

Methodology of the Survey on the Equipment and Use of Communication and Information Technologies in Households (CITH-2004)

Final Report

INSTITUTO NACIONAL DE ESTADÍSTICA



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1 Presentation of the survey

The general objective of the survey on equipment and use of communication and information technologies in households (CIT-H) is to obtain data on the development of what has been denominated the *information society*.

The specific objectives of the survey are:

1. To get to know the communication and information technology equipment in Spanish households (CIT products: television, landline and mobile telephone, radio, computer equipment).
2. To get to know the use that the Spanish population makes of Internet and e-commerce.
3. To serve as a base for international comparison and to cover the information requirements of international institutions.
4. To obtain comparable information for autonomous communities.

1.1 General description of the survey

In 2003 the survey was conducted continuously, a "rotating panel" type, in other words the same dwellings are investigated (panel) over various years and a quarter of the sample renewed (rotating).

The sample was obtained from the continuous register of inhabitants which recorded 2,580 census sections distributed by autonomous community. Within each section 8 main dwellings were selected (which means a sample of 20,640 main dwellings) and 6 reserve dwellings in case incidences were to occur with the main dwellings (giving rise to a total of 36,120 dwellings including main and reserve).

In 2004 a quarter of the sections part of the sample of dwellings was renewed. For the rest of the dwellings the main and reserve dwellings who filled in the 2003 questionnaire were maintained (they are all considered dwellings in 2004) and the reserves which were not used to replace main dwellings (they were still considered reserve in 2004).

The sample for the CIT-H 2004 survey was made up of 26,953 dwellings, 19,366 main dwellings and the rest reserve dwellings which are used if something happens to a main dwelling.

PROVINCE	TOTAL SECTIONS	TOTAL DWELLINGS	MAIN DWELLINGS	RESERVE DWELLINGS
ALAVA	20	280	160	120
ALBACETE	27	285	208	77
ALICANTE	66	623	474	149
ALMERIA	23	234	172	62
AVILA	11	102	80	22
BADAJOS	69	683	516	167
BALEARES	92	805	625	180
BARCELONA	201	2272	1459	813
BURGOS	25	268	195	73
CACERES	43	439	333	106
CADIZ	45	471	345	126
CASTELLON	23	235	178	57
CIUDAD REAL	35	396	270	126
CORDOBA	31	312	231	81
CORUÑA (A)	65	714	496	218
CUENCA	15	172	119	53
GIRONA	24	291	177	114
GRANADA	32	294	215	79
GUADALAJARA	13	143	102	41
GUIPUZCOA	47	658	376	282
HUELVA	20	172	135	37
HUESCA	23	254	177	77
JAEN	26	277	199	78
LEON	35	375	266	109
LLEIDA	14	163	105	58
RIOJA (LA)	72	753	555	198
LUGO	21	206	157	49
MADRID	204	2153	1583	570
MALAGA	52	485	367	118
MURCIA	100	1061	780	281
NAVARRA	160	1592	1220	372
OURENSE	20	206	156	50
ASTURIAS	120	1227	906	321
PALENCIA	12	122	91	31
PALMAS (LA)	64	587	439	148
PONTEVEDRA	50	552	385	167
SALAMANCA	24	236	179	57
S.C.TENERIFE	56	520	399	121
CANTABRIA	80	732	573	159
SEGOVIA	10	110	78	32
SEVILLA	70	728	538	190
SORIA	7	71	55	16
TARRAGONA	25	270	177	93
TERUEL	15	161	120	41
TOLEDO	42	430	321	109
VALENCIA	106	993	767	226
VALLADOLID	34	344	260	84
VIZCAYA	77	1078	616	462
ZAMORA	14	159	112	47
ZARAGOZA	90	973	710	263
CEUTA	15	150	110	40
MELILLA	13	136	99	37
TOTAL	2,578	26,953	19,366	7,587

The dwellings from sections at first interview and dwellings without a telephone were interviewed by personal interview with tablet (CAPI). In total there were 6,492 main dwellings and 4,711 reserve dwellings in 1,123 sections (753 first interview sections and 370 sections from successive interviews with less than 8 main dwellings).

The rest of the dwellings were interviewed by telephone recording the survey on electronic questionnaire from CATI centres. In total there were 12,874 main dwellings and 2,876 reserve dwellings in 1,825 sections.

