

Survey on Equipment and Use of Information and Communication Technologies (ICT) in Households. Year 2016

Eight out of 10 people aged 16 to 74 years have used the Internet in the last three months. Two out of three use it daily

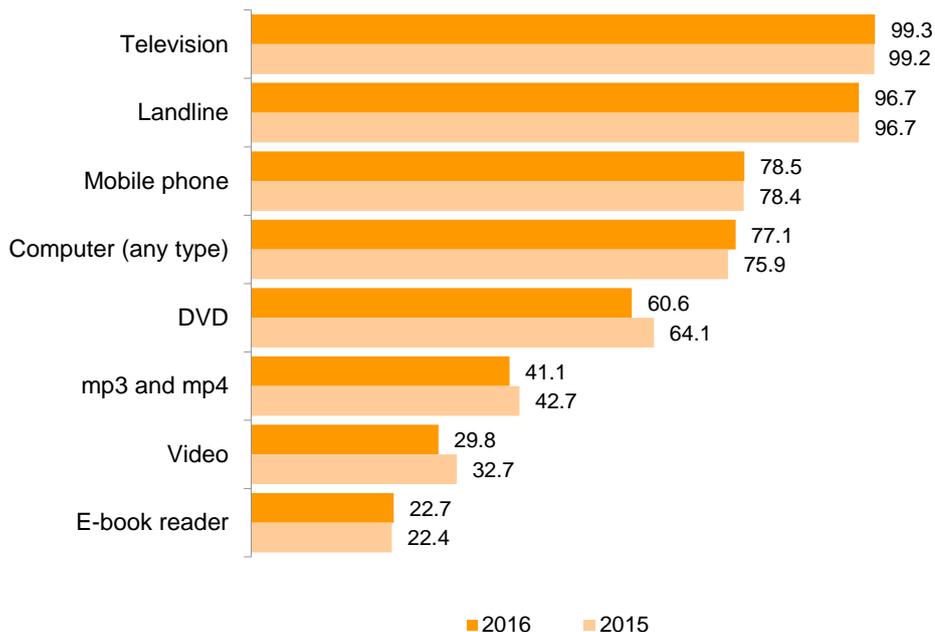
50.1% of the population have used e-Government

One out of two persons have purchased online sometime in their life. 34.9% have done so in the last three months

77.1% of households with at least one member between the ages of 16 and 74 years old had a computer in 2016. This percentage was slightly higher than that registered last year (1.2 points more).

The rest of the ICT products analysed in the survey this year, kept the same levels of 2015, except video and DVD, which decreased.

Household equipment regarding ITC products
Years 2015 y 2016. (% of households)



99.3% of the households had a telephone (either a landline or a mobile phone). 75.9% had both types. 2.6% of the households only had a landline, whereas 20.8% of them only had mobile phones for communication from the household. The implementation of mobile phones kept the same levels of 2015, reaching 96.7% of the households.

Dwellings with Internet access

81.9% of the Spanish households had Internet access, as compared with 78.7% the previous year. **In Spain, there were more than 13 million family dwellings with Internet access.**

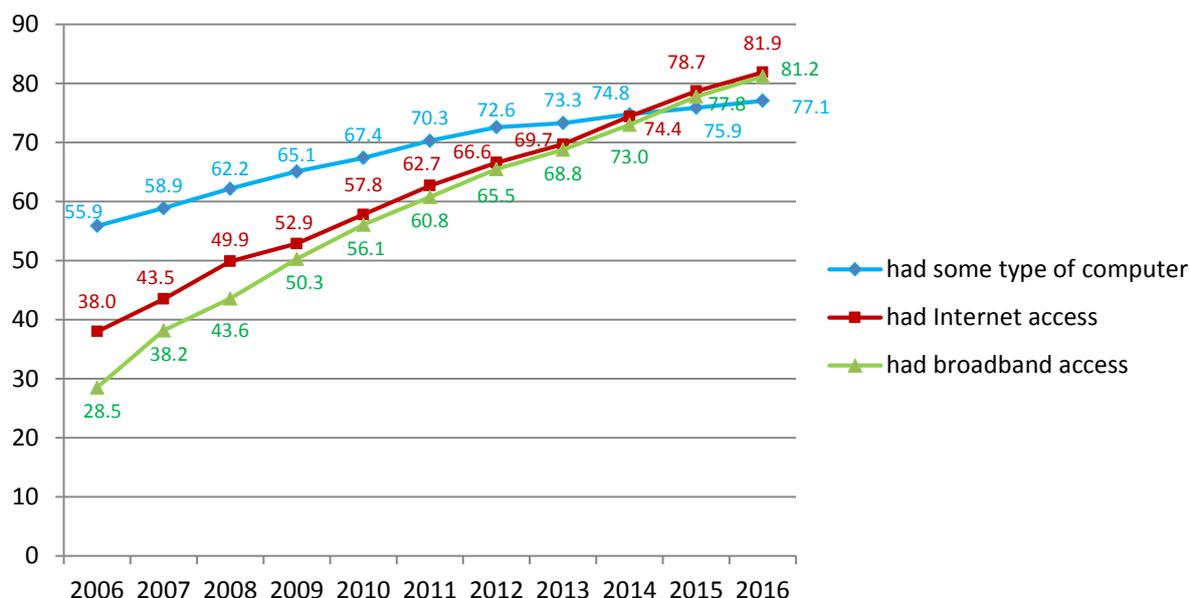
Regarding the type of connection, **81.2% of the households (13 million)** had a **broadband Internet connection** (ADSL, cable network, etc.), which shows an increase of half million households as compared to the previous year. Narrowband Internet connection had a testimonial presence.

