

# **Survey on Equipment and Use of Information and Communication Technologies in Households (ICT-H. 2005)**

**Methodological report**

INSTITUTO NACIONAL DE ESTADÍSTICA



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# 1 Presentation of the survey

The general objective of the Survey on the Equipment and Use of Information and Communication Technologies in Households (ICT-H) is to obtain data on the development of what is known as the *Information Society*.

The survey has the following specific objectives:

1. To ascertain the information and communication technologies equipment in Spanish households (ICT products, television, landline and mobile phone, computer equipment...).
2. To ascertain the use that the Spanish population makes of computers, Internet and e-commerce.
3. To serve as a base to establish comparisons between Spain and other countries and meet the requirements set by international institutions.
4. To obtain information that is comparable between Autonomous Communities.

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## 1.1 General description of the survey

In 2004 the survey started to be conducted continuously, as a 'Rotating Panel.' This means that the same dwellings (panel) are investigated over various years, with a quarter of the sample being renewed (i.e. rotating) every year.

The sample was obtained from the continuous register of inhabitants. It comprised 2,578 census sections distributed by autonomous community. Eight main dwellings were selected within each section, and 6 reserve dwellings were also selected in case incidents were to arise regarding the main dwellings.

In 2005 the corresponding quarter of the sample of dwellings was renewed. As regards the rest of the sections, the main and reserve dwellings that filled in the 2004 questionnaire are maintained (they are all considered main dwellings in 2005), as are the reserves that were not used before to replace main dwellings (they are still considered reserves in 2005).

The sample for the ICT-H 2005 survey was made up of 28,224 dwellings, 23,682 of which were main dwellings and the rest reserve dwellings that were to be used if something happened to the main dwelling.

**SAMPLE OF MAIN AND RESERVE DWELLINGS BY METHOD OF COLLECTION**

	Main CAPI	Reserves CAPI	Main CATI
01 ALAVA	70	30	141
02 ALBACETE	101	42	145
03 ALICANTE/ALACANT	240	102	312
04 ALMERIA	115	42	100
05 AVILA	40	18	55
06 BADAJOZ	204	108	381
07 BALEARS (ILLES)	283	138	451
08 BARCELONA	744	300	1094
09 BURGOS	74	36	154
10 CACERES	133	60	259
11 CADIZ	158	66	251
12 CASTELLON/CASTELLO	99	36	106
13 CIUDAD REAL	122	54	201
14 CORDOBA	103	42	173
15 CORUÑA (A)	184	96	428
16 CUENCA	58	24	89
17 GIRONA	105	36	115
18 GRANADA	122	48	141
19 GUADALAJARA	40	18	70
20 GUIPUZCOA	185	72	295
21 HUELVA	63	36	88
22 HUESCA	82	36	133
23 JAEN	96	36	147
24 LEON	111	54	217
25 LLEIDA	55	24	74
26 RIOJA (LA)	193	108	433
27 LUGO	71	36	112
28 MADRID	579	306	1144
29 MALAGA	181	84	269
30 MURCIA	336	150	577
31 NAVARRA	462	240	904
32 OURENSE	53	30	130
33 ASTURIAS	1266	852	674
34 PALENCIA	42	24	65
35 PALMAS (LAS)	182	90	364
36 PONTEVEDRA	146	72	325
37 SALAMANCA	65	36	140
38 S. C. TENERIFE	205	90	250
39 CANTABRIA	215	120	440
40 SEGOVIA	34	18	55
41 SEVILLA	236	96	375
42 SORIA	17	6	46
43 TARRAGONA	80	36	145
44 TERUEL	46	24	88
45 TOLEDO	130	60	237
46 VALENCIA	344	156	513
47 VALLADOLID	81	48	221
48 VIZCAYA	292	114	530
49 ZAMORA	39	18	83
50 ZARAGOZA	258	132	553
51 CEUTA	66	24	68
52 MELILLA	58	18	57
<b>TOTAL</b>	<b>9264</b>	<b>4542</b>	<b>14418</b>

The dwellings in sections undertaking the first interview and dwellings without a telephone were interviewed via personal interview with tablet (CAPI).

All other dwellings were interviewed by telephone, recording the survey on an electronic questionnaire from CATI centres.

The fieldwork was conducted all over Spain from the end of April to the end of July 2005.

