

Community Survey on ICT usage in households and by individuals 2006 Final Report

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- 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 *Metadata* as well as the *Quality* report. **Chapters 1 to 6 shall be completed for the metadata report (deadline for submission: 31/07/2006), chapters 7 to 11 can be postponed until the Quality report (deadline for submission: 01/12/2006).** However, where provisional information for the Quality Report topics is already available, we invite you to provide us with this data in the *Metadata* report (and update it in the *Quality* Report).
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1. Cover information

1.1	Country	GREECE
1.2	Organisation responsible the survey <i>Please also indicate the organisation running the survey if different from the organisation responsible (e.g. because of sub-contracting).</i>	NATIONAL STATISTICAL SERVICE OF GREECE
1.3	Contact person(s) (name, unit, e-mail, phone, fax)	1. CHALKIADAKI MARIA UNIT OF HOUSEHOLD SURVEYS TEL. 0030 -210-485 2896 FAX. 0030 -210-485 2906 E-MAIL: MCHALK@STATISTICS.GR 2. ZOULIATIS IOANNIS UNIT OF HOUSEHOLD SURVEYS TEL. 0030 -210-485 2896 FAX. 0030 -210-485 2906 E-MAIL: ZOULIATI@STATISTICS.GR
1.4	Name of the collection <i>The name of the survey in its original language(s) and in English (e.g. name used in the statistical office's English website).</i>	SURVEY ON THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES FROM THE HOUSEHOLDS ΕΡΕΥΝΑ ΧΡΗΣΗΣ ΤΕΧΝΟΛΟΓΙΩΝ ΠΛΗΡΟΦΟΡΗΣΗΣ & ΕΠΙΚΟΙΝΩΝΙΑΣ ΑΠΟ ΤΑ ΝΟΙΚΟΚΥΡΙΑ
1.5	Last update of this report	21-11-2006

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 2006 for educational level completed
- Day of the survey conduction for activity status, employment situation, A1-A5, B4,C4, C6, D1, D2, F2, F3
- Three first months of 2006 for questions B2,B3,C2,C3,C7,C8,D4
- Last 12 months (April 2005-March 2006) for questions E2,E2-b,E3,E4,E5,E6

2.2**Survey period**

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

1 April 2006-31 May 2006

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

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 the geographical stratification, which is 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.

- The sample of households for the ICT survey of the year **2006** has been consisted of the samples used in the Greek Survey on Income and Living Conditions (EU-SILC of the years 2003, 2004 and 2005). The EU-SILC is an annual rotating household survey covering the target population of the ICT survey. The EU-SILC is a multistage stratified sampling survey with primary sampling unit the area (one or more unified blocks) and final unit the household. The samples design of the EU-SILC was based on data coming from the population census of the year 2001.

For the ICT primary units are the areas and secondary the households containing members belonging to the target population. The final unit is one person randomly selected among the household members of age sixteen to seventy four years.

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 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.

The sampling fraction in each of the 90 strata was equal to $f = \frac{n}{N} \leq 1,5\%$, where $n=5.500$

N is the total sample size of households and $N=3.673.853$ is the total number of households belonging to the target population.

The number of the sampling households n_h in each of the 90 strata (let h) was defined applying the proportional allocation as follows:

$$n_h = n \cdot \frac{N_h}{N},$$

where N_h is the population size of the stratum h

The values of N and N_h were estimated from data coming from the Labour Force Survey with reference period the 2nd quarter of the year 2005.

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

3.1 Statistical unit		
	Yes	No (please specify the deviations)
Module A in the Eurostat model questionnaire: households with at least one member aged 16 to 74	X	
Modules B to F in the Eurostat model questionnaire: individuals aged 16 to 74	X	

3.2 Age groups covered		
	Yes (please specify, e.g. 12-15 or 75-...)	No
Individuals younger than 16 ?	X ages 12-15	
Individuals aged 16 to 74 ?	X (compulsory)	
Individuals older than 74 ?	X ages 75-84	

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).		
<p>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.</p> <p>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.</p>		

	Universe	Households	Individuals
3.4 Target population	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.	3.675.853	8.177.700
3.5 Non-target population	The approximate number of <i>households</i> and <i>individuals</i> outside the general scope of the survey (e.g. <u>individuals younger than 16 or older than 74; households with all members over 74 years old</u>), 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.	695.670	2.905.051

4. Questionnaire

4.1 Adoption of questions and items from the Eurostat model questionnaire (v2.2)

Please indicate in the table below possible comments on the question coverage in your national questionnaire, e.g. insertion of additional items, different reporting periods, deviations in the routing of ordering of the questions and/or items (see also §4.3), differences in definitions or classifications, alternative sources used (esp. in the background characteristics).

