

### Community Survey on ICT usage in households and by individuals 2005

## Final report

#### Please read this first!!!

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- In the title line of this page, please delete the non-applicable term (Interim / Final).
- Fill in the required information in the space (box) foreseen next to or below the item heading, if a box is irrelevant for your national survey, indicate 'non-applicable' to avoid we have to come back to you on this item. An increase of the box' size after inserting several lines or paragraphs is no problem. However, when reporting several pages for one item, we kindly ask you to give a short summary and refer to the full text in an annex.
- Keep the numbering of the chapters and items. Additional comments can be given at the end of the report.
- This template is designed to serve both the requirements for the <u>Interim</u> as well as the <u>Final</u> reports. Chapters 1 to 6 shall be completed for the interim reporting, chapters 7 to 11 can be postponed until the final reporting. However, where provisional information for the Final Report topics is already available, we invite you to provide us with this data in the Interim Report (and update it in the Final Report).
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### 1. Cover information

1.1	Country	GREECE
1.2	Organisation responsible the survey Please also indicate the organisation <u>running</u> the survey if different from the organisation responsible (e.g. because of sub-contracting).	NATIONAL STATISTICAL SERVICE OF GREECE
1.3	<b>Contact person(s)</b> (Name, unit, e-mail, phone, fax)	1. CHALKIADAKI MARIA UNIT FOR SPECIAL HOUSEHOLD SURVEYS TEL. 0030 -210-485 2896 FAX. 0030 -210-485 2906 E-MAIL: mchalk@statistics.gr 2. ZOULIATIS IOANNIS UNIT FOR SPECIAL HOUSEHOLD SURVEYS TEL. 0030 -210-485 2896 FAX. 0030 -210-485 2906 E-MAIL: zouliati@statistics.gr
1.4	Name of the collection The name of the survey in its original language(s) and in English (e.g. name used in the statistical office's English website).	SURVEY ON THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES ΕΡΕΥΝΑ ΧΡΗΣΗΣ ΤΕΧΝΟΛΟΓΙΩΝ ΠΛΗΡΟΦΟΡΗΣΗΣ & ΕΠΙΚΟΙΝΩΝΙΑΣ
1.5	Last update of this report	November 24 <sup>th</sup> 2005



# 2. General methodological information

#### 2.1 Reference period(s)

The main reference period for the ICT variables as well as the background variables, e.g. *first quarter of the year* or *last three months before the interview* (with an indication of the respective months), or a specific date.

- <31rst of March 2005 for educational level completed
- Day of the survey conduction for activity status, employment situation, A1-A5, C4
- Three first months of 2005 for questions B2, B3, C2, C3, C5, C6, C7
- Last 12 months (April 2004-March 2005) for questions C8, D2, D2-b, D3, D4, D5

#### 2.2 Survey period

The beginning and end date – if already known – of the data collection period.

1 April 2005-31 May 2005.

#### 2.3 Survey vehicle

Stand-alone or embedded in another survey. If embedded, give a short description of the survey the ICT modules are inserted in.

ICT is a stand-alone survey.

#### 2.4 Survey type

Short description of the survey type (face-to-face interview, self-administered mail survey, telephone interview, combination of techniques, other; etc.).

Telephone interview, with simultaneous data entry in electronic questionnaire where feasible.

#### 2.5 Survey participation

Please indicate whether the survey is mandatory or voluntary.

Participation is mandatory according to Greek law.

#### 2.6 Main methodological differences compared to previous survey(s)

If any, indicate the changes in methodology that may have an impact on the (comparability over time of the) results delivered to Eurostat, e.g. change in reference period, new reference sampling frame, different scope, different grossing-up method, different treatment of non-response, etc. No need for giving detailed technical analyses, a bullet point overview of the main differences and the expected impact is sufficient.

• The sample of the *2002 survey* consisted of one of the six rotating panels that make up the Greek Labour Force Survey (LFS). The LFS is a quarterly rotating panel household survey with multistage stratified design that covers the target population of the ICT survey.

The sampling design involves clustering of households in the area units that comprise the area frame. By area unit we mean a part of inhabited area ending at artificial or natural boundaries well defined and identifiable on the ground, by using a map of the locality. Such a unit could be one or more neighboring blocks, or part of a rural locality with such boundaries.