The population object under investigation (objective population) was made up of persons who live in main family dwellings. Yet, although persons from all ages compose the objective population, not all persons are investigated exhaustively, as only persons aged 15 and over at the time of the interview eligible for an exhaustive investigation. One person is selected out of all the persons that fulfil this requirement.

When completing the questionnaire, the table "Household members" is filled in first of all to decide which persons are household members and which are surveyable (household members aged 15 and over). This data must be provided by an informant who is a member of the household and is aged 18 or over.

The selection of the person to survey is made electronically by means of a random procedure.

Blocks II and III deal with the equipment of the household as to ICT products: television, computer, telephone, etc and whether or not the household has Internet access.

Block IV is filled in if there are children aged 10-14 in the household. There is a series of questions for all of them related to the use of computers, the Internet and mobile phones.

Blocks II to IV may be filled in by the initial informant or the selected person.

Blocks V to VIII deal with the use of computers, the Internet and e-commerce and include some socio-economic data on the selected persons. Only the selected person may respond.

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## **1.2 Organisation of fieldwork**

Data was collated in two ways:

- Personal interview with laptop computer or tablet (CAPI): The interviewer does not use paper questionnaires, rather s/he has a laptop computer onto which the questionnaire has been uploaded, so that interviews may be carried out with this laptop computer.

This method is used to interview households from sections with a new sample and households already included in the 2004 sample for whom there is no contact telephone.

- Telephone interview in a CATI centre: households from the 2004 sample are interviewed by phone from a CATI centre as long as they have a telephone number. The interviewer does not use paper questionnaires but rather records responses from the informant directly on the electronic questionnaire.

The CATI centres are located in the Delegations of Albacete, Guipúzcoa, Orense and Tarragona and each one of them calls the following provinces:

<b>Province where the CATI centre is located</b>	<b>Provinces from where information is collated</b>
Albacete	Albacete, Madrid, Murcia and Soria
Orense	Almería, Badajoz, Cáceres, Cádiz, Ciudad Real, Córdoba, Coruña, Cuenca, Granada, León, Lugo, Orense, Asturias and Pontevedra
Guipúzcoa	Avila, Burgos, Guadalajara, Huelva, Jaén, La Rioja, Málaga, Navarra, Palencia, Las Palmas, Salamanca, Cantabria, Segovia, Valladolid and Zamora
Tarragona	Alicante, Baleares, Barcelona, Castellón, Gerona, Huesca, Lérida, Santa Cruz de Tenerife, Sevilla, Tarragona, Teruel, Toledo, Valencia, Zaragoza, Ceuta and Melilla

In CATI centres, personnel worked in two shifts from Monday to Friday. The first shift covered the interval from 9 am to 3 pm and the second from 3 pm to 9 pm.

Sections were divided into 6 groups randomly. Calls commenced in a staggered fashion in order to be able to organise the mailing of letters presenting the survey to dwellings more appropriately.

As regards personnel contracted for the survey, it is worth noting that there were 8 Interviewer Inspectors and 43 Interviewers for 14,418 CATI main households, and 18 Interviewer Inspectors and 81 Interviewers for 9,264 CAPI main households.

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### 1.3 Incidents concerning dwellings and groups and their treatment

The **dwelling keys** considered are:

- Unlocatable dwelling (UD)

In CAPI this incidence occurs when the dwelling is not located by an error in the entry address. The dwelling may not be located on the address that appears on the list of dwellings selected either because the address is incorrect or because the dwelling does not currently exist.

This incident does not exist in CATI.

- Dwelling used for other purposes (OP)

The household selected is dedicated entirely to purposes other than the family residence. For example: convent, old people's home, garage, office, etc.

- Inaccessible dwelling (IN)

In CAPI this refers to a dwelling that cannot be accessed to carry out the interview due to geographical or climatological (floods, snowfall, etc.) changes (when there are no routes to arrive there) or to any other type of changes.

In CATI this incident is automatically assigned when the telephone recorded for a dwelling does not correspond to the address in which the interview may be conducted and it is not possible to locate a correct telephone.

- Empty dwelling (E)

The dwelling selected is not a main dwelling, it may be a temporary dwelling (inhabited or uninhabited at the time of the interview) or inhabited for any reason, such as death or change of residence of persons who live there.

- Surveyable dwelling (S)

The **group keys** considered are:

- Total refusal (TR)

This is considered when it has not been possible to conduct the interview, either via an outright refusal or a subsequent refusal after initially having started to collaborate.