Where applicable, please report on the coverage of the questions for age groups beyond the standard scope, i.e. for respondents younger than 16 or for respondents older than 74. Possible comments on this issue can be added to the general column 'Comments'.

	Question	Comments (deviations from Eurostat model question, e.g. additional items, etc.)	Covered for other age groups?	
			<16	>74
	Module A : Access to selected ICTs			
A1	Does the household via one of its members have access to any of the following?	X		
A2	Does any member of this household have access to the world wide web (Internet) at home	X		
A3	On which of these devices is the Internet accessed at home?	X		
A4	What types of Internet connection are used?	X		
A5	What are the main reasons for not having access to the Internet at home?	X		
	Module B : Use of computer			
B1	When did you most recently use a computer?	X	X	X
B2	How often on average have you used a computer in the last 3 months?	X	X	X
B3	Where have you used a computer in the last 3 months?	X	X	X
B4	Do you use a mobile phone?	X	X	X
B5	To what extent have you substituted private traditional postal mail by mobile messages?	X		
	Module C : Use of the Internet			
C1	When did you most recently use the Internet?	X	X	X
C2	On average how often did you use the Internet in the last 3 months?	X	X	X
C3	Where have you used the Internet in the last 3 months?	X	X	X
C4	Do you use any of the following mobile devices to access the Internet?	X		
C5	To what extent have you substituted private traditional postal mail by Internet or e-mail messages?	X		
C6	Do you use a personal e-mail address (private or office)?	X		
C7	For which of the following activities did you use the Internet in the last 3 months for private use?	X	X (only some sub-items)	X (only some sub-items)

	Question	Comments (deviations from Eurostat model question, e.g. additional items, etc.)	Covered for other age groups?	
			<16	>74
C8	In the last 3 months, did you receive unsolicited e-mails that you would regard as junk mail or spam and that you would prefer not to receive?	X		
	Module D : e-Government			
D1	Would you be interested to use the Internet to replace some of your personal contacts with or visits to public services or administrations?	X		X
D2	What are the reasons for not using the Internet for dealing with public services or administrations?	X		X
D3	With which of the following matters are you already dealing via Internet or would you like to deal via Internet?	X		X
D4	For which of the following activities relating to interaction with public services or administrations did you use the Internet in the last 3 months?	X		X
	Module E : Internet commerce details			
E1	When did you most recently order goods or services for private use over the Internet (excluding manually typed e-mails) ?	X		
E2	What types of goods and services did you order over the Internet for private use in the last 12 months ?	X		
E2 b	Were any of the following products that you ordered over the Internet downloaded or accessed from websites rather than delivered by post etc.?	X		
E3	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		
E4	In the last 12 months, did you encounter any problems when buying / ordering goods or services over the Internet?	X		
E5	What problems have you encountered when buying/ordering goods or services over the Internet in the last 12 months ?	X		
E6	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			
F1	When did you last take a training course (of at least 3 hours) on any aspect of computer use ?	X	X	
F2	Which of the following computer related activities have you already carried out [7 items] ?	X	X	
F3	Which of the following Internet related activities have you already carried out [7 items] ?	X	X	
F4	Where or how did you obtain the skills to carry out these activities ?	X	X	

	Question	Comments (deviations from Eurostat model question, e.g. additional items, etc.)	Covered for other age groups?	
			<16	>74
	Socio-demographic background variables			
G1	Age	X	X	X
G2	Sex	X	X	X
G3	Educational level (according to ISCED)	X	X	X
G4	Employment situation	X	X	X
G5	Occupation (according to ISCO)	X		
G6	Geographical location (y/n Objective 1)	X	X	X
G7	Type of locality (degree of urbanisation)	X	X	X
G8	Number of members in the household	X	X	X
G9	<i>of which</i> , number of children under 16	X	X	X
G10	Household income <i>- optional question</i>			

