EUROPEAN COMMISSION
EUROSTAT

Directorate F: Social statistics
Unit F-4: Income and living conditions; Quality of life

ANONYMISATION GUIDE OF

HETUS WAVE 2010 DATA –

INCLUDING ANNEX 2:

VARIABLES DESCRIPTION LIST

1. INTRODUCTION

Researchers expressed in the year 2017 considerable interest in adding Eurostat's HETUS (= Harmonised European Time Use Surveys) to the list of European microdata collections to be made available via Eurostat's program of better access to microdata for scientific purposes[1].

In this program, microdata are not released by Eurostat in its original form but only in form of so-called Scientific Use Files (SUF). SUF are partly anonymised microdata files where statistical disclosure control methods had been applied in order to reduce the risks of identification of the statistical units.

In addition, SUF are microdata files that are made available only for researchers of research projects that are approved by the national statistical authorities. So, for every research project a binding contract specifies the rights and obligations of the users (researchers) together with sanctions in case of breach of the terms of use in the contract. In particular, researchers are bound by the contract not to match the data set with other sources.

Moreover, only researchers that are member of recognised research entities can request access to Eurostat's SUF. In order to be recognised, an organisation must have "research" as one of its main activities (or must be a research department within another organisation), must provide evidence of publication of research results, must

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[1]See: https://ec.europa.eu/eurostat/web/microdata.

be independent and autonomous in formulating scientific conclusions, and must have adequate data security safeguards[2].

A proposal to define and create a SUF for HETUS wave 2010 data collection – as it is described in detail in ANNEX 2 of this text – is the main purpose of this document.

2.   UNDERSTANDING THE DATA

There have been by now data collections for two HETUS waves, 2000 and 2010. A third wave, HETUS 2020, is under preparation at the moment[3]. But this document concerns only microdata collected during the HETUS wave 2010.

HETUS wave 2010 consisted of 18 countries that had collected TUS data between 2008 and 2015. These 18 participating countries are Austria (AT), Belgium (BE); Germany (DE); Estonia (EE); Greece (EL); Spain (ES); Finland (FI); France (FR); Hungary (HU); Italy (IT); Luxemburg (LU); the Netherlands (NL); Norway (NO); Poland (PL); Romania (RO); Serbia (RS); Turkey (TR) and United Kingdom (UK)[4]. All 18 countries transmitted their HETUS wave 2010 microdata collections to Eurostat on a voluntary basis, i.e. on basis of a "Gentlemen's agreement".

The data collection and harmonisation methods for European level cross-country comparisons as well as the survey instruments used for HETUS wave 2010 are described in every detail in the HETUS 2008 guidelines[5] published online by Eurostat. Moreover, the individual variables delivered to Eurostat for HETUS wave 2010 are described – with respect to their variable codes, variable names, possible answer categories, possible use of filters and technical formats – in the microdata list of ANNEX 2 in this paper.

One data record (per diary day) of HETUS wave 2010 microdata contains a total of ~1,950 variables. The number of such records per country varies between 4,162 (LU) and 78,759 (PL). The total of records is 356,323 (see ANNEX 1). The statistical results for HETUS wave 2010 data have been published – in the form of 19 dynamic tables containing aggregated information – on the dedicated online dissemination database EUROBASE[6] of Eurostat.

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[2] https://ec.europa.eu/eurostat/documents/203647/771732/guidelines-assessment.pdf/6d082f4a-a721-42ce-8deb-cfc6f3925fb2.
[3] See: https://ec.europa.eu/eurostat/documents/3859598/9710775/KS-GQ-19-003-EN-N.pdf/ee48c0bd-7287-411a-86b6-fb0f6d5068cc.
[4] See also: https://ec.europa.eu/eurostat/cache/metadata/en/tus_esms.htm.
[5] See: http://ec.europa.eu/eurostat/ramon/statmanuals/files/KS-RA-08-014-EN.pdf.
[6] See: https://ec.europa.eu/eurostat/data/database -> Population and social conditions -> Living conditions and welfare -> Time use survey.