The main form of broadband Internet connection was by mobile broadband connections through a handheld device (the latest generations of mobile telephones - at least 3G -, etc.), **with 80.1% of households having such access.** This was followed by ADSL line (48.3%), cable or fibre optic network (37.5%), other broadband fixed connections (public Wifi, Wimax, satellite), with 8.1% and mobile broadband connections via USB modem or card (e.g. in laptops), with 6.6%.

It is noteworthy the decline in more than 10 points on the ADSL connection compared to the previous year, and the increase in network cable or fiber optic (9.6 points more) and in handheld devices (3.0 points).

Evolution of ICT equipment in households

Years 2006-2016. National Total (% of households)



Regarding the households without Internet access, 67.4% said the reason was *they did not need Internet*, 41.3% said *they did not have enough knowledge to use it*, and some reported economic reasons: 25.6% pointed out *the equipment was too expensive* and 20.7% said *the connection was too expensive*. However, as an obstacle to access to the Internet these two economic reasons have become less important this year (3.5 and 6.0 points lower, respectively, than in 2015).

Use of ICT by children

The proportion of ICT use by the underage population (10 to 15 years old) was, in general, very high. Thus, computer use among the young is practically universal (94.9%), while 95.2% used the Internet. **For the first time the number of minors using the Internet overcomes those using the computer.**

By sex, the differences in use of computers and the Internet were barely significant, like in previous years. Furthermore, the availability of mobile phone has also come closer. In 2015 the disposal of mobile in girls was higher by more than five points than that of boys. In 2016 this difference has been reduced to 2.1 points.

The evolution of the results suggested that **the Internet** and, above all, **computers, were used by practically the majority of those aged under 10 years old.** In turn, the time when mobile phones were first made available increased significantly from the age of 10 years old, reaching 93.9% in the population aged 15 years old.

Mobile phone availability increased by 2.8 points as compared to 2015 survey and it grows for the third consecutive year. Thus, it increased 3.5 points in 2015 and 0.4 in 2014.

Percentage of children using ICT by sex and age

Year 2016

	Computer use	Internet use	Movil phon
Total	94.9	95.2	69.8
Sex			
Males	95.6	95.7	68.8
Females	94.2	94.7	70.9
Age			
10	92.6	90.6	25.4
11	92.6	93.1	50.9
12	94.8	95.9	72.7
13	96.7	95.4	86.0
14	95.7	98.2	90.1
15	97.1	98.0	93.9

ICT use by persons aged 16 to 74 years old

Regarding Internet use, more than 27.7 million persons, 80.6% of the population aged 16 to 74 have used the Internet in the last three months. This figure was more than 1.9 points higher than that registered in the previous year.

The most commonly used device to connect from anywhere to the Internet is by far the mobile phone (93.3% of Internet users in the last three months mention it). It is followed by the laptop (57.8%), the desktop computer (45.4%) and the tablet (41.5%).

The *Smart TV* (16.3%) and other mobile devices (11.7%) are also mentioned. Persons who reported having used a *Smart TV* to connect to the Internet were asked about the activities carried out with such a device. 71.7% said "*watch movies or videos*" and "*watch Internet TV broadcast*" (63.4%).