Stages of probability sampling: The sample of private households and associated eligible residents was drawn in three stages. In the first stage of the LFS sampling a random sample of area clusters, the primary sampling units (PSUs), was systematically selected from each stratum with probability proportional to the number of private households in the cluster. In the second stage a systematic random sample of households was drawn, with a pre-fixed sampling rate, from the current population of households (based on a list prepared in the field) of each selected PSU. In the third stage, for the incoming LFS rotation (287 PSUs) one of the residents (aged sixteen to seventy four) of each selected household was selected at random in the field for the ICT survey.

• The sample of the *2003 survey* consisted of three of the four rotating panels that make up the Greek Survey of Income and Living Conditions (EU-SILC). The EU-SILC is an annual rotating panel household survey with multistage stratified design that covers the target population of the ICT survey. It should be noted that all four initial panels of the EU-SILC were simultaneously introduced for its first wave conducted in 2003. The reasons for using panels of the EU-SILC to collect the ICT information was the operational convenience, the low cost and the facility in creating a representative sample of the requisite size.

The EU-SILC survey used a stratified multistage probability sampling to select the eligible sampling units.

Stratification: The sampling design involves two levels of area stratification: (i) The first level is geographical stratification based on the partition of the total country area into thirteen standard administrative regions corresponding to the European NUTS II level. The two major city agglomerations of Greater Athens and Greater Thessalonica constitute separate major geographical strata. (ii) The second level of stratification involves grouping municipalities and communes within each NUTS II administrative region by degree of urbanization, i.e., according to their population size, into four categories. These categories are defined by the population size intervals *0-999, 1000-4999, 5000-29999, 30000 and over*. The number of final strata in the thirteen regions, i.e., non-empty strata formed by crossing region and degree of urbanization, was 50. The two major city agglomerations were further partitioned into 31 and 9 substrata (administrative subsections), respectively, on the basis of the city blocks of the municipalities that constitute them. Thus, the total number of strata for this survey was 90.



Clustering: The sampling design involves clustering of households in the area units that comprise the area frame of each final stratum. By area unit we mean a part of inhabited area ending at artificial or natural boundaries well defined and identifiable on the ground by using a map of the locality. Such a unit could be one or more neighbouring blocks, or part of a rural locality with such boundaries. To reduce field costs and the time length of the fieldwork, the size of the area clusters was limited to an average of approximately fifty households in the thirteen administrative regions, and approximately seventy households in the two major city agglomerations.

- The sample of the *2004 survey* was exactly the same as the one of the 2003 survey.
- The sample of households for the ICT survey of the year **2005** has been consisted of two of the six rotating samples that make up the Greek Labour Force Survey (LFS) of the year 2004. The LFS is a quarterly rotating sampling household survey covering the target population of the ICT survey. The LFS is a multistage stratified sampling survey with primary sampling unit the area (one or more unified blocks) and final unit the household. The sample design of LFS of the year 2004 was based on data coming from the population census of the year 2001.

In each Department (NUTS III), the stratification of primary units was performed, by allocating the Agglomerations, Municipalities and Communes by the degree of urbanization (urban, semi-urban, and rural regions). The Municipalities of the Agglomerations of Greater Athens and the Thessalonica were allocated into 31 and 9 equally sized strata (approximately, equal number of households), respectively.

# 3. Statistical unit(s), scope and target population

#### 3.1 Statistical unit

Please indicate whether the following recommendations were applied (and specify the deviations, if any):

- Questions A1-A4 in the Eurostat model questionnaire: households with at least one member aged 16 to 74 (included);
- Question A5, Modules B, C and D in the Eurostat model questionnaire: individuals aged 16 to 74 (included).

Where different from the statistical unit, please indicate the actual *collection* unit.

- Questions A1-A4 in the Eurostat model questionnaire: households with at least one member aged 16 to 74 (included)
- Question A5, Modules B, C and D: One randomly pre-selected individual aged 16-74 per household.

#### 3.2 Age groups covered

In the demographic part of the questionnaire all members of the household (residing in the dwelling during the first three months of the year 2005) have been registered. Households with members aged less than 16 and/or more than 74 are excluded.