- Refusal of the selected person (RS)

This case is considered when the initial informant answers the general household questions but **the selected person refuses to give information**, either via an outright refusal or a subsequent refusal after initially having started to collaborate.

- Total absence (TA)

In CAPI this is used after successive visits to the dwellings have not resulted in interview because all household members are absent and cannot be contacted.

This incident is used in CATI when it is not possible to contact anybody in the dwelling after calls made or when it is possible to contact somebody who does not live in the dwelling and who gives information that its occupants are absent.

- Absence of the selected person (AS)

This is used after successive visits to the dwelling have not resulted in interview because the person selected is absent and cannot be contacted.

- Incapacity to respond (IR)

This incidence occurs when it is not possible to carry out the interview due to incapacity to respond whether due to age, disability, illness, lack of knowledge of the language or any other circumstances either concerning the household members as a whole (preventing initial contact) or of just the selected person.

In the case of the selected person's incapacity to respond it is admissible for the interviewer to use a third person as an intermediary to obtain the information.

- Surveyed group (S)

When none of the previous incidents occurs and the completed questionnaire fulfils the requirements to be considered *complete*.

A questionnaire is **complete** if all the corresponding questions required by the electronic questionnaire have been answered.

Moreover, for dwellings surveyed by means of telephone interview in CATI centres, the results of each and every call made are also collected.

The possible **call results** are:

- Not contacted (NC): when nobody answers the telephone or the call is answered by an answer phone.

- Without a telephone (WT): the telephone does not exist or is a fax or the interviewer verifies that the address to which this telephone corresponds is not the address that appears on the screen.

- Engaged (EN): the engaged tone.

- Partial interview interrupted for other reasons (EPO): these are calls in which the questionnaires have started to be filled in but the interview is interrupted due to the line being cut, problems with the system, etc.

- Interview completed (IC): the interviewer records the dwelling key OP or E or the dwelling key S, and the group keys S, TR, RS, TA, AS or IR on the Work Sheet.
- Contact postponed (CP): the dwelling is contacted but before starting the interview the informant asks to be called at another time or there is no valid informant in the dwelling at the time and the call is postponed.
- Partial interview because a new appointment is established (EPC): these are calls in which the questionnaires have been started to be filled in but the informant requests that the interview continue at another time.

## 2.Design of the sample

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### 2.1 Type of sampling

The sample has been designed considering in the whole country by means of a stratified tri-stage sample.

First stage units are census sections. Second stage units are main family dwellings. During the third stage, **a person** is selected in each dwelling who is aged over 14 years old. Furthermore, **all minors** aged between 10 and 14 are also investigated in each dwelling.

The framework used to select the sample is an area framework made up of the list of existing census sections referring to 1 January 2001. The selection of second stage units uses the most updated available list of main family dwellings in each of the sections selected for the sample obtained from the most updated continuous inhabitants register. The register from 16 March 2004 was used for the first wave of persons analysed in 2005.

The stratification criteria used was the size of the municipality to which the section belongs. In the case of Navarra, by agreement with this community, other substrata have been defined based on the rural or urban type of municipality and on the geographical location within the country (Urban Pamplona, Rural Pamplona, Urban North, Rural North, Urban Middle, Rural Middle, Urban South and Rural South). As regards Asturias, by agreement with this community, other substrata have been defined based on the regions to which the municipality belongs (Navia, Narcea, Avilés, Oviedo, Gijón, Caudal, Nalón and Oriente).

An independent sample is designed to represent each autonomous community, since one of the objectives of the survey is to facilitate data with this level of breakdown. Conversely, the survey is not representative at a provincial level. Micro-data files provide the province code solely to ensure the user can obtain the autonomous community of residence.

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### 2.2 Size of the sample. Allocation.

In order to fulfil the goals of the survey, i.e. to provide estimates with a specific degree of reliability on a national level and by Autonomous Community, the investigation uses 2692 census sections (2580+112 from the expansion of Asturias) and 21456 dwellings, with 8 dwellings selected in each census section.

In order to obtain a minimum sample size that allows reliable estimates on an autonomous community level, the sample is distributed among them by using a commitment allocation, either uniform or proportional to the size of the community. Similarly, information from the ICT-H-2004 survey has also been taken into account.

The sample is also distributed by strata:

Stratum0 = population equal or over 500,000 inhabitants.