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

5. Sampling frame

5.1	Name and short description of the sampling frame or register used
	<p>The sampling frame containing the primary units (cluster of households in one or more unified blocks) for the ICT survey is the same as for the EU-SILC of the year 2004, which is an area frame constructed using the necessary information from the recent Greek General Population Census 2001, and provides complete coverage of the target population of this survey.</p> <p>The sampling frame containing the secondary units (households) in the selected sampling primary units is updated before the selection of households.</p>

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 containing the primary units (cluster of households in one or more unified blocks) is updated every 10 years from data coming from Greek General Population Census. This may be a shortcoming of the sampling frame.

6. Sampling design

6.1

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 strata.

Sampling method

The multistage stratified area sampling is applied for the survey. The primary units are the areas (one or more unified blocks) and secondary sampling units selected in each sampling area are the households containing members belonging to the target population. The final unit is one person randomly selected among the household members of age sixteen to seventy four years.

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.

Stages of probability sampling

The sample of households for the ICT survey of the year 2006 was selected of the sample used in the Greek Survey of Income and Living Conditions (EU-SILC of the years 2002, 2003 and 2004). The EU- SILC is an annual rotating household survey covering the target population of the ICT survey.

The selection probabilities of the households for the ICT survey of the year 2006 were defined suitably so that the demands of the survey to be met. The definition of selection probabilities was as follows:

1st stage: The primary unit of order i in stratum h has probability of being drawn proportional to the target population size as follows: $P_{hi} = \frac{N_{hi}}{N_h}$

N_{hi} : The updated (from EU-SILC survey) target population of households in the hi primary unit

N_h : The updated (from LFS 2005) target population of households in the h stratum

2nd stage: Out of N_{hi} households, a sample of n_{hi} households was selected with equal probabilities. Each of n_{hi} households has the same chance to be selected, equal to: $\frac{n_{hi}}{N_{hi}}$. As the estimator of the stratum total

Y_h (for any characteristic) should be self-weighting, the n_{hi} was defined, as follows: $n_{hi} = \frac{N_h}{a_h}$, where

$n_h = \sum_i n_{hi}$ and a_h is the number of primary units in the h stratum.

6.2	<p>Additional measures taken at the time of sampling design to improve representativeness</p> <p>If any, and if not covered under §6.1. E.g. corrections for sampling frame under coverage, etc.</p>
	<p>The initial probabilities of selection of sampling households of EU-SILC were based on the population sizes (coming from Greek General Population Census of the year 2001), which differ considerably from the new population sizes that better suit the demands of the current ICT survey. Additionally, the target populations of EU-SILC and ICT do not coincide. The measures of EU-SILC were based on all persons, but the current sample for ICT is restricted to individuals aged 16 to 74 years old. Thus, although the sample of households for the ICT survey of the year 2006 was selected of the sample used in the Greek Survey of Income and Living Conditions (EU-SILC of the years 2002, 2003 and 2004), the following measures were taken for improving the representativeness:</p> <ul style="list-style-type: none"> a. The 1st stage probabilities of selection of primary units were modified taking into consideration the updated target population size in each stratum using estimated data from Labour Force Survey with reference period the 2nd quarter of the year 2005 b. The 2nd stage probabilities of selection of households were modified taking into consideration the updated register of households in the primary sampling units. c. The allocation of sampling households in each separate stratum was carried out proportionally to the target population size, which was estimated from data coming from Labour Force Survey with reference period the 2nd quarter of the year 2005. <p>After the application of the above measures, the sampling households for the ICT have no the same probability of selections (1st and 2nd) with the sampling households for EU-SILC, after changing the selection probabilities of the EU-SILC households so that the probabilities of ICT households to be determined on updated target population.</p>

	Sample size	Households	Individuals (aged 16 to 74)	Individuals (younger than 16)	Individuals (older than 74)
6.3	<p>Gross sample size</p> <p>The number of households/individuals initially selected from the sampling frame (if not applicable, please indicate why).</p> <p>Please restrict the numbers in the first two columns to the <i>Eurostat scope</i> (if additional age groups are covered, these can be reported separately in the last two columns).</p>	5.500	5.500	400	350
6.4	<p>Net sample size</p> <p>The number of households/individuals that can be used in the final database (if not applicable, please indicate why).</p>	To be filled in under §7.C (final report)			

7. Response and non-response

(quality 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).