All household and personal information are completed by members aged 16-74 years old.

#### 3.3 Territorial coverage

If applicable, indicate the parts of the country that are not included as well as an estimate of the resulting percentage of undercoverage (non-covered population compared to total country population).

All private households of the country and the members of them are covered in the survey, independently of their size or any socio-economic characteristics they may have.

Excluded are collective households such as hotels, hospitals, military camps, nursing homes, etc. As collective households were also considered households with more than 5 lodgers. Households having as members foreigners in diplomatic missions.



	Universe	Households	Individuals
3.4	<b>Target population</b> The number of <i>households</i> and <i>individuals</i> in the target population (scope, universe). Please restrict the numbers to the <i>Eurostat scope</i> (if additional age groups are covered in the national survey, these can be reported separately between brackets). If not directly available, please provide an estimate (e.g. based on other social surveys). If not applicable, please indicate why.	3.624.373	8.166.396
3.5	<b>Non-target population</b> The approximate number of <i>households</i> and <i>individuals</i> outside the scope of the survey (e.g. individuals younger than 16 or older than 74; households with all members over 74 years old), i.e. the difference between the total population (in terms of households or individuals) in the country and the target population). If not applicable, please indicate why.	368.591	2.444.270



# 4. Questionnaire

#### 4.1 Adoption of questions and items from the Eurostat model questionnaire (v3.1)

Please indicate in the table below whether the questions were collected in the national survey (by inserting a '**X**' in the column "Question included"). The 'O' next to the question title refers to the optional status of certain questions. Deviations from the Eurostat model questionnaire are to be discussed in the last column (e.g. missing, combined or additional items; different reporting periods; deviations in the routing or ordering of the questions/items (see also §4.3); difference definitions; different classification, breakdown or source (esp. in the background characteristics)). Where applicable, specify whether the information was derived from other sources than the ICT questionnaire.

	Question	Deviations from Eurostat model question	
	Module A : Access to selected ICTs		
A1	Does the household via one of its members have access to any of the following?	x	
<u>A2</u>	Does any member of this household have access to the world wide web (Internet) at home	x	
<u>A3</u>	On which of these devices is the Internet accessed at home?	x	
<u>A4</u>	What types of Internet connection are used?	Х	
A5	What are the main reasons for not having access to the Internet at home?	х	
	Module B : Use of computer		
В1	When did you most recently use a computer?	Х	
B2	How often on average have you used a computer in the last 3 months?	Х	
B3	Where have you used a computer in the last 3 months?	X	
	Module C : Use of the Internet		
C1	When did you most recently use the Internet?	X	
<u>C2</u>	On average how often did you use the Internet in the last 3 months?	x	
<u>C3</u>	Where have you used the Internet in the last 3 months (using a computer or any other means)?	x	
<u>C4</u>	Is the device you use to access the Internet at home protected [by virus checking program; hardware/software firewall; "don't know"] ?	x	Additional answer "Didn't access the internet at home" for persons not having answered "at home" in Question C3.
<u>C5</u>	Has it been installed or updated in the last 3 months (incl. automatic updating)?	x	
C6	In the last 3 months, have you used online authentication on the Internet for private use, such as password, PIN or digital signature?	x	
<u>C7</u>	For which of the following activities did you use the Internet in the last 3 months for private use?	x	



C8	In the last 12 months, have you encountered any of the following security problems through using the Internet?	x	
	Module D : Internet commerce details		
<u>D1</u>	When did you most recently order goods or services for private use over the Internet (excluding manually typed e-mails) ?	x	
D2	What types of goods and services did you order over the Internet for private use in the last 12 months ?	х	
D2b	Of the products which you ordered over the Internet, were any of the following delivered or upgraded on-line (downloaded from the Internet or accessed from websites) ? - pilot question	x	
D3	Did you buy or order goods over the Internet from [retailers known from outside the Internet; retailers known from the Internet or found on the Internet] ?	x	
D4	What problems have you encountered when buying/ordering goods or services over the Internet in the last 12 months ?	x	
D5	What were the main reasons for not buying / ordering any goods or services for your own private use in the last 12 months ?	x	
	Module E : E-skills		
E1	When did you last take a training course (of at least 3 hours) on any aspect of computer use ?	X	
E2	Which of the following computer related activities have you already carried out [7 items] ?	x	
E3	Which of the following Internet related activities have you already carried out [7 items] ?	х	
E4	Where or how did you obtain the skills to carry out these activities ? - <i>pilot question</i>	х	
	Socio-demographic background variables		
F1	Age	Х	
F2	Sex	Х	
F3	Educational level (according to ISCED)	х	Completed by 31 March 2005
15			
F4	Employment situation	X	
	Employment situation Occupation (according to ISCO) - pilot question	x x	For working persons (employees and self employed)
F4	Occupation (according to ISCO)		