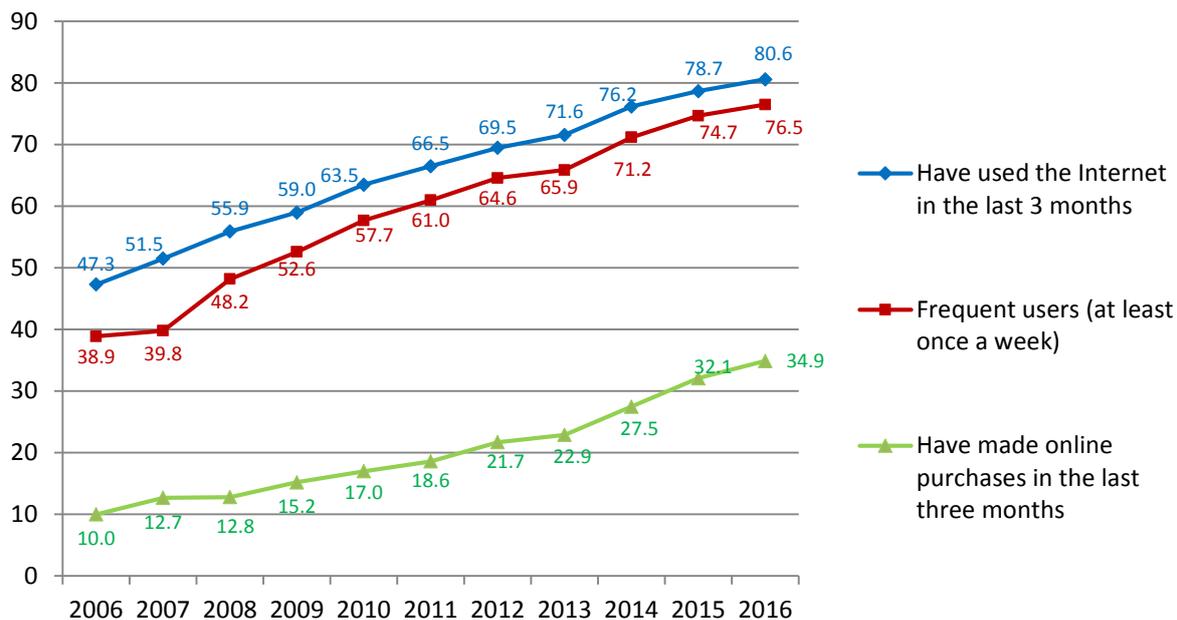
Almost 90% of the Internet users (4.7 points more than last year) **reported having used some type of mobile device** to access the Internet outside of the residence or workplace. **88.2% had accessed via mobile phone.**

Frequent Internet users (those who accessed the Internet at least once a week in the last three months) represented 94.9% of the total for Internet users, similar percentage to that of the previous year. These frequent users represented approximately 26.3 million persons (76.5% of the population).

The segment of Intensive users (daily use) was close to 23 million persons, that is, 66.8% of the population between 16 and 74 years old. That is, **two out of three persons aged 16 to 74 are daily Internet users.**

Use of ICT by persons aged 16 to 74 years old

Homogeneous series 2006-2016. National Total (% of persons)



Use of electronic commerce

The percentage of persons who made purchases via the Internet in the last three months experienced an increase of 2.8 points, standing at 34.9% of the population. Around **one out of three persons aged 16 to 74 bought via the Internet in the last three months.**

In turn, more than 17 million persons (50.1% of the population between 16 and 74 years old) made purchases via the Internet some time in their life.

The most frequently purchased products/services are *holiday accommodation* (55.1 of the total of persons who bought on the Internet in the last year), *sports and clothing material* (52.4%), *other services for trips* (49.0%) and *tickets for shows* (46.9%).

Regarding 2015, e-commerce users have bought more time online, but have spent less in the last three months. The average number of purchases is around 4.3 purchases (0.3 points more than in 2015) and the estimated average cost is about 270 euros in those three months (10 euros less than the previous year). Therefore, **the average cost of each purchase is close to 63 euros** (seven less than in 2015).

Last year online shoppers were asked about the frequency of use of certain information before buying *online*. 70.8% declared *they always or almost always* conducted a *price or product comparison in different web sites or apps*. 68.1% *always or almost always* looked at the *customer's feedback on websites or blogs* and 54.5% *always or almost always* consulted the *information of the website retailers, producers or service providers*.