In the tables below, **please report separately for individuals in the general scope (16-74) and age groups added for piloting** (see the last two columns).

If no additional age groups were covered (see also §3.2), the last two columns can be left blank.

		<i>Number of households</i>	<i>Number of individuals (aged 16-74)</i>	<i>Number of individuals (<16)</i>	<i>Number of individuals (>74)</i>
7.A	Gross sample size The number of households/individuals initially selected from the sampling frame (if not applicable, please indicate why).	5500	5500	400	350
	<i>Type of unit non-response (ineligible cases)</i>	<i>Number of households</i>	<i>Number of individuals (aged 16-74)</i>	<i>Number of individuals (<16)</i>	<i>Number of individuals (>74)</i>
7.1	Ineligible: out-of-scope E.g. selected household is not in the target population because all members are over 75 years old.	6	6	0	0
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	0	0	0
7.B	Number of eligible elements I.e. the gross sample size corrected for the ineligible cases. ► $[\$7.B] = [\$7.A] - [\$7.1] - [\$7.2]$	5494	5494	400	350
	<i>Type of unit non-response (eligible cases)</i>	<i>Number of households</i>	<i>Number of individuals (aged 16-74)</i>	<i>Number of individuals (<16)</i>	<i>Number of individuals (>74)</i>
7.3	Non-contact E.g. no one was home or postal survey was never sent back.	482	482	74	97

7.4 Refusal E.g. selected household or individual was contacted but refused to take part in the survey.	116	116	2	4
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.	0	0	0	0
7.6 Rejected interviews 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.).	0	0	0	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	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. ► $[\$7.C] = [\$7.B] - [\$7.3] - [\$7.4] - [\$7.5] - [\$7.6] - [\$7.7]$	4896	4896	324	249
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	<i>Households</i>	<i>Individuals (aged 16-74)</i>	<i>Individuals (<16)</i>	<i>Individuals (>74)</i>
7.D Unit response rate The unit response rate is the ratio of the <i>number of in-scope 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 <i>gross sample size</i> (see §7.A) <i>minus the ineligible cases</i> (see §7.1 and §7.2). ► $[\$7.D] = [\$7.C] / [\$7.B]$	89,02	89,02	81,00	71,14

