* in general.

To date, the most widespread services include communications via *e-mail*, which is used by 9,554,141 people (78.8% of all users) and the *search for information on goods and services*, which is used by 9,891,093 people (81.5% of users).

Other communication services, such as *conversations, forums and chat rooms* are used by 34.7% of users, although the type of user is very different between both types of communication service: *e-mail* maintains a great homogeneity of users with no great socio-demographic differences, whereas *conversations, forums and chat rooms* particularly attract the attention of a very young group of users, which is distributed relatively homogeneously over the different sizes of municipality.

In terms of the other great dominant trends, the search for information, it is seen that there is a huge need for varying information. Thus, 81.5% of users *search for information on goods and services* and 52.0% obtained *information from Authority websites*. However, this search is not reflected in the immediate use of this information, given that only 15.2% of users *sent completed forms to the Authorities* and 17.5% *purchased products and services over the internet*.



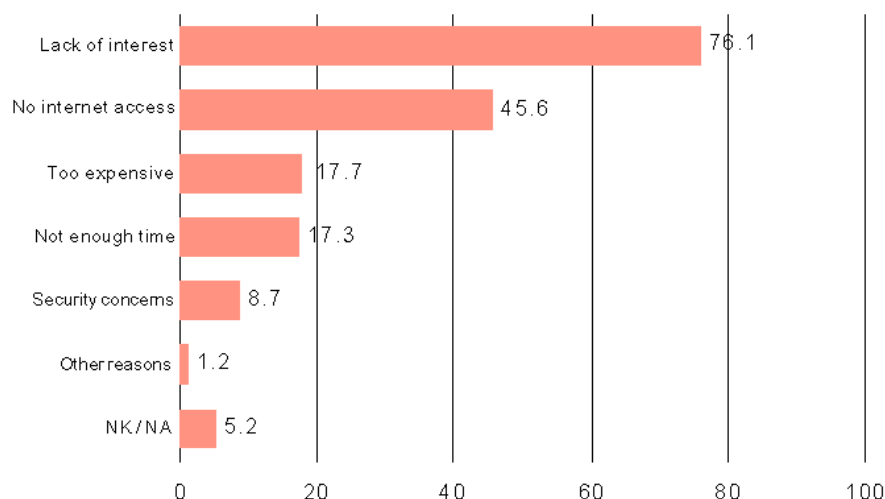
Other frequently used services include the *media*, the reading of newspapers and magazines on the internet, listening to the radio or watching the television, services that are used by 49.9% of users, as well as *entertainment services*, a concept that includes various activities such as games and music over the internet, ..., which are used by 48.6% of users.

Connecting to the internet communications network involves its own risks for computers or equipment connected. The type of security problems found by users over the past year is varied.

The main security problem facing internet users are *unrequested or undesired e-mails*, a problem of 6.6 million users, over half of the total. The other most widespread problem was the attack of *computer viruses* that reach the computer, with an incidence of 32.4% of all users and *exposure to illegal or offensive contents*, an 18.3% incidence, which includes concepts such as the display of undesired websites, connection to website by deception the attack of computer piracy, access and manipulation of computers by others, ...

Lastly, in terms of internet usage, it is worth studying the population that does not use it and analyse their motivations. The main reasons for people not accessing the internet were the *lack of interest* (76.1%) and the *lack of access* (45.6%), both closely linked. For its part, the *high financial cost* was only mentioned by 17.7% of people and the *lack of time* by another 17.3%.

Reasons for not having used the Internet over the past three months (% non-users). 2003

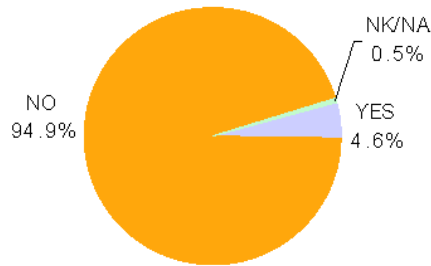


2.3 e-commerce usage by the population

A total of 1,625,615 people purchased products or services over the internet in the past three months, representing 4.6% of all adults aged over 15, although

another 1,262,667 people (3.6%) had purchased over the internet once in the past.