Stratum1 = population under 500,000 and APS stratum = 1 (province capital)

Stratum2 = population equal or over 100,000 and under 500,000

Stratum3 = population equal or over 50,000 and under 100,000

Stratum4 = population equal or over 20,000 and under 50,000

Stratum5 = population equal or over 10,000 and under 20,000

Stratum6 = population under 10,000

Between strata, allocation is proportional to size. Furthermore, the number of sections by strata in each autonomous community is always a multiple of four.

The sample was increased in the Comunidad Foral de Navarra based on the agreement subscribed with the Statistics Institute in this community with the objective of being able to provide a higher level of data breakdown. The same has occurred with the Principado de Asturias as a result of the agreement subscribed by the INE and the Fundación Centro Tecnológico de la Información y Comunicación [Information and Communication Technological Centre Foundation] of said region.

The number of dwellings selected in each census section is 14, of which 8 are main and 6 reserves.

The distribution of the number of sections selected by autonomous community is:

<b>Autonomous Community</b>	<b>Number of census sections</b>
Andalucía	300
Aragón	128
Asturias (Principado de)	232
Baleares (Islas)	92
Canarias	120
Cantabria	80
Castilla y León	172
Castilla - La Mancha	132
Cataluña	264
Comunidad Valenciana	196
Extremadura	112
Galicia	156
Madrid (Comunidad de)	204
Murcia (Región de)	100
Navarra (Comunidad Foral de)	160
País Vasco	144
Rioja (La)	72
Ceuta y Melilla (Aut cities.)	28
<b>TOTAL</b>	<b>2692</b>

### **2.3. Sample selection**

In order to conduct the ICT-H-2005, the selection of first stage units in each stratum has been carried out with probability proportional to the size of each section. In the second stage, dwellings have been selected by means of a systematic sample with random start and equal probabilities of selection for each dwelling in the section. This procedure provides self-weighted samples of dwellings in each stratum.

During a third stage and within each dwelling, a person is chosen with equal probability among those 15 and over.

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## **2.4. Renewal of the sample**

As of 2005, the survey will be performed every six months. Previously, it was carried out annually. In order to avoid tiring out respondent families, and to give other new families the chance of being selected, the sample is renewed partially using the rotation shifts scheme.

Therefore, the survey is a rotating panel with four rotation shifts organised in such a way that every six months dwellings are renewed from one shift. For this reason, the number of sections by autonomous community in the sample is a multiple of four, as this facilitates the appropriate distribution of sections among the four rotation shifts.

The sample of first units remains fixed although variations in the sectioning have been incorporated by using probability procedures consistent with the design of the sample.

The dwellings from the sections in rotation shift 2 were renewed during the first semester of 2005.

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## **2.5. Estimators**

The following types of estimators have been considered to estimate the survey characteristics:

- Estimator for data on households
- Estimator for data on persons aged 15 and over.
- Estimator for data on persons aged 10 to 14.

Ratio estimators will be used in all cases, balanced according to information from external sources.

(see Annex for possible explanations)

### **A). Estimator for data on households**

So as to obtain characteristics regarding households, the survey uses an estimator obtained by means of the following steps:

A1) Expansion estimator based on the design factor with correction for non-response on a stratum level.

In each stratum  $h$ , the estimator for the total of a characteristic  $X$  is obtained by means of the following expression:

$$\hat{X}_h = \sum_{i=1}^{n_h} \sum_{j=1}^{v_{ih(e)}} c_i \frac{V_h}{v_{h(e)}} x_{hij}$$

where:

$V_h$  : Dwellings from stratum  $h$ .

$v_{h(e)}$  : Size of effective sample of dwellings in stratum  $h$

$n_h$  : Number of sample sections in stratum  $h$ .

$c_i$  : Update coefficient. Value that depends on section  $i$ , representing for the sections from rotation shifts 1 and 2 the growth of the same from the selection of the sample of primary units. For the rest of the sections, including those in the País Vasco rotation shift 1, said coefficient takes the value of 1.

$x_{hij}$  : value of the of study in dwelling  $j$ , section  $i$ .

A2) Separate ratio estimator, to adjust to the population projection in each stratum  $h$ .

$$\hat{X}_h^R = \frac{\sum_{i=1}^{n_h} \sum_{j=1}^{v_{ih(e)}} c_i x_{hij}}{\sum_{i=1}^{n_h} \sum_{j=1}^{v_{ih(e)}} c_i p_{hij}} P_h$$

where:

$p_{hij}$  : Total sample persons (aged 15 and over) from dwelling  $j$ , section  $i$ .