F8	Number of members in the household	X	
F9	of which, number of children under 16	х	
F10	Household income - optional question		

### 4.2 Additional questions introduced in the national questionnaire, if any

'non-applicable'

4.3	Effects of deviations from the routing used in the Eurostat model questionnaire, if any
	'non-applicable'

4.4	General remarks on the national questionnaire, if any
	'non-applicable'



# 5. Sampling frame

#### 5.1 Name and short description of the sampling frame or register used

The sampling frame containing the primary units (cluster of households in one or more unified blocks), for the ICT survey, comes from two rotating samples (out of 6) of the LFS with reference period the 1<sup>st</sup> quarter of the year 2004. These two rotating samples include the 2/6 of the total number of primary sampling units (880) and approximately 10.280 households. The LFS is an area frame sampling and it has been designed using all the necessary information on primary sampling units from the recent Greek General Population Census 2001, and provides complete coverage of the target population of this survey.

In each selected primary unit, the sampling frame containing the households is updated before the data collection.

5.2	Known shortcomings of the sampling frame, if any Shortcomings in terms of timeliness (e.g. time lag between last update of the sampling frame and the moment of the actual sampling), geographical coverage, coverage of different subpopulations, etc.
	The sampling frame has been updated one month before the survey was initiated, and no shortcomings exist.

### <sup>6.1</sup> 6. Sampling design

#### Sampling method

Please give a description of the sampling method used (e.g. stratified random sample, quota sampling, cluster sampling; one-stage or two-stage sampling; if not directly selected from the register, how are individuals selected within the household; one or all individuals within a household; etc.) and the method used for determining the sample size and sample selection. If stratification was used, please specify which variables were used to stratify, the categories of those variables and the final number of stratums.

The two-stage stratified area sampling with self-weighting estimators is applied for the survey. The primary units are the areas (one or more unified blocks) and the final sampling units selected in each sampling area are the households, apart from households not containing at least one member 16 to 74 years old.

#### Stratification

In each geographical region (NUTS II), the urban agglomerations, the Municipalities and Communes were allocated by the degree of urbanization (urban, semi-urban and rural regions). The produced strata according to the degree of urbanization are:

Urban	Stratum	1	Agglomerations and Municipalities with 10.000 inhabitants or more
Semi-urban <sub>"</sub>		2	Municipalities and Communes with 2.000 to 9.999 inhabitants
Rural	"	3	Communes up to 1.999 inhabitants

The Municipalities of the Greater Athens (the largest urban agglomeration) were allocated to 31 approximately equally sized strata (equal number of households), and the Municipalities belonging to the agglomeration of Thessalonica (the second urban centre of Greece) were allocated to 9 equally sized strata, taking into account social and economic criteria for this further stratification. After the stratification, 79 strata were produced.

#### Sampling fraction

The overall sampling fraction is  $\frac{1}{\lambda} \approx 0.152\%$  (5.501 households).

#### Sample selection

### 1<sup>st</sup> stage of sampling

In each stratum (let say stratum h),  $n_h$  primary units were selected, with probabilities proportional to their size and with the application of the purposive sampling, so that (a) the selected primary units to belong to the sample of the Labour Force Survey of the year 2004 and (b) the primary units to contain households having been surveyed only in the 1<sup>st</sup> and 2<sup>nd</sup> wave.

