

Single Integrated Metadata Structure (SIMS v2.0)

(user oriented)

Country: Greece

Compiling agency: ELSTAT

Domain name: SURVEY ON THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN HOUSEHOLDS AND BY INDIVIDUALS, 2020

ELSTAT metadata

Reference metadata

- [1. Contact](#)
- [2. Metadata update](#)
- [3. Statistical presentation](#)
- [4. Unit of measure](#)
- [5. Reference period](#)
- [6. Institutional mandate](#)
- [7. Confidentiality](#)
- [8. Release policy](#)
- [9. Frequency of dissemination](#)
- [10. Accessibility and clarity](#)
- [11. Quality management](#)
- [12. Relevance](#)
- [13. Accuracy and reliability](#)
- [14. Timeliness and punctuality](#)
- [15. Coherence and Comparability](#)
- [16. Cost and burden](#)
- [17. Data revision](#)
- [18. Statistical processing](#)
- [19. Comment](#)

1. Contact

[Top](#)

1.1 Contact organisation	HELLENIC STATISTICAL AUTHORITY
1.2 Contact organisation unit	POPULATION STATISTICS AND LABOUR MARKET DIVISION
1.3 Contact name	1.Ntouros Georgios 2.Chalkiadaki Maria 3.Zouliatis Ioannis
1.4 Contact person function	1. Unit Head 2. In charge of the whole project/survey (survey conduct,

	design of questionnaires, guidelines and other documents, database management, data dissemination, etc.) 3. Questionnaire design, preparing of guidelines, database management, data publication, etc.)
1.5 Contact mail address	Pireos 46 & Eponiton Str., 185 10 Piraeus
1.6 Contact email address	1. g.ntouros@statistics.gr 2. m.chalkiadaki@statistics.gr 3. i.zouliatis@statistics.gr
1.7 Contact phone number	• (+30) 213 135 2174 • (+30) 213 135 2896 • (+30) 213 135 2941
1.8 Contact fax number	(+30) 213 135 2906

2. Metadata update Top	
3.1 Metadata last certified	
3.2 Metadata last posted	
3.3 Metadata last update	

3. Statistical presentation Top	
3.1 Data description	
The basic aim of the survey of the year 2020 is to study, according to individuals' demographic characteristics, educational level, occupation and total household income: • Access to selected information and communication technologies (computer, internet connection, etc.) • internet access • e-government • e-commerce • Privacy and protection of personal data • Trust, security and privacy, including trust, security and privacy in the context of smartphones • Internet of Things (IoT)	
3.2 Classification system	
NUTS 1, ISCO 08, ISCED 2011	
3.3 Sector coverage	
-	
3.4 Statistical concepts and definitions	
1. Household Household is considered to be a person residing alone in a dwelling or a group of persons, relatives or not, residing in the same dwelling. Prerequisite for a household to be included in the survey is the existence of at least one member aged 16-74 years old. 2. Household members Household members are considered to be the individuals residing in the household during the 1st quarter of the year 2020 (or for most of this time interval).	
3.5 Statistical unit	
Individuals and households.	
3.6 Statistical population	

The survey covers all private households of the country, irrespective of their size or their socio – economic characteristics, with the only pre-requisite that they comprise at least one member aged 16-74 years old.

The following cases are excluded:

- Collective households, such as hotels, hospitals, elderly homes, camps, reformatories, etc. Collective households will also be considered the dwellings with more than 5 lodgers. Households with foreign citizens serving in diplomatic missions.

3.7 Reference area

Country

3.8 Time coverage

Yearly. Time series 2002- today.

3.9 Base period

4. Unit of measure

[Top](#)

Percentage % of households

Percentage % of individuals

5. Reference period

[Top](#)

1st quarter 2020: for key variables

For the reference period of the secondary variables please consult the survey questionnaire

<http://www.statistics.gr/en/statistics/-/publication/SFA20/->

6. Institutional mandate

[Top](#)

6.1 Legal acts and other agreements

The legal framework concerning the organization and operation of ELSTAT is as follows:

- **Law 3832/2010** [Law 3832/2010](#) (Government Gazette No 38, Issue A): "Hellenic Statistical System Establishment of the Hellenic Statistical Authority (ELSTAT) as an Independent Authority", as amended by article 90 paragraphs 8 and 9 of the Law 3842/2010 (Government Gazette No 58, Issue A): "Restoration of fiscal justice, confrontation of tax evasion and other provisions", by article 10 of the Law 3899/2010 (Government Gazette No 212, Issue A): "Urgent measures for the implementation of the assistance program of the Greek Economy", by article 45 of the Law 3943/2011 (Government Gazette No 66, Issue A): "Combating tax evasion, staffing of auditing services and other provisions falling within the competence of the Ministry of Finance", by article 22 paragraph 1 of the Law 3965/2011 (Government Gazette No 113, Issue A): "Operations Reform of the Consignment and Loan Fund, Public Debt Management Agency, Public Enterprises and Government bodies, the establishment of the General Secretary of Public Property and other provisions", by article first of the Law 4047/2012 (Government Gazette No 31, Issue A): "Ratification of the Act of Legislative Content "Very urgent measures for the implementation of the Medium-term Fiscal Strategy 2012-2015 and of the State Budget for 2011" and of the Act of Legislative Content "Regulation of very urgent issues for the implementation of law 4024/2011 "Pension provisions, uniform pay scale - grading system, labour reserve and other provisions for the implementation of the Medium-term Fiscal Strategy Framework 2012-2015" and of issues falling within the competence of the Ministries of Administrative Reform and E-Governance,

Interior, Finance, Environment, Energy and Climate Change, and of Education, Lifelong Learning and Religious Affairs and related to the implementation of the Medium-term Fiscal Strategy Framework 2012-2015" and other provisions", by article 323 of the Law 4072/2012 (Government Gazette No 86, Issue A): "Improvement of the business environment New corporate form - Trade Marks - Realtors - Regulating maritime, port and fishing matters and other provisions" and by article 7 paragraph 1 of the Act of Legislative Content dated 18/11/2012 (Government Gazette No 228, Issue A): "Financial rules and other provisions", by Article 93 of the Law 4182/2013 (Government Gazette No 185, Issue A): "Code of charitable estate, inheritances in abeyance and other provisions", by Article 6 paragraph 8 of the Law 4244/2014 (Government Gazette 60, Issue A): "Integration in Greek law of the Council Directive 2013/1/EU of 20 December 2012 amending Directive 93/109/EC as regards certain detailed arrangements for the exercise of the right to vote and stand as a candidate in elections to the European Parliament for citizens of the Union residing in a Member State of which they are not nationals and amendment of law 2196/1994 (A' 41) and other provisions", by Article first subparagraph C.3 of the Law 4254/2014 (Government Gazette No 85, Issue A): "Measures for the support and development of the Greek economy, in the context of the implementation of Law 4046/2012, and other provisions of law" and by Article 33, paragraphs 5a and 5b of the Law 4258/2014 (Government Gazette No 94, Issue A): "Demarcation process and arrangements of matters for streams - arrangements of Urban Planning legislation and other provisions".

- **Regulation on the Operation and Administration of the Hellenic Statistical Authority (ELSTAT)**, 2012, (Government Gazette No 2390, Issue B, 28-8-2012) [Regulation on the Operation and Administration of ELSTAT](#)
- **Regulation (EC) No 223/2009 of the European Parliament and of the Council**, on the European statistics (Official Journal of the European Union L 87/164) [Regulation No 223/2009](#)
- **Article 14 of the Law 3470/2006** (Government Gazette No 132, Issue A): "National Export Council, tax regulations and other provisions".
- **Article 3, paragraph 1c, of the Law 3448/2006** (Government Gazette No 57, Issue A): "For the further use of information coming from the public sector and the settlement of matters falling within the responsibility of the Ministry of Interior, Public Administration and Decentralization".
- **European Statistics Code of Practice**, adopted by the Statistical Programme Committee on 24 February 2005 and promulgated in the Commission Recommendation of 25 May 2005 on the independence, integrity and accountability of the national and Community statistical Authorities, after its revision, which was adopted on 28 September 2011 by the European Statistical System Committee [COP](#).
- **Presidential Decree 226/2000** (Government Gazette No 195, Issue A): "Organization of the General Secretariat of the National Statistical Service of Greece".
- **Articles 4, 12, 13, 14, 15 and 16 of the Law 2392/1996** (Government Gazette No 60, Issue A): "Access of the General Secretariat of the National Statistical Service of Greece to administrative sources and administrative files, Statistical Confidentiality Committee, settlement of matters concerning the conduct of censuses and statistical works, as well as of matters of the General Secretariat of the National Statistical Service of Greece"

The survey is conducted in accordance with Regulation 808/2004 of the European Parliament and Council on Information Society statistics and in accordance with Implementing Regulation published each year. More specifically, for the survey of the year 2019, the relevant implementing regulation is 1910/2019.