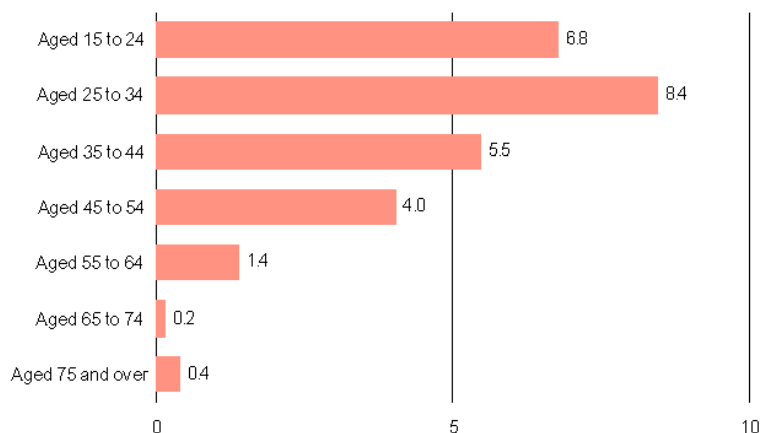
People to have purchase over the Internet in the past three months (% people)



Internet users purchasing over the internet in the past three months amounted to 13.3% of said users. In addition, the potential of internet purchasers is based on users who have never made a purchase, more specifically 86.5% of all users (10,495,830 people).

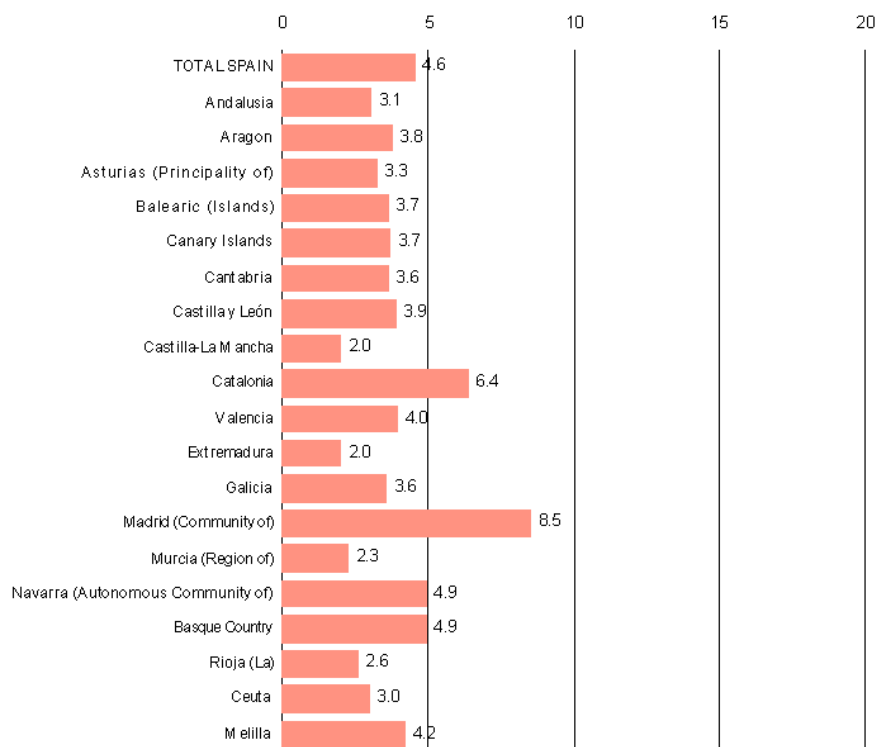
The profile of the most regular purchaser is male (almost double in proportion to female), middle aged (between 25 and 34), with an advanced education and residing in a municipality with over 20,000 inhabitants.