N° main dwellings	CATI Sections	CAPI Sections
8	952	753
7	419	0
6	214	0
5	139	1
4	60	0
3	27	14
2	11	66
1	3	289

The distribution by provinces of CAPI AND CATI dwellings was the following:

PROVINCE	CAPI SECTIONS	CAPI MAIN DWELLINGS	CAPI RESERVE DWELLINGS	CATI SECTIONS	CATI MAIN DWELLINGS	CATI RESERVE DWELLINGS
ALAVA	20	160	120	0	0	0
ALBACETE	16	85	57	18	123	20
ALICANTE	28	155	108	48	319	41
ALMERIA	12	65	44	16	107	18
AVILA	5	26	18	8	54	4
BADAJOS	33	164	117	51	352	50
BALEARES	46	215	144	69	410	36
BARCELONA	80	448	326	149	1011	487
BURGOS	9	58	43	18	137	30
CACERES	19	95	67	33	238	39
CADIZ	27	111	85	34	234	41
CASTELLON	11	55	36	17	123	21
CIUDAD REAL	10	61	42	28	209	84
CORDOBA	9	65	49	23	166	32
CORUÑA (A)	22	148	113	47	348	105
CUENCA	7	42	34	10	77	19
GIRONA	7	49	37	18	128	77
GRANADA	11	74	54	23	141	25
GUADALAJARA	5	27	19	10	75	22
GUIPUZCOA	47	376	282	0	0	0
HUELVA	7	36	24	16	99	13
HUESCA	13	62	45	16	115	32
JAEN	13	66	46	19	133	32
LEON	17	84	62	26	182	47
LLEIDA	6	34	26	10	71	32
RIOJA (LA)	28	154	111	54	401	87
LUGO	10	45	32	16	112	17
MADRID	67	425	316	153	1,158	254
MALAGA	22	115	79	39	252	39
MURCIA	46	230	168	75	550	113
NAVARRA	72	361	244	120	859	128
OURENSE	9	38	27	16	118	23
ASTURIAS	38	248	186	90	658	135
PALENCIA	3	24	18	9	67	13
PALMAS (LA)	24	159	116	45	280	32
PONTEVEDRA	20	104	74	38	281	93
SALAMANCA	8	51	36	18	128	21
S.C.TENERIFE	21	99	68	45	300	53
CANTABRIA	28	168	125	60	405	34
SEGOVIA	3	24	18	7	54	14
SEVILLA	31	147	112	54	391	78
SORIA	3	17	13	5	38	3
TARRAGONA	6	34	25	21	143	68
TERUEL	6	28	19	12	92	22
TOLEDO	11	74	54	33	247	55
VALENCIA	42	221	157	81	546	69
VALLADOLID	8	57	42	27	203	42
VIZCAYA	77	616	462	0	0	0
ZAMORA	8	29	24	11	83	23
ZARAGOZA	34	189	135	68	521	128
CEUTA	9	39	31	11	71	9
MELILLA	9	35	21	10	64	16
TOTAL	1,123	6,492	4,711	1,825	12,874	2,876

Dwellings from 370 sections have been distributed among CATI centres and CAPI delegations.

The field work was conducted in all of Spain from the end of April to the end of July 2004.

The population object of investigation (objective population) is made up of persons who live in main family dwellings. But, although persons from all ages form part of the objective population, not all persons are exhaustively investigated as only persons 15 and over at the time of the interview, one of whom is selected, are eligible for an exhaustive investigation.

For 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 15 and over). An informant who is a member of the household 18 or over is necessary to provide this data.

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

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

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

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, Internet and e-commerce and some socio-economic data on the selected persons. Only the selected person may respond.

1.2 Organisation of field work

Data was collated in two ways:

- personal interview with laptop computer or tablet (CAPI): The interviewer does not use paper questionnaires, rather he or she has a laptop computer in which the computer is included in such a way that interviews may be carried out with this laptop computer.

By using this method households from sections with new sample and households already included in the 2003 sample for whom there is no contact telephone, are interviewed.

- Telephone interview in a CATI centre: households from the 2003 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 on the electronic questionnaire directly.

In the case of the Basque Country all interviews were conducted in person.

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

II: interviewer inspectors; II: Interviewers

Province where the CATI centre is located	Provinces from where information was collated
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 are distributed over two shifts from Monday to Friday. The first shift covered the interval from 9h00 to 15h00 and the second from 15h00 to 21h00.

Sections were divided into 6 groups randomly that were called in a staggered fashion to be able to organise better the sending of letters of introduction on the survey to dwellings.

With respect to personnel contracted for the survey, it is worth noting that there were 8 interviewer inspectors and 43 interviewers for 12,874 CATI households; 18 interviewer inspectors and 81 interviewers for 6,492 CAPI households.

1.3 Incidences in dwellings and groups and their treatment

The **dwellings keys** that are 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 now exist.