If  $X_h$  is the stratum size (estimated number of households from the Labour Force Survey for the 1<sup>st</sup> quarter of the 2004 year for the year 2004) and  $X_{hi}$  the corresponding size of the  $i^{th}$  primary unit (number of households having been recorded after updating the list of households during the Labour Force Survey of the 1<sup>st</sup> quarter of the 2004 year), then selection probability of the  $i^{th}$  primary unit is:

$$\boldsymbol{P}_{hi} = \frac{\boldsymbol{X}_{hi}}{\boldsymbol{X}_{h}} \quad (1)$$

The whole number of the sampling primaries units is 880 (  $\sum_{h=1}^{79} n_h = 880$  )

#### 2<sup>nd</sup> stage of sampling

In each selected primary unit, the sample of households was selected with equal probabilities and applying the systematic sampling from a list of households being surveyed in the Labour Force Survey with reference time period the  $1^{st}$  quarter of the 2004 year and belonging to the target population.

Sample size of households in each primary unit

Let  $M_{hi}$  be the number of households during the 1<sup>st</sup> quarter of the year 2004 in the  $i^{th}$  selected primary unit belonging to the stratum h. Out of them, a sample of  $m_{hi}$  households was selected. The selection probability is:

$$\pi_{hi} = \frac{m_{hi}}{M_{hi}} (2)$$

The simple size in each selected primary unit is calculated as following:

$$m_{hi} = \frac{M_{hi}}{\delta_{hi}}$$
 (3)

Where:  $\delta_{hi} = \pi_{hi}^{-1} = \frac{M_{hi}}{m_{hi}}$  is the sampling interval which is calculated as following:

$$\frac{1}{n_h} \cdot \frac{1}{P_{hi}} \cdot \frac{M_{hi}}{m_{hi}} = \lambda \implies \frac{1}{n_h} \cdot \frac{1}{P_{hi}} \cdot \delta_{hi} = \lambda \implies \delta_{hi} = \lambda \cdot n_h \cdot P_{hi} = \lambda \cdot \frac{n_h}{X_h} \cdot X_{hi} \quad (4)$$

The calculations of the households sample size and the sampling interval with the application of the expressions (3) and (4) respectively become the estimator self-weighting.

# 6.2 Additional measures taken at the time of sampling design to improve representativeness

If any, and if not covered under §6.1. E.g. corrections for sampling frame undercoverage, etc.

The sampling frame containing the primary units is updated every ten years through the General Population Census. However, in each selected primary sampling unit, the frame from which the sampling households are selected is updated before the survey conduction.

	Sample size	Households	Individuals
6.3	<b>Gross sample size</b> The number of households/individuals initially selected from the sampling frame (if not applicable, please indicate why). Please restrict the numbers to the <i>Eurostat scope</i> (if additional age groups are covered in the national survey, these can be reported separately between brackets). If the sample has not yet been selected, please indicate the planned sample size.	5.501	5.501
6.4	Net sample size The number of households/individuals that can be used in the final database (if not applicable, please indicate why).		n under §7.C report)



### 7. Response and non-response

#### (Final Report)

**Note:** This chapter only deals with non-response error. Other non-sampling error such as frame errors, measurement and processing errors or model assumption errors are discussed elsewhere or outside the scope of this methodological report.

### **UNIT NON-RESPONSE**

Unit non-response occurs when not all elements (households and/or individuals) of the gross sample (i.e. the initial sample drawn from the reference sampling frame) participate in the survey and are thus not included in the net sample.

However, not all types of non-response are taken into account when calculating the response rate (in §7.D) as they can be rather related to the quality of e.g. the sampling frame than to the quality of the survey data.

Note: In this report - for reasons of comparability across countries - all non-contacts are considered to be *non-response of eligible cases* (where in reality some of the non-contacts may concern ineligible cases).

		Number of households	Number of individuals
7.A	Gross sample size The number of households/individuals initially selected from the sampling frame (if not applicable, please indicate why).	5.501	5.501

	Type of unit non-response (ineligible cases)	Number of households	Number of individuals
7.1	Ineligible: out-of-scope		
	E.g. selected household is not in the target population because all members are over 75 years old.	19	19
7.2	Other ineligible		
	E.g. no dwelling exists at the selected address or selected individual has died between the reference data of the sampling frame (cf. §5.2) and the moment of the interview.	0	ο

7.B	Number of eligible elements			
	I.e. the gross sample size corrected for the ineligible cases. [\$7.B] = [\$7.A] - [\$7.1] - [\$7.2]	5.482	5.482	