Use of ICT by nationality

The percentage of Spaniards using the Internet was lower than foreign users (more than three points). However, the percentage of frequent users is similar in both cases.

As has occurred in the previous years, the practice of purchasing via the Internet was greater in the case of Spaniards (more than nine points).

Percentage of ICT users by nationality

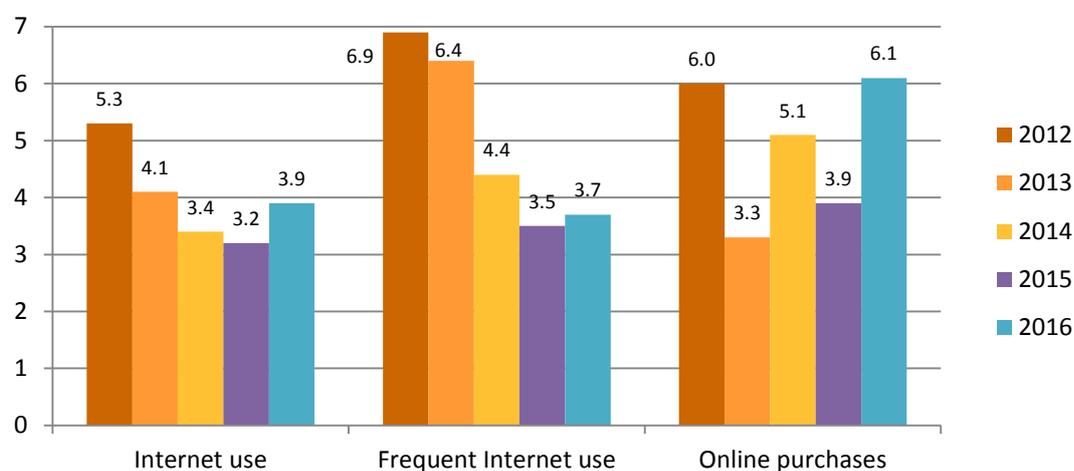
Year 2016

	Have used the Internet in the last 3 months	Frequent users (at least once a week)	Have made online purchases in the last three months
Total	80.6	76.5	34.9
Spanish	80.2	76.1	35.9
Foreing	83.8	79.3	26.5

The digital gap

The gender digital gap (that is, the difference in points between the sexes as regards the main ICT use indicators) increased in the main analysed indicators (use of the Internet in the last three months, frequent use of the Internet and Internet purchases), thus breaking the historical trends observed in previous years.

The gender digital gap (difference between percentages of men and women). Years 2012-2016



ICT use by Autonomous Community

The Autonomous Communities that registered higher percentage of Internet users in the last three months were, in descending order, Comunidad de Madrid, País Vasco, Aragón, Comunidad Foral de Navarra, Cataluña and Illes Balears, all above the Spanish average. It is noteworthy that the rest of the Communities reached at least 90% of the national average. The territorial digital divide, calculated as the percentage difference of the higher and the lower use of the Autonomous Communities, is 12.3 points.

The named Communities, along with Cantabria, also have the highest percentages in frequent use of the Internet and online shopping. The greater variability is observed in the latter indicator, with more than 19 points digital divide.

Percentage of ICT users by Autonomous Community

Year 2016

	Have used the Internet in the last three months	Frequent internet users (at least once a month)	Have used a mobile phone in the last three months
Total	80.6	76.5	34.9
Andalucía	78.8	74.3	28.8
Aragón	83.9	80.0	38.8
Asturias, Principado de	76.7	72.0	34.3
Balears, Illes	81.7	76.7	42.0
Canarias	78.7	75.0	24.0
Cantabria	80.1	76.6	34.4
Castilla y León	77.0	71.5	30.3
Castilla - La Mancha	78.0	73.2	31.9
Cataluña	82.8	78.9	41.4
Comunitat Valenciana	78.4	73.9	34.2
Extremadura	75.7	72.5	29.3
Galicia	74.6	70.7	30.4
Madrid, Comunidad de	86.9	83.2	42.2
Murcia, Región de	79.1	75.1	26.4
Navarra, Comunidad Foral de	81.9	78.8	43.0
País Vasco	84.8	81.6	43.2
Rioja, La	80.1	76.4	30.1
Ceuta	74.7	74.7	27.3
Melilla	79.4	78.3	24.1