$P_h$  : Population projection in stratum  $h$ .

A3) The final estimator is obtained by applying reweighting techniques to the previous estimator, using CALMAR software.

The external source used was the information from the Economically Active Population Survey, relating to the size of the dwelling in each autonomous community (5 sizes).

### B). Estimator for data on persons aged 15 and over

This estimator is obtained from information from the individual questionnaire, whose responses come from a person selected among household members aged 15 and over. The estimator is similar to that used in the case of the household but bearing in mind the existence of a factor that incorporates the probability of selection corresponding to this person.

B1) Estimator based on the design factor with correction for non-response.

$$\hat{X}_h = \sum_{i=1}^{n_h} \sum_{j=1}^{v_{h(e)}} \frac{V_h c_i p_{hij}}{v_{h(e)}} x_{hij}$$

B2) Ratio estimator to adjust the stratum population.

$$\hat{X}_h^R = \frac{\sum_{i=1}^{n_h} \sum_{j=1}^{v_{h(e)}} c_i p_{hij} x_{hij}}{\sum_{i=1}^{n_h} \sum_{j=1}^{v_{h(e)}} c_i p_{hij}} P_h$$

B3) Implementation of reweighting techniques by age groups and sex on an autonomous community level (CALMAR) with populations referring to 15 May 2005 obtained from the 2001 Census.

### C). Estimator for data on persons aged 10 to 14

The sample information relating to all household members who are aged 10-14 is provided by the person aged 15 and or over selected in each dwelling. Therefore, the raising factors of the expansion estimator based on the design factor coincide with those used in the estimators corresponding to household data. These are also adjusted using ratio estimators but, in this case, adjustment is made to population projections of persons aged 10-14 year old by sex in each autonomous community obtained from the 2001 census.

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## 2.6. Sampling errors

The indirect Jackknife method is used for the calculation of sample errors of the main characteristics investigated. (\*).<sup>1</sup>

This method is based on the formation of subsamples in which each one of them is obtained by eliminating a primary unit from the total sample. The estimate of the variance of the estimator has the following expression:

$$\hat{\text{Var}}(\hat{X}) = \sum_h \frac{(n_h - 1)}{n_h} \sum_{j \in h} (\hat{X}_{(hj)} - \hat{X})^2$$

where:

$\hat{X}_{(hj)}$  is the estimate of  $X$  when primary unit  $j$  from stratum  $h$  is removed from the sample.

$\hat{X}$  is the estimate of  $X$  obtained with the whole sample.

$n_h$  is the number of primary units in stratum  $h$ .

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<sup>1</sup> (\*) Using CALJACK software created by P. Lavallé from Statistics Canada

## ICT-H 2005 TOTAL SAMPLE ERRORS (expressed in variation coefficients in %)

### Variables relating to households

Dwellings with a desktop computer  
Dwellings with Internet access  
Dwellings Internet access (broad band)

0.91
1.32
1.91

### Variables relating to persons over 14

Have used a computer (in the last three months)  
Have used the Internet (in the last three months)  
Have purchased articles using the Internet (last 3 months)

0.92
1.10
3.78

### Variables relating to children aged from 10 to 14

Have used a computer (in the last three months)  
Have used the Internet (in the last three months)

1.59
1.79

## ICTH-05

SAMPLE ERRORS CONCERNING VARIABLES REGARDING HOUSEHOLDS.

	Households with desktop computer ICTH- 05 (size 4-without population)	Households with Internet access ICTH-05 (size 4) without population	
	<b>AUTONOMOUS COMMUNITY</b>		
	<b>NATIONAL TOTAL</b>	0,91	1,32
01	<b>ANDALUCÍA</b>	2,90	4,48
02	<b>ARAGÓN</b>	3,15	4,45
03	<b>ASTURIAS</b>	2,68	3,97
04	<b>BALEARES</b>	3,64	5,75
05	<b>CANARIAS</b>	3,59	6,24
06	<b>CANTABRIA</b>	4,74	6,63
07	<b>CASTILLA-LEÓN</b>	3,18	4,91
08	<b>CASTILLA-LA MANCHA</b>	4,29	7,17
09	<b>CATALUÑA</b>	2,23	2,70
10	<b>COM.VALENCIANA</b>	3,00	4,47
11	<b>EXTREMADURA</b>	4,38	7,73
12	<b>GALICIA</b>	3,43	6,17
13	<b>MADRID</b>	2,69	3,88
14	<b>MURCIA</b>	4,27	6,87
15	<b>NAVARRA</b>	2,93	3,79
16	<b>PAÍS VASCO</b>	2,87	3,74
17	<b>LA RIOJA</b>	5,32	7,15
18	<b>CEUTA Y MELILLA</b>	11,88	14,70