People to have purchased over the Internet in the past three months (% people). 2003



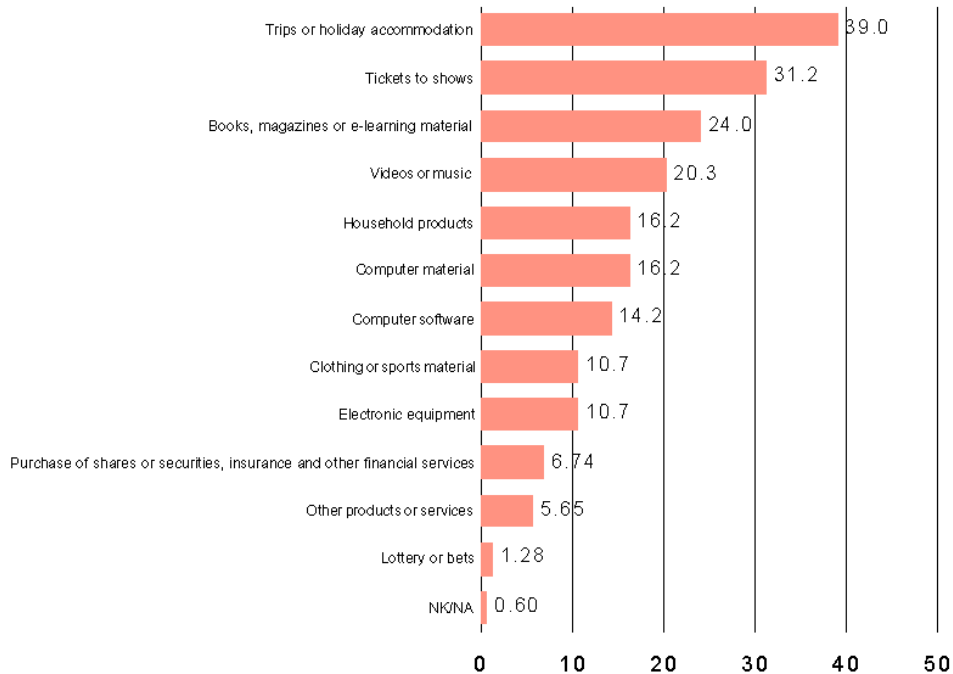
The residents of the autonomous communities of Madrid (8.5% of purchasers in relation to the total population) and Cataluña (6.4%) provide the highest proportion of internet purchasers over the past three months.

People to have purchased over the Internet in the past three months (% people). 2003



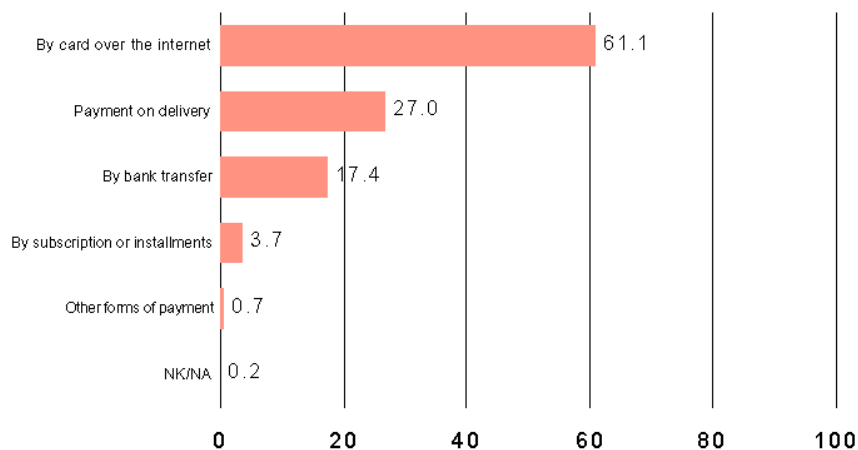
These purchasers have spent an average of € 475.95, most purchasing *trips or holiday accommodation* (39.0% of purchasers), *tickets to shows* (31.2%) and *books, magazines or e-learning material* (24.0%).

Products purchased over the Internet in the past three months (% purchasers). 2003