	Type of unit non-response (eligible cases)	Number of households	Number of individuals
7.3	Non-contact E.g. no one was home or postal survey was never sent back.	732	732
7.4	<b>Refusal</b> E.g. selected household or individual was contacted but refused to take part in the survey.	265	265



7.5	Inability to respond E.g. selected household or individual was unable to participate due to language barriers or cognitive or physical incapacity to respond.	Ο	Ο
7.6	<b>Rejected interviews</b> E.g. the selected household/individual did take part but the survey form cannot be used (poor quality - e.g. strong inconsistencies; unacceptable item-response – e.g. individual left most of the questions unanswered; survey form got lost and interview cannot be repeated; etc.).	Ο	0
7.7	Other non-response Please specify the other types of non-response encountered. <u>Note</u> : please add the other non-response related to ineligibility of the selected elements under §7.2. • •	0	0

7.C	Net sample size			
	The number of households/individuals that can be used in the final database (if not applicable, please indicate why). This notion corresponds to the <i>final sample</i> in the Tabulation Scheme. [§7.C] = [§7.B] – [§7.3] – [§7.4] – [§7.5] – [§7.6] – [§7.7]	4.485	4.485	

		Households	Individuals
7.D	Unit response rate The unit response rate is the ratio of the <i>number of in-scope</i> <i>respondents</i> (= the number of achieved interviews or the net sample size, see §7.C) to the <i>number of eligible elements</i> selected from the sampling frame (see §7.B). The number of eligible elements equals the gross sample size (see §7.A) minus the ineligible cases (see §7.1 and §7.2). [§7.D] = [§7.C] / [§7.B]	81,8%	81,8%

#### 7.8 Comments on the unit response rate, if any

The sampling frame containing the primary units for the ICT survey is the same as for the two rotating samples (out of 6) of the LFS with reference period the  $1^{st}$  quarter of the year 2004. Each rotating sample contains the 1/6 of the whole number of households of quarterly sample.

More specifically from the 10.280 households corresponding to 2/6 sample of LFS having been interviewed in the  $1^{st}$  quarter of 2004, 5.501 formed the sample for the ICT survey, as we had their phone numbers as well as household's synthesis.



	T			
7.9	Methods used for minimizing unit non-response			
	<ul> <li>Where applicable, give a description of measures taken to reduce the unit non-response:</li> <li>advance notification in the form of a letter or phone call;</li> </ul>			
	<ul> <li>system of reminders, number of visits, number of attempts for phone calls, etc.</li> </ul>			
	<ul> <li>showing respondents how the data they are providing are being used;</li> <li>etc.</li> </ul>			
	An advance notification letter was sent to all households, one month before the survey conduction.			
	In cases where the households couldn't be approached, mainly due to temporary absence, a number of calls-backs (up to three) were used. In these cases, another notification letter was sent, informing the households that the interviewer would visit them again on a certain date / time.			
7.10	Methods used for dealing with unit non-response			
	Indicate whether imputations are made for unit non-response and give a short description of the methods used (e.g. correction factor in the weighting procedure, imputation based on background characteristics known from the sampling frame, etc.).			
	The household weights of the ICT sample in each of the thirteen major geographic strata will also be adjusted for non-response (using the inverse response rate) separately within each substratum defined by the degree of urbanization. In the two major city agglomerations the non-response adjustment was made within each of their substrata.			
	Concerning the individuals and for reducing the bias due to non-response, the individuals of the sample were post stratified to 24 sub-strata being defined by sex and year intervals: 16-19, 20-24, 25-29,30-34, 35-39,40-44, 45-49, 50-54, 55-59,60-64, 65-69 and 70-74.			
	As each post-stratum is homogeneous and the population size (not the sample size) is defined by external source of statistical information (results of LFS), the bias due to non-response is, approximately, negligible.			
7.11	Other comments relating to the unit pen response			
7.11	Other comments relating to the unit non-response			

If any, please use this box to inform on additional issues on the non-response calculation (e.g. method used in national publications, etc.).