## ICTH-05

Sample errors

Variables concerning persons aged over 14

Variation coefficients(%)

	Have used a computer (in the last three months) 2005	Have used the Internet (in the last three months) 2005	Have purchased articles using the Internet 2005 (last three months)
AUTONOMOUS COMMUNITIES			
NATIONAL TOTAL	0,92	1,10	3,78
ANDALUCÍA	3,18	3,67	11,82
ARAGÓN	3,25	4,42	17,14
ASTURIAS	2,47	3,10	9,98
BALEARES	4,41	4,86	16,74
CANARIAS	4,93	6,15	17,51
CANTABRIA	4,63	5,59	19,41
CASTILLA-LEÓN	3,25	3,88	13,72
CASTILLA-LA MANCHA	3,77	5,06	18,69
CATALUÑA	2,06	2,54	8,57
COM.VALENCIANA	3,17	3,90	13,14
EXTREMADURA	5,21	5,83	21,75
GALICIA	3,67	4,20	17,98
MADRID	2,48	2,93	10,06
MURCIA	4,59	5,28	20,16
NAVARRA	2,74	3,48	10,31
PAÍS VASCO	2,32	2,93	9,46
LA RIOJA	5,14	5,87	26,74
CEUTA Y MELILLA	12,42	13,69	58,84

## ICTH-05

### Sampling errors

Variables concerning children aged between 10 and 14 years old

Variation coefficients (%)

	Have used a computer 2005 (in the last three months)	Have used the Internet 2005 (in the last three months)
<b>AUTONOMOUS COMMUNITY</b>		
<b>NATIONAL TOTAL</b>	1,59	1,79
<b>ANDALUCÍA</b>	4,67	4,91
<b>ARAGÓN</b>	4,88	5,97
<b>ASTURIAS</b>	5,34	5,41
<b>BALEARES</b>	8,72	7,21
<b>CANARIAS</b>	7,00	7,75
<b>CANTABRIA</b>	12,23	10,01
<b>CASTILLA-LEÓN</b>	4,78	6,60
<b>CASTILLA-LA MANCHA</b>	6,54	6,97
<b>CATALUÑA</b>	2,94	3,67
<b>COM.VALENCIANA</b>	6,46	6,66
<b>EXTREMADURA</b>	8,02	7,38
<b>GALICIA</b>	8,01	7,16
<b>MADRID</b>	4,75	6,72
<b>MURCIA</b>	8,52	8,38
<b>NAVARRA</b>	5,60	5,85
<b>PAÍS VASCO</b>	4,79	7,36
<b>LA RIOJA</b>	8,45	11,42
<b>CEUTA Y MELILLA</b>	27,33	10,97

## ANNEX.-

### PROBABILITY OF A DWELLING BEING SELECTED

$K_h$  = no. of sample sections in stratum h.

m = no. of dwellings in the sample in each section = 8

$V_h$  = dwellings in stratum h.

$V_s$  = dwellings in section s.

$$P(V_{ish}) = K_{h*} \frac{V_s}{V_h} \cdot \frac{m}{V_s} = K_h \cdot \frac{m}{V_h} \text{ are self-weighted samples.}$$

When it is time to renew the corresponding rotation shift, only dwellings are renewed, not sections. As this would affect the probability of the dwelling.

In this case, the new dwelling should have the same probability as the other dwellings in the sample. To ensure this occurs, it is necessary to multiply by a coefficient that is known as a "growth coefficient."