Indicators from these surveys are used for benchmarking purposes. Most of the provided data are used for the benchmarking 2016-2021 (adopted by the High Level Group i-2010 in November 2009).

These indicators are provided by the European Statistical System.

6.2 Data sharing

-

7. Confidentiality

[Top](#)

7.1 Confidentiality policy

The issues concerning the observance of statistical confidentiality by the Hellenic Statistical Authority (ELSTAT) are governed by articles 7, 8 and 9 of the Law 3832/2010, as amended by article 90 paragraph 8 of Law 3842/2010 and by article 10 of Law 3899/2010, as well as by article 8 of Law 2392/1996, which was brought back into force, in accordance with article 90 paragraph 8 of Law 3842/2010. <http://www.statistics.gr/en/legal-framework>

Furthermore, ELSTAT disseminates the statistics in compliance with the statistical principles of the European Statistics Code of Practice and in particular with the principle of statistical confidentiality [COP](#).

7.2 Confidentiality – data treatment

➤ ELSTAT protects and does not disseminate data it has obtained or it has access to, which enable the direct or indirect identification of the statistical units that have provided them by the disclosure of individual information directly received for statistical purposes or indirectly supplied from administrative or other sources. ELSTAT takes all appropriate preventive measures so as to render impossible the identification of individual statistical units by technical or other means that might reasonably be used by a third party. Statistical data that could potentially enable the identification of the statistical unit are disseminated by ELSTAT if and only if:

a) these data have been treated, as it is specifically set out in the Regulation on Statistical Obligations of the agencies of the Hellenic Statistical System (ELSS), in such a way that their dissemination does not prejudice statistical confidentiality or

b) the statistical unit has given its consent, without any reservations, for the disclosure of data.

➤ The confidential data that are transmitted by ELSS agencies to ELSTAT are used exclusively for statistical purposes and the only persons who have the right to have access to these data are the personnel engaged in this task and appointed by an act of the President of ELSTAT.

➤ ELSTAT may grant researchers conducting statistical analyses for scientific purposes access to data that enable the indirect identification of the statistical units concerned. The access is granted provided the following conditions are satisfied:

a) an appropriate request together with a detailed research proposal in conformity with current scientific standards have been submitted;

b) the research proposal indicates in sufficient detail the set of data to be accessed, the methods of analyzing them, and the time needed for the research;

c) a contract specifying the conditions for access, the obligations of the researchers, the measures for respecting the confidentiality of statistical data and the sanctions in case of breach of these obligations has been signed by the individual researcher, by his/her institution, or by the organization commissioning the research, as the case may be, and by ELSTAT.

➤ Issues referring to the observance of statistical confidentiality are examined by the Statistical Confidentiality Committee (SCC) operating in ELSTAT. The responsibilities of this Committee are to make recommendations to the President of ELSTAT on:

- the level of detail at which statistical data can be disseminated, so as the identification,

either directly or indirectly, of the surveyed statistical unit is not possible;

- the anonymization criteria for the microdata provided to users [Anonymization criteria](#);
- the granting to researchers access to confidential data for scientific purposes.

➤ The staff of ELSTAT, under any employment status, as well as the temporary survey workers who are employed for the collection of statistical data in statistical surveys conducted by ELSTAT, who acquire access by any means to confidential data, are bound by the principle of confidentiality and must use these data exclusively for the statistical purposes of ELSTAT. After the termination of their term of office, they are not allowed to use these data for any purpose.

➤ Violation of data confidentiality and/or statistical confidentiality by any civil servant or employee of ELSTAT constitutes the disciplinary offence of violation of duty and may be punished with the penalty of final dismissal.

ELSTAT, by its decision, may impose a penalty amounting from ten thousand (10,000) up to two hundred thousand (200,000) euros to anyone who violates the confidentiality of data and/or statistical confidentiality. The penalty is always imposed after the hearing of the defence of the person liable for the breach, depending on the gravity and the repercussions of the violation. Any relapse constitutes an aggravating factor for the assessment of the administrative sanction.