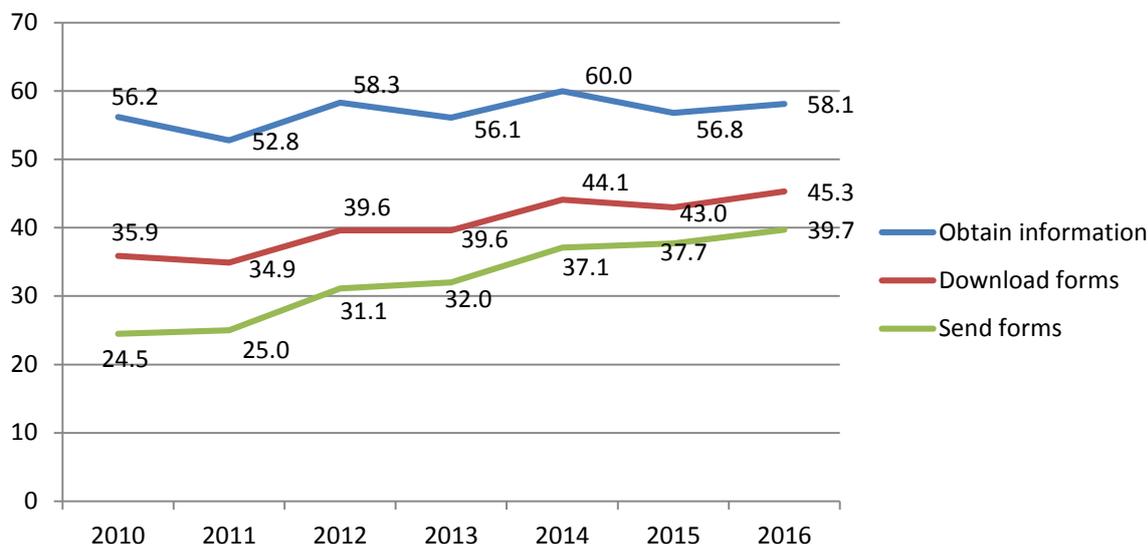
Electronic administration

61.6% of the persons who have used the Internet in the last 12 months have contacted or interacted with the Public Administrations or Services via Internet for personal reasons. That is, **50.1% of the total population** aged 16 to 74 years old (0.7 points more than in 2015).

Regarding the type of interaction, 58.1% of the Internet users in the last year claimed to have obtained information from the Administration websites, 45.3% stated that they downloaded official forms and 39.7% had sent completed forms.

Evolution of the use of electronic administration by means of contact.

Years 2010-2016. (%of Internet users in the last year)



Regarding the causes why users with the need to send some completed form to the Public Administrations did not do it via the Internet last year, 49.0% declared it was because *it was processed via Internet by another person on their behalf –business agent, financial advisor, relative or acquaintance–*, 19.0% due to *lack of skills or knowledge*, 13.6% due to *being worried for protection and security of their personal data* and 13.0% for *not having electronic signature or certificate or having problems with them*.

Privacy, security and confidence in the Internet

Around **three out of four Internet users** in the last 12 months (73.5%), **have provided some type of personal information over the Internet**. 65.7% mentioned personal data (name, date of birth, etc.). With virtually the same wording (65.1%) contact information (address, phone number, etc.) is indicated. Behind them the details of payment (45.2%) and other personal information (31.5%) are located.

In line with the above, 73.8% of Internet users in the last 12 months showed having performed some of the actions proposed to manage access to their personal information online. Of these, the most mentioned were: *refuse giving permission to use personal information for advertising purposes* (51.6%), *check that the website where personal information was needed was secure* (50.4%) and *limit the access to their profile or content on social networks* (49.6%). In a second range, it was mentioned, *to restrict the access to your geographical location* (39.6%) and *to read the privacy policy of websites before providing personal information* (36.0%).

62.9% of Internet users in the last 12 months (almost 11 points more than 2015) knows that “cookies” are files that can be used to monitor the movement of persons in the Internet, for making a profile of each user and present them advertisement personalized. However, only 31.0% *have made modifications in their browser configuration in order to prevent or limit cookies*.

When asked about their level of concern about their online activities being monitored to provide them with tailored advertising, 61.1% reported some kind of concern about this issue, 17.3%

reported being very concerned and 43.8 % somewhat concerned. However, **only 17.0% reported using some anti-tracking software to limit the ability to track their Internet activities.**

This does not mean that these Internet users do not use any software or security tool, since a large majority (78.6%) reported using it.

Internet users in the last year were asked about the level of trust in the Internet. 32.5% answered that *few or nothing*, 58.5% answered that *some* and 9.0% that *a lot*.