$V_s'$  = number of dwellings in updated section.

$$P(V_{ish}) = K_{h*} \frac{V_s}{V_h} \cdot \frac{m}{V_s'} = K_h \cdot \frac{V_s}{V_h} \frac{m \cdot V_s'}{V_s} = K_h \cdot \frac{m}{V_h}$$

$$\text{growth coefficient} = c_i = \frac{V_s'}{V_s}$$

### 3.Fieldwork results

**INCIDENT SUMMARY**  
final

	Incidents concerning main dwellings											Reserves surveyed	Total surveyed	
	Total main d.S	TR	RS	TA	AS	IR	Surveyable	IN	E	OP	UD			
<b>Albacete</b>	<b>2.564</b>	<b>1.974</b>	<b>181</b>	<b>21</b>	<b>75</b>	<b>42</b>	<b>30</b>	<b>2323</b>	<b>193</b>	<b>42</b>	<b>6</b>			<b>1.974</b>
		85,0%	7,8%	0,9%	3,2%	1,8%	1,3%	90,6%	7,5%	1,6%	0,2%			77,0%
<b>Guipúzcoa</b>	<b>3.952</b>	<b>3.297</b>	<b>188</b>	<b>26</b>	<b>121</b>	<b>18</b>	<b>4</b>	<b>3654</b>	<b>230</b>	<b>56</b>	<b>12</b>			<b>3.297</b>
		90,2%	5,1%	0,7%	3,3%	0,5%	0,1%	92,5%	5,8%	1,4%	0,3%			83,4%
<b>Orense</b>	<b>3.943</b>	<b>3.341</b>	<b>111</b>	<b>22</b>	<b>123</b>	<b>36</b>	<b>10</b>	<b>3643</b>	<b>214</b>	<b>76</b>	<b>10</b>			<b>3.341</b>
		91,7%	3,0%	0,6%	3,4%	1,0%	0,3%	92,4%	5,4%	1,9%	0,3%			84,7%
<b>Tarragona</b>	<b>3.959</b>	<b>3.347</b>	<b>82</b>	<b>20</b>	<b>114</b>	<b>27</b>	<b>12</b>	<b>3602</b>	<b>280</b>	<b>58</b>	<b>19</b>			<b>3.347</b>
		92,9%	2,3%	0,6%	3,2%	0,7%	0,3%	91,0%	7,1%	1,5%	0,5%			84,5%
<b>Total CATI</b>	<b>14.418</b>	<b>11.959</b>	<b>562</b>	<b>89</b>	<b>433</b>	<b>123</b>	<b>56</b>	<b>13.222</b>	<b>917</b>	<b>232</b>	<b>47</b>			<b>11.959</b>
		90,4%	4,3%	0,7%	3,3%	0,9%	0,4%	91,7%	6,4%	1,6%	0,3%			82,9%
<b>Total CAPI</b>	<b>9.264</b>	<b>5861</b>	<b>1064</b>	<b>56</b>	<b>513</b>	<b>48</b>	<b>51</b>	<b>7.593</b>	<b>38</b>	<b>1361</b>	<b>128</b>	<b>144</b>	<b>1581</b>	<b>7.442</b>
		77,2%	14,0%	0,7%	6,8%	0,6%	0,7%	82,0%	0,4%	14,7%	1,4%	1,6%		80,3%
<b>TOTAL</b>	<b>23.682</b>	<b>17.820</b>	<b>1.626</b>	<b>145</b>	<b>946</b>	<b>171</b>	<b>107</b>	<b>20.815</b>	<b>955</b>	<b>1.593</b>	<b>175</b>	<b>144</b>	<b>1.581</b>	<b>19.401</b>
		85,6%	7,8%	0,7%	4,5%	0,8%	0,5%	87,9%	4,0%	6,7%	0,7%	0,6%		81,9%

Dwellings with a temporary result of NC and EI in CATI are finally considered CG=TA (total absence)

Surveyable=S+TR+RS+TA+AS+IR

As regards S, TR, RS, TA, AS and IR incidents, percentages are calculated considering the total number of surveyable dwellings. For the rest, the percentages are calculated considering the total number of dwellings with definitive incidents

For the total surveyed (main+reserves), the percentage is calculated considering the total number of initial main dwellings



## 4. Dissemination of the results

The statistic tables of the commented results of the survey and the methodological report will be published on the INE web site ([www.ine.es](http://www.ine.es)) and, if applicable, in the corresponding electronic publication.

The statistical tables of the final results of the ICT-H. 2005 will have a similar format and presentation to those published in the ICT-H. 2004, being tables related to dwellings and persons.

In tables relating to dwellings, the main magnitudes will refer to ICT equipment in the dwelling (television, computer, telephone, radio, video, etc.), as well as access and way of connecting to the Internet. As regards household members, among others, tables will be created for the use of computers, the Internet and e-mail.

These statistical variables inherent to the survey will be cross-referenced with the socio-demographic variables obtained in the same, such as the size of the household and of the municipality where it is located, sex, level of training of the persons and employment situation.