8. Release policy

[Top](#)

8.1 Release calendar

Press Release date - General Results – «Survey on the Use of Information and Communication Technologies by Households and Individuals and Use of e-Commerce, Privacy and Protection of Personal Data and Internet Security»: 10 November 2020

<https://www.statistics.gr/en/PRESS RELEASE>

8.2 Release calendar access

<http://www.statistics.gr/en/calendar#72019>

8.3 User access

Users are informed on data release dates through ELSTAT's website. The equal access of users to data is governed by the European Statistics Code of Practice.

9. Frequency of dissemination

[Top](#)

Yearly.

10. Dissemination format

[Top](#)

10.1 News release

The press release was announced on 10 November 2020.

<https://www.statistics.gr/en/PRESS RELEASE>

10.2 Publications

Publication "The Living Conditions in Greece" provides, both in greek and english languages, the latest statistics illustrating living conditions in Greece, among which data from the Survey on the use of information and communication technologies in households and by individuals.

The publication is updated with the latest data the first Friday of January, March, May, July, September and November.

Relative link: <http://www.statistics.gr/en/living-conditions-in-greece>

Also publication "Greece in figures" publishes data on the ICT survey. Relative link: [Greece in figures](#)

10.3 On-line database

On line data base for data access, will be available in ELSTAT's site, by the end of the year:

<https://www.statistics.gr/el/public-use-files>

10.3.1 Data tables - consultations

Information is not available.

10.4 Micro-data access

Microdata are available to users upon request in the competent Unit of Statistical Information using the following link: <http://www.statistics.gr/statistical-data-request> και

<http://www.statistics.gr/data-for-scientific-purposes>

10.5 Other

<http://dlib.statistics.gr/portal/page/portal/ESYE>

10.5.1 Metadata – consultations

Information is not available.

10.6 Documentation on methodology

Information on the survey (in Greek and in English) is posted on the website of ELSTAT

<http://www.statistics.gr/en/statistics/-/publication/SFA20/2020>

Users in the above link can find the questionnaire of the survey, the surveys' guidelines (only in Greek) and the SIMS in national language and in English.

Detailed methodological information will be included in the survey's Quality Report which will be posted on ELSTAT's website.

10.6.1 Metadata completeness - rate

10.7 Quality documentation

Quality documentation is included in the survey's Quality Report

<https://www.statistics.gr/en/statistics/-/publication/SFA20/>

11. Quality management

[Top](#)

11.1 Quality assurance

The quality of the survey is ensured by the existence of a methodological handbook issued by Eurostat, as well as by the use of a common questionnaire – template, in order to improve comparability of results in all member states, and in general by the implementation of the European Statistics Code of Practice.

11.2 Quality assessment

Quality assessment is carried out by ELSTAT and Eurostat.

The sample size is such as to ensure high accuracy results, representative for the reference population and all necessary steps are taken so as to make all appropriate checks and minimize measurement errors in data collection. Data are accompanied by quality reports analyzing the accuracy, consistency and comparability of data.

12. Relevance

[Top](#)

12.1 User needs

Main users of the survey data is Eurostat, OECD, Universities (professors, graduate and post graduate students), researchers on the field of information society, telecommunication providers etc. In general the users' requests are being satisfied.

12.2 User satisfaction

The Section of Statistical Information and Dissemination of ELSTAT conducts a survey on users' satisfaction

<http://www.statistics.gr/user-satisfaction-survey>

12.3 Completeness

The completeness of data and breakdowns are considered to be very satisfactory according to user needs, while ESTAT's requirements are set out in Commission Regulation 808/2004 of the European Parliament and Council on Information Society statistics, and in accordance with Implementing Regulation 1910/2019.

13. Accuracy and reliability

[Top](#)

13.1 Overall accuracy

The concept of accuracy refers to the precision of estimates computed from a sample rather than from the entire population. Accuracy depends on sample size, sampling design effect and structure of the population under study. In addition to that, sampling errors and non sampling errors need to be taken into account.

The sample size has been defined from the Division of Methodology, Quality Management and Public Relations, according to the provisions set in the surveys' implementing regulation, allowing thus the production of high accuracy estimations for the country and also for the 4 great geographical areas of the country (NUTS1 level).

Sampling errors will be calculated from the competent division (see §13.2 below).

For the non-sampling errors see §13.3 below.

13.2 Sampling error

Sampling errors are estimated by the Coefficient of Variation.