This incidence does not exist in CATI.

- Dwelling used for other purposes (OP)

The household selected is dedicated entirely to purposes which are different from family residence. For example: convent, old people's home, garage, office, etc.

- Inaccessible dwelling (IN)

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

In CATI this incidence 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** that have been considered are:

- Total refusal (TR)

This is considered when it has not been possible to conduct the interview and the cause is the subsequent outright refusal of the initial informant after having started to collaborate.

- Refusal from the selected person (RS)

This case is considered as long as the initial informant answers the general household questions but **the selected person refuses to give information** either via an outright refusal as occurs subsequently 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 incidence 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 from household members as a whole preventing initial contact as well as the selected persons.

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 incidences occurs and the questionnaire filled in fulfils the requirements to be considered *complete*.

A questionnaire is **complete** if all corresponding questions according to the movement of the electronic questionnaire have been answered.

Moreover, for dwellings collected by means of telephone interview in CATI centres the results of all of them are collected and each one of the calls made.

The possible **call results** are:

- Not contacted (NC): when nobody answers the telephone or answerphone.

- 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, system problems, etc.

- Interview completed (IC): the interview records on the work sheet the dwelling key E, TR, RS, TA, AS or IR.

- Contact postponed (CP): the dwelling is contacted but before starting the interview the informant asks to be called at another time to conduct it or there is no valid informant in the dwelling at this 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

2.1 Type of sample

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

The first stage units are census sections. Second stage units are main family dwellings. During the third stage a person is selected in each dwellings who is 14 and over. Similarly, all minors 10-14 are 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. For the second stage units the most updated available list of main family dwellings in each one of the selected sections for the sample obtained from the use of the continuous inhabitants register, has been used.

The stratification criteria used was the size of the municipality to which the section belongs. In the case of Navarra, by convention in this community, other substrata have been defined based on the rural or urban type of municipality and on their geographical situation within the country.

For each autonomous community an independent sample is designed from that represented due to one of the survey objectives being to facilitate data with this level of breakdown.

2.2 Size of the sample. Fixation.

In order to cover the objectives of the survey to be able to facilitate estimates with a certain degree of reliability on a national and autonomous community level, a sample of 2580 census sections and 20640 dwellings were selected, whereby 8 dwellings have been selected in each census section, 8 in the autonomous community of Euskadi.

With the objective of obtaining a minimum sample size that facilitates obtaining reliable estimates on an autonomous community level, the sample is distributed among them by using a fixation commitment between the uniform one and proportional to the size of the community. Similarly, the information coming from the CIT-H-02 survey has been taken into account.

Between strata, fixation is proportional to the size of these always maintaining that the number of sections by stratum in each autonomous community is 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 number of dwellings selected in each census section is 14 of which 8 are main and 6 reserve.

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

Autonomous Community	Number of census sections
Andalucía	300
Aragón	128
Asturias (Principado de)	120
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 (Ciudades Aut.)	28
TOTAL	2580

2.3 Selection of the sample

In order to conduct the CIT-H-03 survey the selection of first stage units in each stratum was carried out with probability proportional to the size of each section. During the second stage, dwellings were selected by means of a systematic sample with random start and equal probabilities of selection for each section dwelling. This procedure leads to obtaining 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.

2.4 Renewal of the sample

The survey is carried out annually. With the object of avoiding tiring out respondent families as well as giving the probability of selection to other new families, the sample is renewed partially for which reason the schema of rotation shifts is introduced.

Therefore, the survey is a rotating panel with four rotation shifts organised in such a way that each year dwellings are renewed from one shift. For this reason, the number of sections by autonomous community in the sample is a multiple of four which 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 coherent with the design of the sample.

In 2004 the dwellings from rotation shift 1 were renewed. This partial renewal of the sample was not carried out in the Basque Country since the dwellings selected in this community were interviewed for the first time.

2.5 Estimators

To estimate the survey characteristics the following types of estimators are considered:

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

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

A) ESTIMATOR FOR HOUSEHOLDS DATA

For household characteristics an estimator is used that is obtained by means of the following steps:

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

In each stratum h , the estimator for the total of a characteristic X is obtained by means of the 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 sections from rotation shift 1 (except the Basque Country) growth of the same from the selection of the primary units sample. For the rest of the sections, including those from rotation shift 1 in the Basque Country, this coefficient has the value 1.

x_{hij} : value of characteristic object of study in dwelling j , section i .

A2) Estimator of separate ratio 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 (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 information coming from the Economically Active Population Survey relating to the size of the dwelling in each autonomous community, as well as provincial population projections referring to 15 May 2004 obtained from the 2001 census has been used as an external source.