7.8	<p>Comments on the unit response rate, if any</p> <p>Response Rate appears increment over the last years, with an initial value of 77,3% in the first survey conducted in 2002, 87,3% for the 2003 survey, 81,4% for the 2004 survey, 81,8% for the 2005 survey, while it raised to 89,0% for the current survey</p> <p>The Response Rate (%) by Geographical Region for the 2006 survey is depicted in the following table</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Geographical Regions (NUTS I)</th><th style="text-align: center;">Response Rate (%)</th></tr> </thead> <tbody> <tr> <td>Northern Greece – GR1</td><td style="text-align: center;">94.5</td></tr> <tr> <td>Central Greece – GR2</td><td style="text-align: center;">94.4</td></tr> <tr> <td>Attica – GR3</td><td style="text-align: center;">82.7</td></tr> <tr> <td>Island of Aegean & Crete – GR4</td><td style="text-align: center;">86.2</td></tr> <tr> <td>Total Greece</td><td style="text-align: center;">89.0</td></tr> </tbody> </table>	Geographical Regions (NUTS I)	Response Rate (%)	Northern Greece – GR1	94.5	Central Greece – GR2	94.4	Attica – GR3	82.7	Island of Aegean & Crete – GR4	86.2	Total Greece	89.0
Geographical Regions (NUTS I)	Response Rate (%)												
Northern Greece – GR1	94.5												
Central Greece – GR2	94.4												
Attica – GR3	82.7												
Island of Aegean & Crete – GR4	86.2												
Total Greece	89.0												
7.9	<p>Methods used for minimizing unit non-response</p> <p>Where applicable, give a description of measures taken to reduce the unit non-response:</p> <ul style="list-style-type: none"> • advance notification in the form of a letter or phone call; • system of reminders, number of visits, number of attempts for phone calls, etc. • showing respondents how the data they are providing are being used; • etc. <p>An advance notification letter was sent to all households, one month before the survey conduction.</p> <p>In cases where the households couldn't be approached, mainly due to temporary absence, a number of attempts for phone calls (up to three) were used.</p>												
7.10	<p>Methods used for dealing with unit non-response</p> <p>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.).</p> <p>Weighting adjustments are used to compensate for total unit non-response. The essence of the weighted adjustment procedure is to increase the initial weights of specified respondents so that they represent the non-respondents. The weighting adjustment or re-weighting is carried out as follows:</p> <ol style="list-style-type: none"> a) The initial weights (inverse of selection probabilities) of all households belonging to respondents within a stratum are adjusted by the same multiplying factor, which is equal to the inverse of response rate. b) A new adjustment (population weighting adjustment or post stratification) is carried out in such a way that the weighted respondent distribution across the weighting classes (households with 1, 2, 3, 4 and 5+ members) conforms to the population households distribution. The population distribution has been estimated from data coming from the Labour Force Survey with reference period the 2nd quarter of the year 2005. Provided that the weighting classes are not small, the post stratification leads to lower standard errors and attempts to reduce the bias created by non-response and coverage errors. <p>For individuals, a new adjustment is carried out in such a way that the weighted respondent distribution across the classes defined by age group (age groups: 16-19, 20-24, 25-29, 30-34, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74) and sex (male, female) conforms to the population individuals' distribution. The population distribution has been estimated from data coming from the Labor Force Survey with reference period the 2nd quarter of the year 2005.</p>												

7.11	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).
	<i>'non-applicable'</i>

ITEM 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.

7.12	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.

7.13	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.). <i>'non-applicable'</i>

7.14	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.). <i>'non-applicable'</i>

8. Grossing-up procedures

(quality report)

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
	<p>Let h be one of the final strata of households (Final stratum = Geography x Urbanization), then this will take the following values: $h = 1, 2, \dots, H$ (where $H = 90$). In each of the final strata (let h), if statistical information was selected from a sample of n'_h households, the extrapolation factor of the household of order i was defined as:</p> $W_{hi} = \frac{N_h}{n_h} \cdot \frac{1}{r_h} t_{hi} \quad (8.1)$ <p>where:</p> <p>N_h: The target population size in the h stratum according to LFS of the 2nd quarter 2005</p> <p>n_h: The initial sample size in the h stratum</p> <p>$\frac{N_h}{n_h}$: The initial probability of selection of the sampling households in the h stratum, as the response rate in the h stratum</p> <p>estimator of the stratum total Y_h (for any characteristic) is self-weighting,</p> <p>$r_h = \frac{n'_h}{n_h}$ is the response rate in the h stratum</p> <p>t_{hi}: Factor, which adjusts the sample weights of households so that the sample totals conform to the population totals on a cell-by-cell basis (Population Weighting Adjustment). The auxiliary variable used at household level is the household size (1,2,3,4 or 5+ members) for the definition of cells or classes.</p>

8.2 Grossing-up procedures for individuals

In each of the final strata of households (let h), if statistical information was selected from a sample of m_h individuals, the extrapolation factor of the individual of order j belonging to the hi household is defined as follows:

$$W_{hij} = W_{hi} \cdot \frac{1}{p_{hij}} \cdot g_{hij} \quad (8.2)$$

where:

W_{hi} : The extrapolation factor of the hi household in which the hij individual belongs

p_{hij} : The selection probability of the hij individual, which belongs to the hi household. As one individual was selected with equal probabilities out of m_{hi} members belonging to the target population, the p_{hij} is

$$\text{defined as: } p_{hij} = \frac{1}{m_{hi}}$$

g_{hij} : Factor, which adjusts the sample weights of individuals, so that the sample distribution conform to the population distribution across a set of classes. The classes are 24, which are defined by crossing sex by age groups (2 sex categories \times 12 age groups). The age groups are 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 population distribution of individuals by sex and age groups was estimated from data coming from Labour Force Survey with reference period the 2nd quarter of 2005.