The variance estimation is based on the assumption that the PSU's were selected according to a PPS with replacement scheme. As the clusters (one or more unified city blocks) are used as primary sampling units (PSUs) in the sample design, the variance procedure estimates the variance from the variation among the PSUs.

13.3 Non-sampling error

The non-sampling errors are divided into the following categories:

1. Coverage error
2. Measurement error
3. Non-response error
4. Processing error

13.3.1 Coverage error

It is caused by the imperfection of the sampling frame (households of the EU-SILC of year 2019 containing members belonging to the target population -individuals aged 16-74 years old), being somehow outdated thus resulting in ineligible sample cases / out-of-scope units.

13.3.1.1 A2 Over-coverage – rate

0.3% of selected households did not belong in the target population because all members were over 75 years old.

13.3.1.2 A3 Common units – proportion

Not applicable

13.3.2 Measurement error

They occur at the time of data collection from the questionnaire.

In order to reduce these errors the following actions were done:

- For building up the questionnaire we adopted the questionnaire proposed from Eurostat as the basis. The structure of the questionnaires is similar. The majority of the questions are almost literally copied and translated.
- Detailed guidelines handbook is provided to all interviewers. Also, a second manual on the use of the data entry programs / electronic questionnaires designed using Oracle - SQL (in central office desktops).
- Training to interviewers takes place in Athens.
- Checks (validation/ logical/ completeness/ flow, etc.) are carried out both by ELSTAT and EUROSTAT (validation programs). Supervisors are in close communication with interviewers for attending work progress or to discuss and solve occurring problems.
- Participation in the survey of skilled and experienced, with previous years' ICT survey and other household surveys, interviewers.

13.3.3 Processing error

Occurring in post-data-collection processes such as data entry, keying, editing and weighting

- Data entry checks are made from ELSTAT's experienced personnel, also using ESTAT's validation programs
- Longitudinal checks with data from previous years' surveys.
- Codification of questions relating to occupation (ISCO-08)

13.3.4 Model assumption error

Not applicable

Non response error

a. Unit non – response

The unit response rate is the ratio of the number of in-scope respondents (= the number of achieved interviews or the net sample size to the number of eligible elements selected from the sampling frame).

Unit non-response rate for

Households: 31.71%

Individuals (aged 16-74): 31.71%

Actions for minimizing units' non-response are:

- An advance notification letter sent to all households, one month before the survey conduct, among others, providing information on how the data collected are used.
- In cases where the households cannot be accessed, mainly due to temporary absence, a number of attempts for phone calls (at least three) are made, on different days or hours of day.

b. Item non - response

-

14. Timeliness and punctuality

[Top](#)

14.1 Timeliness

The time lag between the reference period of the survey data and the publication of data is approximately 10 months.

14.2 Punctuality

Dates when each of the phases of the projects started/ended

Data are produced and disseminated according to the predefined timetable.

	<u>Duration / start / end date</u>
Preparation of survey	End of year 2019 – March 2020
Data collection (fieldwork)	Due to exceptional circumstances July – August 2020
Data delivery to Eurostat	Delivery of microdata 5/10/2020

Dissemination of national results The national results are available for dissemination right after the Press Release of the survey results (10/11/2020)

15. Coherence and Comparability

[Top](#)

15.1 Comparability - geographical

Comparability of data between Member States is assured by keeping the comparability of methods used and of definitions of variables. This target is much aided by the use of EU proposed questionnaire and of the conceptual guidelines and instructions (methodological manual).

15.1.1 Assymetry for mirror flows statistics – coefficient

Not applicable

15.2 Comparability over time

From 2002 onwards, the data are comparable because common definitions and methods of data production are applied; therefore, in general, no problem on comparability over time exists.

15.3 Coherence cross-domain

No statistically significant differences have been observed for the same variables, published by ELSTAT or by other organizations / services conducting similar surveys.

Internet penetration indicator (Households with access to the internet at home) is compared with the indicator calculated from the Household Budget Survey.

Coherence information for data of 2020 survey will be presented as soon as data from the other surveys will be announced.

15.3.1 Coherence – sub annual and annual statistics

-

15.3.2 Coherence – National Accounts

-

15.4 Coherence - internal

-

16. Cost and burden

[Top](#)

The ICT survey has been designed to keep respondent burden under control in order to avoid high non-response rate and to ensure good quality of the collected information. The burden mostly concerns the time required to get the information from the surveyed households/ individuals. Nevertheless, it seems not possible to lighten this burden.