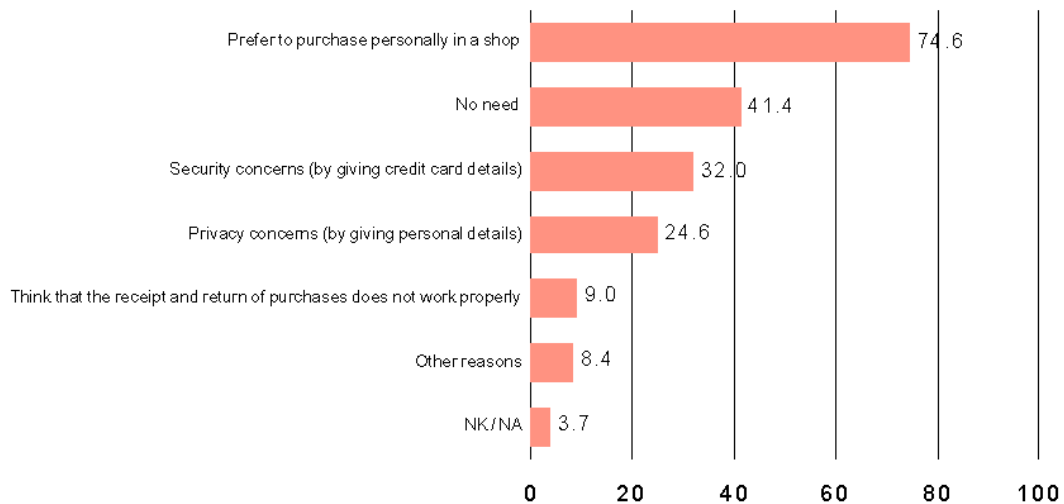
These purchases were mostly paid for by credit card over the internet (61.1% of purchasers) although a high percentage paid by cash on delivery, either upon receipt of the product or upon collecting it personally (26.9%), by bank transfer (17.4%) or by subscription or instalments, providing their bank account number over the internet (3.75%).

Form of payment used for purchases over the Internet (% purchases). 2003



The main reason given by non-internet purchasers is that they *prefer to purchase personally in a shop* (74.6%) or the simple fact that they *have not needed to* (41.4%).

Reasons for not having purchased over the internet in the past three months (% non-purchasers). 2003

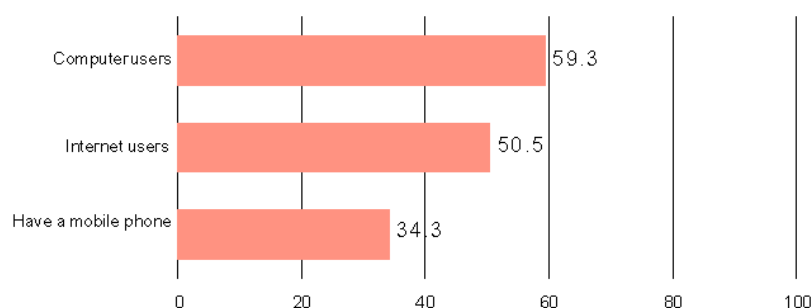


For their part, the reasons involving some kind of user mistrust, such as *concern for security* or concern for privacy upon giving the identification of their credit card or personal details, have a certain influence (32.0% and 24.6% respectively), although these were not conclusive when conditioning internet purchases.

2.4 ICT usage by children aged 10 to 14

Children aged between 10 and 14 frequently use new information and communication technologies. Over half of them have used the computer in their household over the past three months (59.3% of all children) and half (50.5%) have used the internet over the past three months. These figures follow a similar profile to the population of young adults.

ICT usage by children aged 10 to 14 (% children). 2003



Internet access is conditioned by the place from where access is made, the main place over these ages logically being the educational centre (54.7%), although another large percentage access from their household (50.7%) and even from other places (40.8%).

The usage made of internet is worth noting, given that if it is used on one hand for school work or to search for information related to their studies (78.8%), on the other it is frequently used in relation to leisure, such as the search and recording of music, games on the internet, ... (72.7%). This usage would also include internet conversations (chat rooms) and e-mails.

Girls exceed boys in the usage of information and communication technologies, contrary to other ranges of adult age groups in which the opposite situation occurs.

For their part, the autonomous communities with most children using new information and communication technologies are Cataluña, the País Vasco, Asturias and the Balears I (Illes). The influence of the residence habitat is relatively important, as the most frequent users of computers and internet access are children living in municipalities with over 50,000 inhabitants.

At these ages, children with a mobile telephone represent 34.3% of the total, with a very different profile to the usage of computers and the internet. Thus, girls have more mobiles than boys (40.3% and 28.7% respectively), of which a greater need to communicate with their families and friends can be deduced. Moreover, there are no significant differences between children living in large and small municipalities, the autonomous communities with the highest percentage of mobile users being Asturias, Madrid and Castilla y León.