'non-applicable'

7.12 Proxy answers
 Please indicate whether the instructions to interviewers allow for proxy interviews (another person in the household than the one who was randomly selected can answer the questions).
 If yes, give an estimate of the percentage of proxy interviews (compared to the total number of interviews).
 'non-applicable'



### **I** TEM NON-RESPONSE

Item non-response occurs when a respondent provides some, but not all, of the requested information, or if the reported information is not useable (note that entirely non-useable questionnaire are already counted in the *unit* non-response, see §7.6).

It may occur for a variety of reasons. Items may be missing because the respondent broke off the interview after partially completing it (but enough data were provided so that the questionnaire is not classified as a unit non-response). Items may be missing because the respondent inadvertently skipped an item, a module or a page (especially in self-administered mail surveys). Or a respondent may simply not have the information on the question (and no don't know option is foreseen) or refuse to give the requested information.

As item non-response usually goes hand-in-hand with systematic bias (e.g. the proportion of *No* answers may be higher among people with item non-response compared to those who did answer on a specific item), it is useful to assess the degree and impact of this type of non-response.

7.13	Questions or items with item response rates below 90%
	If any, identify the items with low response rates (the cut-off value to be used is 0.90) and indicate their respective response rates. The item non-response rate should of course be calculated taking into account the routing and filtering in the questionnaire.
	The data entry program didn't allow for missing items.

7.14	7.14 Methods used for dealing with item non-response				
	Indicate whether imputations are made for item non-response and give a short description of the methods used (e.g. nearest-neighbour imputation, hot deck imputation, mode imputations within classes, etc.).				
'non-applicable'					
7.15	Other comments relating to the item non-response				

If any, please use this box to inform on additional issues on the non-response calculation (e.g. method used in national publications, etc.).

'non-applicable'



### 8. Grossing-up procedures

Please give a description of the extrapolation or weighting procedures used to gross up the *households* (§8.1) and the *individuals* (§8.2) in the net sample to the (target) population, discussing the different steps taken or factors applied to the design weighting to take into account the (post)stratification, balancing for unit non-response, etc. In case similar methods are used for grossing-up the net samples of households and individuals, the discussion can be integrated under one heading.

8.1 Grossing-up procedures for households

Let *h* be one of the final strata of households (*Final stratum* = *Geography x Urbanization*), then this will take the following values: h = 1, 2, ..., H (where H = 79). In each of the final strata (let *h*), if statistical information was selected from a sample of  $n_h$  households, the extrapolation factor was defined as:

$$w_h = \frac{N_h}{n_h} (8.1)$$

where  $N_h$  is the total number of households in the target population in stratum h, which is estimated from LFS data of the year 2004.

### 8.2 Grossing-up procedures for individuals

For the calculation of extrapolation factors aiming at grossing up the individuals, the sampling individuals were post stratified by sex and age groups. The age groups were 12, and they were defined by the year intervals: 16-19, 20-24, 25-29,30-34, 35-39,40-44, 45-49, 50-54, 55-59,60-64, 65-69 and 70-74. The total number of post-strata containing the sampling individuals was 24 (2 sex categories x 12 age groups).

Let *h* be one of the final post-strata of individual (Final post-stratum = sex x age groups), then this will take the following values: h = 1, 2, ..., L (where L = 24). In each of the final post-strata (let *h*), if statistical information was selected from a sample of  $m_h$  sampling individuals, the extrapolation factor was defined as:

$$w'_h = \frac{M_h}{m_h} \quad (8.5)$$

where  $M_h$  is the number of individuals in the target population in post-stratum h, according to the estimated data from LFS of the year 2004.



### 9. Sampling error

# Relative standard error / coefficient of variation (for a selection of indicators)

The sampling error reflects the fact that only a particular sample was surveyed rather than the entire population. The (estimated) *relative standard error* – or (estimated) *coefficient of variation* (CV) – is the ratio of the square root of the variance of the estimator for the proportion ( $\sigma$ ) to the expected value of the proportion ( $\theta$ ). It is estimated by the ratio of the square root of the estimate of the sampling variance ( $\hat{\sigma}_{(\hat{\theta})}$ ) to the estimated value.

$$\mathbf{CV}_{\hat{\theta}} = \frac{\hat{\sigma}_{(\hat{\theta})}}{\hat{\theta}}$$

The estimation of the sampling variance should ideally take into account the sampling design (e.g. the stratification).