3.   AGREEMENT IN PRINCIPLE BY 17 COUNTRIES

A dedicated consultation of these 18 countries in summer/ autumn 2018 resulted in 17 "agreements in principle" to facilitate the access to HETUS wave 2010 data.

The legislation of one country, Turkey, does not allow at all a dissemination of their NSI microdata by any other organisations. Therefore, the TUS data collection of Turkey was eliminated from the process at this early stage and the work was continued for "only" 17 countries of HETUS wave 2010 (see ANNEX 1).

4.   STATISTICAL DISCLOSURE CONTROL

The application of statistical disclosure control (SDC) methods should ensure that the microdata are adequately protected and at the same time they should allow researchers to obtain as much detailed information as possible.

Since scientific use files are released to a category of trusted users (researchers), these data should be protected in such a way that the risk of identification of statistical units is *appropriately* reduced. The 'appropriateness' of the level of protection depends on the disclosure risk, i.e.:

a) the impact that unlawful disclosure of confidential data would have and

b) the probability that identification/ disclosure might occur.

The impact of unlawful disclosure of confidential data is defined by the significance of the consequences for respondents and statistical offices of a loss of control over a scientific use file. The specific value added of the survey is in the time use variables (see ANNEX 2, p. 30 ff.). These variables are defined in such a way that they are neither very disclosive, nor very sensitive.

The probability of identification/ disclosure depends mostly on the level of detail of the data released (this concerns both the number of variables and the details in the breakdown of variables). The more details there are in the data file, the greater the probability of identification/ disclosure.

The disclosure risk is linked mainly to indirect identifiers that also occur in other sources and could be used for linking files. The indirect identifiers considered in HETUS wave 2010 microdata are:

- age (INC2)
- sex (INC1)
- lifecycle (INC3)[7]
- country of birth (IND41_1)

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[7] See detailed description in ANNEX 2, p. 19/20.

- country of citizenship (IND42_1)

- marital status (IND28_1)

- educational attainment (IND22_1)

- occupation (IND5)

- economic activity (IND3_1).

The risks related to occupation and economic activity are actually regarded as rather low, as these variables are already strongly aggregated in the original file and the coding of these variables goes with considerable noise, which results in an inherent protection.

The number of persons in the household (HHC1) is also an important indirect identifier, but the variable is already top-coded to 5 in the original file. The top-coding of variable HHC1 is not coherent with counts of response records linked to the same household ID. In the Luxembourgish file, for example, there are 954 households. There are 127 households with 5 or more members according to HHC1. From these 127 households 16 have 6 response records and 1 household has 7 response records. From this incoherence you can derive that the household size has to be at least 6 or 7. But you cannot derive the actual number of persons in the household. So, in less than 2% of the households a bit more information can be derived than provided by the top-coded variable HHC1. The related disclosure risks are considered low.

The time use variables itself are not considered as a risk. There are no other data sources that contain these time use variables and can be used for linking records. The time use variables are a repetition of the same aggregate categories for different time slots. Obviously, there will be many unique combinations, but the specific timing and order of activities will not help much to identify a person. Also considering that the data collection took place already 9 years ago. The high level of aggregation of the time use categories also makes that the categories are not sensitive; activities that could be considered private for respondents are part of broad neutral categories.

It is important that researchers can analyse the time use activities inside households. The household and the person identifier can be used to establish the link. To make sure that these identifiers cannot be used outside this context, new random numbers for both identifiers have been assigned.

There are income variables both at personal (**HHQ9_1**) and at household level (**IND13_1**). These variables are usually regarded as sensitive. Already in the original microdata files this information is presented as quintiles, where the country-specific quintile thresholds remain unknown. Therefore, these thresholds are different per country and for the household and the person level.