9. Sampling error (quality report)

Standard error (for a selection of indicators)

The sampling error reflects the fact that only a particular sample was surveyed rather than the entire population. It is estimated by the standard error and can be expressed by the square root of the estimate of the sampling variance ($\hat{\sigma}_{\hat{p}}$). The estimation of the sampling variance should ideally take into account the sampling design (e.g. the stratification).

In case the standard errors 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 (§9.6).

Please indicate below the number of respondents (absolute value for Yes answers), the estimated value of the proportion as well as the respective *standard error* for the indicators and subindicators mentioned.

Please note that the accuracy measure used, i.e. the standard deviation, is differs from the 2004 and 2005 report templates (where the coefficient of variation was used).

	<i>Indicator or subindicator</i>	<i>Number of respondents</i>	<i>Estimated proportion</i>	<i>Standard error</i>
9.1	Proportion of households having access to the Internet at home (item 'Yes' in variable A2 of the 2006 model questionnaire)	849.955	23,1	22.023
9.2	Proportion of households using a broadband connection (a 'Yes' on option <i>b</i> or <i>c</i> in variable A4 of the 2006 model questionnaire)	141.042	16,6	0,01148
9.3	Proportion of individuals regularly using the Internet: overall (indiv. who ticked option 1 or 2 in variable C2 of the 2006 model questionnaire)	1.855.769	22,7	50.734
9.3.1	Proportion of ind. regularly using the Internet: males	1.101.929	59,4	0,01343
9.3.2	Proportion of ind. regularly using the Internet: females	753.839	40,6	0,01343
9.3.3	Proportion of ind. regularly using the Internet: age group 16-24 years	512.831	27,6	0,01204
9.3.4	Proportion of ind. regularly using the Internet: age group 25-34 years	595.167	32,1	0,01306
9.3.5	Proportion of ind. regularly using the Internet: age group 35-44 years	435.587	23,5	0,01122
9.3.6	Proportion of ind. regularly using the Internet: age group 45-54 years	217.053	11,7	0,00916
9.3.7	Proportion of ind. regularly using the Internet: age group 55-64 years	80.070	4,3	0,00535
9.3.8	Proportion of ind. regularly using the Internet: age group 65-74 years	15.060	0,8	0,00215
9.3.9	Proportion of ind. regularly using the Internet: low educational level	172.828	9,3	0,00931
9.3.10	Proportion of ind. regularly using the Internet: medium educat. level	824.080	44,4	0,01686
9.3.11	Proportion of ind. regularly using the Internet: high educational level	858.861	46,3	0,01642
9.3.12	Proportion of ind. regularly using the Internet: students	399.584	21,5	0,01277
9.3.13	Proportion of ind. regularly using the Internet: employees	919.849	49,6	0,01636
9.3.14	Proportion of ind. regularly using the Internet: self-employed	333.557	18,0	0,01272
9.3.15	Proportion of ind. regularly using the Internet: unemployed	85.286	4,6	0,00793
9.3.16	Proportion of ind. regularly using the Internet: retired, other inactive	117.494	6,3	0,00776
9.4	Proportion of individuals having downloaded official forms (individuals who ticked item <i>b</i> in variable D4 of the 2006 model questionnaire)	79.397	3,2	0,00528
9.5	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 E1 of the 2006 model questionnaire)	253.197	10,7	0,00990

9.6 Comments on the calculation of standard error

Sampling errors for characteristics relating to Households

Symbols

w_{hi} : The extrapolation factor of the household of order i belonging to stratum h , ($h = 1, \dots, 90$)

y_{hi} : The survey characteristic of the hi household, where $y_{hi} = \begin{cases} 1, & \text{if } i \in U_d \\ 0 & \text{otherwise} \end{cases}$, while U_d denotes the group of households with a certain characteristic.