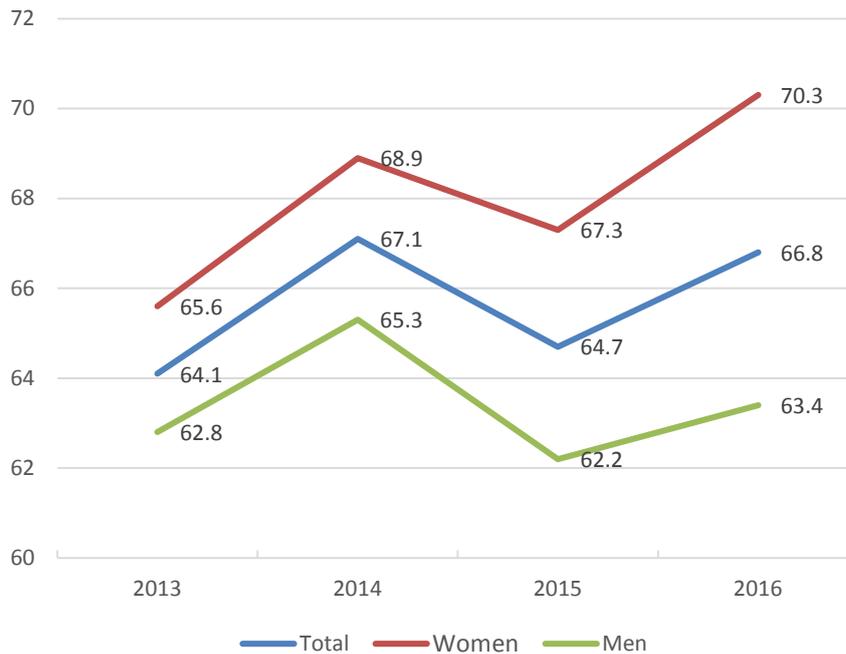
Participation in social networks

66.8% of the Internet users in the last three months **participated in general social networks** like Facebook, Twitter or Tuenti, creating a user profile or sending messages or other contributions. This percentage is similar to previous years.

The most participatory are students (90.7%) and young people aged 16 to 24 years (91.1%). By sex, the participation of women (70.3%) is higher than that of men (63.4%). This difference between women and men has been increasing since 2013.

Evolution of participation in social networks by sex

Years 2013-2016. (%Internet users in the last three months)



Methodological note

The Survey on Equipment and Use of Information and Communication Technologies (ICT) in Households, TIC-H 2016, has been carried out by the National Statistics Institute (INE), in partnership with the Cataluña Statistics Institute (IDESCAT) within the scope of its Autonomous Community.

Moreover, there is a partnership agreement with the Ministry of Industry, Energy and Tourism through the Red.es public business entity for the research of given information society indicators.

The Survey follows the methodological recommendations of the Statistical Office of the European Communities (Eurostat). This is the only source of its kind whose data is strictly comparable, not only among EU Member States, but across all international domains.

The 2016 ICT-H Survey is a panel-type research focusing on persons aged 10 years old and over, resident in family dwellings, which collects information on the equipment of the household as regards information and communication technologies (television, telephone, radio, IT equipment) and on the use of computers, the Internet and e-commerce.

Currently, the survey has a yearly frequency. The interviews were conducted between January and May of the current year, by telephone and by personal visit.

For each Autonomous Community, an independent sample is designed to represent it, given that one of the objectives of the survey is to facilitate data on that breakdown level.

A stratified three-stage sample type is used. The first-stage units are the census sections. The second-stage units are the main family dwellings. During the third stage, a person aged 16 years old or over is selected in each dwelling. Furthermore, all minors aged 10 to 15 are also researched in each dwelling. The theoretical size of the sample is 20,000 dwellings, one fourth of which is renewed every year.

Ratio estimators are used, to which calibration techniques are applied using information from external sources.

A survey variable consistency control is performed on the sample, both in the data collection process (microedition) and in the subsequent data processing.

For the purpose of achieving a greater comparability with the data published by Eurostat, the results published on the INE website as of 2006 refer to dwellings inhabited by at least one person aged 16 to 74 years old and persons of that same age group. In addition, the data on minors refer, as of 2007, to the group aged 10 to 15 years old (previously, this studied minors aged 10 to 14 years old). The aforementioned website also provides the microdata file with the complete information from the survey.