5.   RESEARCH DEMAND FOR TIME USE DATA

Over the last several years, Eurostat received a number of requests for ad-hoc HETUS wave 2010 data extractions. For example, reliable time-use statistics have been critical for the measurement and analysis of quality of life or general well-being, for more comprehensive measurement of all forms of work, including unpaid work and non-market production and the development of household production accounts, and for informing and monitoring gender policies (work-life balance).

Moreover, time-use statistics can further supplement information to other statistical areas, such as: education (learning patterns), health (physical activity patterns, feeding patterns, sleep patterns, etc.), culture (involvement), environment (access to water, sanitation and clean energy), social behaviour, involvement in civic activities and volunteering, use of information and communication technologies (ICT), etc.

In the meeting of the Microdata Access Network Group (MANG 2017) the Harmonised European Time Use Surveys were indicated as top priority for researchers.

6.   PROBABILITY OF IDENTIFICATION AND REDUCTION OF DISCLOSURE RISK

Due to the fact that scientific use files are used by researchers outside the secure environment of Eurostat the disclosure risk has to be reduced.

The general reasoning behind the proposal is to use an approach, similar to EU-SILC, to reduce information contained in identifying variables. The main value added of the survey is contained in the time-use variables. These variables are neither very disclosive nor sensitive. Eurostat Unit F4, after discussion with Eurostat Unit B1 and consultation of the countries producing the data, proposed the following protection actions for HETUS wave 2010 microdata (see ANNEX 2):

-    The variable **HID** (unique household identifier) is recoded into a new unique random number for the household of the respondent (1-99999), still allowing to link members of the same household;
-    The variable containing the unique person identifier **PID** is recoded into a new unique random number for the person (1-99), still allowing to link observations of the same person;
-    In consequence, the full identifier of a person in HETUS microdata is the combination of the country code, the household identifier and the person identifier (the files allow researchers to identify respondents that belong to the same household);
-    The variable **DDV2** (exact date of the data collection is removed; remark: the from DDV2 derived variable "day of the week" DDV1 remains in the list;
-    The variable **HHC2** (age of the youngest person) is deleted;
-    The variables **HHC4** (number of older children aged 7-17 years) and **HHC5** (number of adults aged 18+) are top-coded to 2 (please note that variable HHC3, i.e. number of young children aged <7 years, was already top-coded to 2);

- Variables **HHQ1** (children in formal long-term care) and **HHQ2** (children in public or private child care) are deleted;

- The variables **HHQ6m_1** (number of mobile phones in the household) and **HHQ6o_**1 (number of computers in the household) are deleted;

- The variable **INC2** (respondents' age in completed years) is recoded into 15 age groups of 5-years (with exception for young persons (10-17=1; 18-19=2) and top-coding for old persons from 80+);

- The variable **IND17_1** (self-declared labour status) is recoded: code 33 (disabled person) and code 36 (other inactive person) are combined into code 36 (other inactive person);

- The variable **IND20** (respondents' level of education currently receiving) is deleted; remark: the variable IND19 (respondent currently receiving education) remains in the list;

- The variable **IND41_3** (respondents' specified country of birth) is deleted; remark: the derived variable IND41_1: 1 = Born in this country; 2 = Born in another EU Member state; 3 = Born in a non-EU country remains in the list;

- The variable **IND42_3** (respondents' specified country of main citizenship) is deleted; remark: the derived variable IND42_1: 1 = National of this country; 2 = National of another EU Member State; 3 = National of a non-EU country remains in the list;

- The variable **IND28_1** (respondents' present marital status) is recoded into: 1 = Unmarried (never married); 2 = Married (incl. registered partnership); 3 = other.

The surveys (HETUS wave 2010) do not have regional breakdowns.

It also has to be considered that the surveys' inclusion probabilities are low (lower than ½ per thousand on average, see ANNEX 1, last column). Moreover, the surveys were conducted about 9 years ago. This further reduces the disclosure risk and the sensitivity of the information.

These are the specifications for the general protection rules that will be applied to all 17 participating countries of HETUS wave 2010. There was no need for additional rules at individual country level.