B) ESTIMATOR FOR DATA ON PERSONS 15 AND OVER

This is obtained from information coming from the individual questionnaire whose responses come from a person selected among household members 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 lack of 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) Application of reweighting techniques by age groups and sex on an autonomous community level (CALMAR) with populations referring to 15 May 2004 obtained from the 2001 Census.

C) ESTIMATOR FOR DATA ON PERSONS 10-14.

The sample information relating to all household members who are 10-14 is provided by the person 15 and or over selected in each dwelling. Therefore, the elevation 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 by means of ratio estimators but in this case, adjustment is made to

population projections of 10-14 year olds by sex in each autonomous community obtained from the 2001 census.

2.6 Sample errors

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

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:

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

where:

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

¹ (*) The CALJACK software elaborated by P. Lavallé de Statistics Canadá was used

CIT-H 2004 TOTAL SAMPLE ERRORS

Variables relating to households.

Variation coefficient (%)

Dwellings with a desktop computer
Dwellings with Internet access

0.96

1.42

Variables relating to persons over 14

Variation coefficient (%)

Computer users (in the last three months)
Internet users (in the last three months)
Purchases via Internet (sometimes)(*)

1.05

1.25

3.55

(*)NOTE : - Internet purchases: variable PURCHASES from the microdata file (position 2743).

CIT-H-04. SAMPLE ERRORS OF VARIABLES RELATED TO HOUSEHOLDS

CA	Dwellings with desktop computer	Dwellings with Internet access
ANDALUCÍA	2.8	4.61
ARAGÓN	3.4	5.05
ASTURIAS	4.0	7.20
BALEARES	5.0	5.97
CANARIAS	4.4	7.20
CANTABRIA	5.2	7.71
CASTILLA-LEÓN	3.5	5.09
CASTILLA-LA MANCHA	4.2	6.53
CATALUÑA	2.3	3.01
COM.VALENCIANA	3.4	4.78
EXTREMADURA	4.5	8.63
GALICIA	3.8	6.32
MADRID	2.9	4.28
MURCIA	4.8	7.11
NAVARRA	3.3	4.24
PAÍS VASCO	3.1	3.94
LA RIOJA	5.1	7.72

Purchases on Internet

11.34
14.38
13.79
17.78
17.67
16.94
14.35
21.03
8.20
12.89
13.95
14.40
9.36
20.88
10.28
10.53
19.23
64.06

CIT-H-04.SAMPLE ERRORS OF VARIABLES RELATING TO PERSONS 10 TO 14.

CA	Computer users (in the last three months)	Computer users (in the last three months)
ANDALUCÍA	5.12	5.48
ARAGÓN	6.06	8.71
ASTURIAS	7.19	6.98
BALEARES	10.15	7.82
CANARIAS	11.90	11.64
CANTABRIA	10.69	13.04
CASTILLA-LEÓN	6.51	8.20
CASTILLA-LA MANCHA	6.70	7.46
CATALUÑA	3.67	4.76
COM.VALENCIANA	6.65	7.69
EXTREMADURA	7.59	7.94
GALICIA	8.05	7.75
MADRID	4.44	4.80
MURCIA	9.79	11.30
NAVARRA	4.94	6.84
PAÍS VASCO	4.36	5.42
LA RIOJA	11.05	10.84
CEUTA Y MELILLA	28.79	22.41

CIT-H-04.SAMPLE ERRORS OF VARIABLES RELATING TO PERSONS 10 TO 14.

CA	Computer users (in the last three months)	Computer users (in the last three months)
ANDALUCÍA	5.12	5.48
ARAGÓN	6.06	8.71
ASTURIAS	7.19	6.98
BALEARES	10.15	7.82
CANARIAS	11.90	11.64
CANTABRIA	10.69	13.04
CASTILLA-LEÓN	6.51	8.20
CASTILLA-LA MANCHA	6.70	7.46
CATALUÑA	3.67	4.76
COM.VALENCIANA	6.65	7.69
EXTREMADURA	7.59	7.94
GALICIA	8.05	7.75
MADRID	4.44	4.80
MURCIA	9.79	11.30
NAVARRA	4.94	6.84
PAÍS VASCO	4.36	5.42
LA RIOJA	11.05	10.84
CEUTA Y MELILLA	28.79	22.41

3 Field work results

3.1 Results in CATI centres

The final incidences of the dwelling and group obtained in the report elaborated by CATI for the survey appear in the following table:

1. Dwelling keys in main dwellings

	TOTAL MAIN DWELLINGS	S	%	IN	%	E	%	OP	%
TOTAL	12874	11625	90.3%	1054	8.2%	166	1.3%	29	0.2%

S: surveyable, IN: inaccessible, E: empty, OP: other purposes

Of the total main dwellings to interview from CATI centres 90.3% were surveyable, 8.2% inaccessible, 1.3% empty and 0.2% other purposes.