In case the CV's are derived using the variance formula for simple random sampling and incorporating a factor which reflects the multi-stage, clustered nature of the sampling design, please comment on the assumptions made and or the methods used (§9.7).

Please indicate below the estimated value of the proportion as well as the respective *relative standard error* for the indicators and sub-indicators mentioned.

	Indicator or subindicator	Number of respondents	Estimated proportion	Coefficient of variation
9,1	Proportion of households having access to the Internet at home (item 'Yes' in variable A2 of the 2005 model questionnaire)	840	21,7%	3,80%
9,2	<b>Proportion of households using a broadband connection</b> (a 'Yes' on option b or c in variable A4 of the 2005 model questionnaire)	24	2,9%	23,88%
9,3	Proportion of indiv. having used a computer in the last 3 months (individuals who ticked the 1st option in variable B1 of the 2005 model questionnaire)	1100	28,8%	2,36%
9,4	<b>Proportion of individuals regularly using the Internet: overall</b> (individuals who ticked option 1 or 2 in variable C2 of the 2005 model questionnaire)	686	81,6%	3,30%
9.4.1	Proportion of ind. regularly using the Internet: males	394	85,9%	4,30%
	Proportion of ind. regularly using the Internet: females	292	76,1%	5,17%
	Proportion of ind. regularly using the Internet: age group 16-24 years	152	79,5%	6,48%
	Proportion of ind. regularly using the Internet: <b>age group 25-34</b> years	210	88,4%	5,83%
	Proportion of ind. regularly using the Internet: <b>age group 35-44</b> years	175	79,8%	6,72%
	Proportion of ind. regularly using the Internet: <b>age group 45-54</b> years	99	72,6%	9,38%
	Proportion of ind. regularly using the Internet: <b>age group 55-64</b> years	45	85,0%	14,36%
	Proportion of ind. regularly using the Internet: <b>age group 65-74</b> years	5	100,0%	45,26%
	Proportion of ind. regularly using the Internet: low educational level	74	75,6%	10,74%
9.4.10	Proportion of ind. regularly using the Internet: medium educat. level	279	78,7%	5,58%
9.4.11	Proportion of ind. regularly using the Internet: high educational level	333	86,6%	5,23%
9.4.12	Proportion of ind. regularly using the Internet: students	105	78,4%	8,53%
9.4.13	Proportion of ind. regularly using the Internet: employees	361	82,6%	4,94%



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9.4.14	Proportion of ind. regularly using the Internet: self-employed	156	85,2%	7,91%
9.4.15	Proportion of ind. regularly using the Internet: unemployed	21	75,8%	21,98%
9.4.16	Proportion of ind. regularly using the Internet: retired	43	75,9%	15,59%
9,5	<b>Proportion of individuals having downloaded official forms</b> (individuals who ticked item o in variable C7 of the 2005 model questionnaire)	77	8,8%	11,41%
9,6	Proportion of individuals having ordered goods or services for private use over the internet in the last 3 months (individuals who ticked option 1 in variable D1 of the 2005 model questionnaire)	68	6,6%	12,26%

### 9.7 Comments on the calculation of the coefficient of variation

Although the selection of sampling units (households, individuals) was carried out with the application of multistage sampling scheme, the calculations of extrapolation factors and the coefficients of variations were based on a single stratified random sampling, with the use of auxiliary information coming from the strata and estimated population number of households and individuals from LFS 2004. The use of auxiliary information (as population totals in post-strata) improved the accuracy of the produced results.

## 10. Closing remarks

10.1	Problems encountered and lessons to be learnt These comments can relate to methodological issues as well as to the questionnaire itself (item construction, clarity of definitions to interviewers and respondents, routing and filtering, outcome of pre-tests, etc.)
10.2	Other comments, if any

### 11. Annexes



Note: Please also provide the annexes in a computer-readable format and in English

11.1	Questionnaire in national language	YES
11.2	Questionnaire in English	YES
11.3	Interviewer instructions in national language	YES
11.4	National reports on methodology (if available)	NO
11.5	Analysis of key results, backed up by tables and graphs (if available)	YES
11.6		is report)
<b>11.6 Other annexes</b> Please give an overview of other annexes (whether or not referred to in the preceding chapters of this         •         •		is report)