As far as costs are concerned:

- (a) Costs of staff assigned to the action are estimated approximately to 80,000 euros and
- (b) Costs for data collection by external collaborators are estimated approximately to 35,000 euros

17. Data revision

[Top](#)

17.1 Revision policy

The revision policy may relate to the survey data and the survey itself, i.e. the questionnaire, the sample, etc., and takes into account users' needs for additional statistical information.

<http://www.statistics.gr/en/policies>

17.2 Revision practice

Data transmitted to Eurostat undergo detailed verifications by implementing automated validation procedures at the level of variables and breakdowns. Besides cross-sectional checks, longitudinal checks are conducted and whenever necessary (if data inconsistencies are found) reporting countries are asked to verify and revise their results.

18. Statistical processing

[Top](#)

18.1 Source data

The sample of households for the ICT survey of the year **2020** consisted of a sub-sample of the sample used in the EU-SILC of the years 2016 - 2019.

The three stage stratified sampling has been used with ultimate sampling unit the individual.

As pre-mentioned the sampling of individuals-households was done from the households that were interviewed in the EU-SILC survey of the years 2016- 2019, whose sampling units consist the first stage of sampling.

Stratification criteria for the 2nd stage were:

- Region (NUTS2) : The 13 regions as well as the Major City Agglomerations (Athens and Thessaloniki)
- Urbanization degree: (Urban areas 30,000+ inhabitants, Urban areas 5,000-29,999 inhabitants, urban-rural areas 1,000 – 4,999 inhabitants and Rural 1-1.999 inhabitants).

The initial sample consists of 7,501 households from which one individual aged 16-74 years old has been selected with equal probabilities from the household members aged 16-74.

18.2 Frequency of data collection

Yearly

18.3 Data collection

The method of data collection is the telephone interview (CATI).

18.4 Data validation

Data validation is carried out by qualitative and quantitative tests based on:

- Longitudinal checks on raw data (with data of previous years)
- Comparisons of key variables with variables / data of other statistical sources
- Calculation of sampling errors, also used as a criterion for the final validation of data.

18.5 Data compilation

Grossing-up procedures for households

Let h be one of the final strata of households (Final stratum = Region x Degree of 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 j belonging to the PSU of order i was defined as:

$$w_{hij} = \frac{N_h}{a_h \cdot N_{hi}} \cdot \frac{N_{hi}}{n_{hi}} \cdot \frac{1}{r_l} \cdot t_{hij} = \frac{N_h}{a_h \cdot n_{hi}} \cdot \frac{1}{r_l} \cdot t_{hij} \quad (9)$$

From relations (8) in paragraph 6.9 and (9), we have:

$$w_{hij} = \frac{N_h}{a_h \cdot \frac{n_h}{a_h}} \cdot \frac{1}{r_l} \cdot t_{hij} \Rightarrow w_{hij} = \frac{N_h}{n_h} \cdot \frac{1}{r_l} \cdot t_{hij} \quad (10)$$

where:

N_h : Target population size in the h stratum according to Population census 2011 and data from population projections based on vital statistics.

n_h : Initial sample size in the h stratum

$\frac{N_h}{n_h}$: Inverse of initial inclusion selection probability of sampling households in h stratum, as estimator

of the stratum total Y_h (for any characteristic) is self-weighting,

r_l : Response propensity in weighting class C_l

t_{hij} : 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) at NUTS 1 level, for the definition of cells or classes.

The distribution of households by size class per NUTSI is estimated by using population projections. These projections are based on vital statistics (population census, births, deaths, migration) and the Population Census 2011.

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 k belonging to the hij household is defined as follows:

$$w_{hijk} = w_{hij} \cdot \frac{1}{p_{hijk}} \cdot g_{hijk} \quad (8.2)$$

where:

w_{hijk} : The extrapolation factor of the hij household in which the $hijk$ individual belongs

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

the p_{hijk} is defined as: $p_{hijk} = \frac{1}{m_{hij}}$

g_{hijk} : Factor, which adjusts the sample weights of individuals, so that the sample distribution conform to the population distribution across a set of classes at NUTS1 level. 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 NUTSI is estimated by using population projections. These projections are based on vital statistics (population census, births, deaths, migration) and the Population Census 2011.

18.5.1 Imputation – rate

0%

18.6 Adjustment

-

18.6.1 Seasonal adjustment

-

19. Comment

[Top](#)

-