2. Group keys in surveyable main dwellings

	TOTAL MAIN DWELLING S SURV.	S	%	TR	%	RS	%	TA	%	AS	%	IR	%
TOTAL	11,625	9,608	82.6%	1,115	9.6%	167	1.4%	455	3.9%	222	1.9%	58	0.5%

S: group surveyed, TR: total refusal, RS: refusal by selected person, TA: total absence, AS: absence of person selected, IR: incapacity to respond

Of the total main dwellings surveyed, 82.6% were finally interviewed. 11% of dwellings refused (the group as a whole or the selected person), 5.8% absent (the group as a whole or the selected person) and 0.5% incapable of responding.

The majority of dwellings with group key TA are dwellings that have not been contacted after several calls. They have been considered absent because no more information is available but probably some of them are really empty dwellings. To verify this, personal visits were made during the month of September to a sample of these dwellings.

When a definitive incidence occurs in a dwelling that prevents the survey from being completed, substitution is made with a reserve dwelling from the same section if there are any left.

	TOTAL MAIN DWELLING S	MAIN DWELLING S CG = SE	%	RESERVE DWELLING S CG = S	%	TOTAL CG = S	%
TOTAL	12,874	9,608	91.6%	885	8.4%	10,493	81.5%

Of the dwellings surveyed 91.6% are main dwellings and 8.4% are reserve dwellings.

The total number of surveyable dwellings, both main and reserve, represents 81.5% of the number of initial main dwellings. This represents 18.5% of the sample loss.

3.2 Results in CAPI delegations

The final incidences of the dwelling and group from the CAPI collation appear in the following tables:

	TOTAL MAIN DWELLINGS	S	%	IN	%	E	%	OP	%	UL	%
TOTAL	6,492	5,707	87.9%	9	0.1%	588	9.1%	62	1.0%	107	1.6%

S: surveyable, IN: inaccessible, E: empty, OP: other purposes, UL: unlocatable

The sum of the surveyed, inaccessible, empty, other purpose and unlocatable dwellings is 6,473. The difference between the initial number of main dwellings (6,492) is due to that fact that sections 280894, 281013, 310214 and 410107 finished in the field are incomplete due to a computer problem.

Of the total main dwellings to interview from the CAPI delegations 87.9% resulted in being surveyable, 0.1% accessible, 9.1% empty and 1.0% other purposes and 1.6% unlocatable.

2. Group keys in surveyable main dwellings

	TOTAL MAIN DWELLING S SURV.	E	%	TR	%	RS	%	TA	%	AS	%	IR	%
TOTAL	5,707	4,322	75.7%	752	13.2%	31	0.5%	510	8.9%	69	1.2%	23	0.4%

Of the total main dwellings surveyed, 75.7% were finally interviewed. 13.7% of dwellings refused (the group as a whole or the selected person), 10.1% were

absent (the group as a whole or the selected person) and 0.4% were incapable of responding.

When a definitive incidence occurs in a dwelling that prevents the survey from being completed, substitution is made with a reserve dwelling from the same section.

CATI CENTRE	TOTAL MAIN DWELLINGS	MAIN DWELLINGS CG = S	%	RESERVES CG = S	%	TOTAL CG = S	%
TOTAL	6,492	4,322	71.4%	1,732	28.6%	6,054	93.3%

Of the dwellings surveyed 71.4% are main dwellings and 28.6% are reserve dwellings.

The total number of surveyable dwellings, both main and reserve, represents 93.3% of the number of initial main dwellings. This represents 6.7% of the sample loss.

(1) By extrapolation to all IN from the collation results with paper questionnaire.

4 Treatment of the information

When the collation of information is made by telephone, a recording is made at the same time, assisted by an appropriate support for this purpose in such a way that movement controls were incorporated which guarantee the formulation of questions in their correct order and content and coherence of the variables between themselves.

For dwellings whose information is collated by means of personal interview, their recording is also carried out at the same time, as the complete questionnaire with the corresponding movement controls were included in the laptop computer used in the interviews.

Finally, all the data, both those obtained by phone and personal visit were subjected to centralised control and filtering. After incorporating the elevation factors the final microdata file was obtained and used for the analysis and tabulation of the survey.