Y : The sum of $y_{hi} \forall h, i$ That is $\sum_h \sum_i y_{hi}$

The estimation of Y is as follows

$\hat{Y} = \sum_h \sum_i w_{hi} y_{hi}$ estimated number of households with a certain characteristic

Estimation of sampling error

$V(\hat{Y}) = \sum_h \sum_i w_{hi} (w_{hi} - 1)(y_{hi} - \bar{y}_h)$ estimated variance of the number of households

having a certain characteristic, where $\bar{y}_h = \frac{\sum_i w_{hi} y_{hi}}{\sum_i w_{hi}}$

$R = \frac{\hat{Y}}{X}$: the proportion of households with certain characteristic belonging to a certain subgroup of households population

$\hat{R} = \frac{\hat{Y}}{X}$: estimation of R

whereas, $\hat{X} = \sum_h \sum_i w_{hi} x_{hi}$ the population of households, in which are included the households that share a specific property.

$V(\hat{R}) = \frac{1}{\hat{X}^2} [V(\hat{Y}) + \hat{R}^2 V(\hat{X}) - 2\hat{R} \text{Cov}(X, Y)]$: is the estimated variance of the ratio R

where:

$V(\hat{Y}) = \sum_h \sum_i w_{hi} (w_{hi} - 1)(y_{hi} - \bar{y}_h)$,

$V(\hat{X}) = \sum_h \sum_i w_{hi} (w_{hi} - 1)(x_{hi} - \bar{x}_h)$, where $\bar{x}_h = \frac{\sum_i w_{hi} x_{hi}}{\sum_i w_{hi}}$,

$\text{Cov}(Y, X) = \sum_h \sum_i w_{hi} (w_{hi} - 1)(y_{hi} - \bar{y}_h)(x_{hi} - \bar{x}_h)$

Sampling errors for characteristics relating to Individuals**Symbolisms**

w_{hi} : The extrapolation factor of the respondent belonging to stratum

h , ($h = 1, \dots, 24$), where every stratum is defined by crossing age and sex.

y_{hi} : The survey characteristics of the hi individual, where $y_{hi} = \begin{cases} 1, & \text{if } i \in U_d \\ 0 & \text{otherwise} \end{cases}$, while

U_d denotes the group of individuals with a certain characteristic.

Y : The sum of $\sum_h y_{hi}$

The application of formulas given previously for households are also valid in the cases of individuals in order to estimate $\hat{Y}, \hat{X}, V(\hat{Y}), V(\hat{X}), \hat{R}, V(\hat{R}), Cov(X, Y)$.

10. Pilot exercise on additional age groups

(for countries having additional age groups in their Work Programme for the survey)

10.1	Feedback received on relevance of the questions or feasibility of asking certain questions
Specific groups of questions have been selected for each age group category, being relevant to interviewees. As far as children aged 12-15 no problems were encountered in asking the questions included in the specific questionnaire. For interviewees aged 75-84 no problems have also been encountered in asking the questions of the questionnaire, but this because of the fact that none of them was forwarded to more specialized questions on PC or internet as all of them had never used a PC or accessed the internet.	
10.2	Feedback received on feasibility of selecting and/or interviewing individuals under 16 or individuals over 74
Individuals aged 12-15 and 75-84 have been randomly selected from households with household members aged 16-74, for which we had the information that also these ages existed. However, beside this fact safe results can be extracted for the specific age groups.	
10.3	Other comments
<p>Initial sample of children aged 12-15 was 400 persons, from which 324 have been interviewed.</p> <p>Initial sample of persons aged 75-84 was 350 persons, from which 249 have been interviewed.</p>	

11. Closing remarks

11.1	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.)	
11.2	Other comments, if any

12. Annexes

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

12.1	Questionnaires (3) in national language - YES
12.2	Questionnaire in English (if available) - YES
12.3	Interviewer instructions (if available) – YES in national language
12.4	National reports on methodology (if available) - YES
12.5	Analysis of key results, backed up by tables and graphs (if available) - YES
12.6	Other annexes Please give an overview of other annexes (whether or not referred to in the preceding chapters of this report) • ... • ...