7.   Analysis of the remaining risk of identification

The analysis of the remaining identification risk has been done at the level of persons. The indirectly identifying variables in the file are: age (INC2), sex (INC1), lifecycle (INC3)[8], country of birth (IND41_1), country of citizenship (IND42_1), marital status (IND28_1) and educational attainment (IND22_1). The Expert Group on Statistical

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[8] See ANNEX 2.

Disclosure Control requested to also analyse the variables occupation (IND5) and economic activity (IND3_1). For this purpose, a 7th table was added to the table set in ANNEX 3.

The seven tables contain combinations of four dimensions of the indirect identifiers. The variables age and sex were always included in the tables, as these variables are usually present in all files that can be potentially used to link and disclose. Two simple indicators were used: the percentage of unique records and the percentage of one or two records in the table.

The survey design for HETUS wave 2010 was different in different countries. Especially the number of diary days per person is different (ranging from 1 day to 7 days). ANNEX 1 contains an overview of the number of records per country.

Seven four-dimensional tables were produced (dimensions in brackets) for all 17 countries that had given an agreement in principle to give access to their HETUS wave 2010 microdata:

1. Age by sex by country of birth by country of citizenship (15x2x3x3=270)

2. Age by sex by country of birth by marital status (15x2x3x3=270)

3. Age by sex by country of birth by educational attainment (15x2x3x13=1170)

4. Age by sex by lifecycle by country of birth (15x2x11x3=990)

5. Age by sex by lifecycle by marital status (15x2x11x3=990)

6. Age by sex by lifecycle by educational attainment (15x2x11x13=4290)

7. Age by sex by economic activity by occupation (15x2x8x9=2160)

As the Member States provided the microdata on a voluntary basis, not always all the variables were included in the microdata file. An example is the Netherlands, where the variables lifecycle (INC3), country of birth (IND41_1), country of citizenship (IND42_1), and educational attainment (IND22_1), economic activity (IND3_1) and occupation (IND5) are all missing. This is an automatic protection (and a loss of information) for tables 1, 3, 4, 6 and 7 that have only 30 cells.

In some cases, the number of categories is higher than expected because of one or more missing value codes that appear in the variable. For instance the variable marital status in the Dutch file also has missing values (which makes 4 separate values in total), therefore tables 2 and 5 in ANNEX 3/B1 have 120 cells (15x2x1x4). Such missing values do not create a disclosure risk, as the missing value cannot be used to identify a person.

ANNEX 3/A1 to A5 offers an indication of identification risks (number of records (=persons) in cells with 1 or 2 records). In general, less than 20 percent of the records would be in identification risk from this perspective. The higher risks occur mainly in combination with the variable educational attainment (tables 3 and 6). This is partly due to missing values occurring in the education variable.

The identification risk is notably higher for Luxembourg. This is partly due to the small sample size. The variable educational attainment also has two types of missing values; these do not constitute a risk. The situation of Luxembourg could require additional country specific measures.

Sample size is lowest in the Netherlands, but because the Netherlands did not include several of the identifying variables in the microdata file, the remaining risk of identification is very low.

In ANNEX 3/B1 to B5 the same information is presented as number of all small counts occurring in cells (counts of values from 0 to 5 plus 6 and more).Obviously, more complete microdata sets have more cells and therefore more small cell values.

8. Conclusion

The tables in the ANNEX 3 show that applying the proposed confidentiality treatment has reduced the disclosure risk. The number of unique combinations is highest in tables 3 and 6, which contain the variable educational attainment. This is partly due to missing values occurring next to the real codes. Otherwise, the remaining disclosure risk is usually low (less than 1 percent of records are a unique combination of four identifying dimensions).

High disclosure risk is connected to the low sample size, but will also be due to missing values in the education variable. There might be a need for additional country specific measures on the education variable.

In general, the identifying variables are already highly aggregated. Unique combinations are an indication of identification risk, but actual identification of these unique persons will be hard. It should also be considered that the inclusion probabilities are low and that the data concern a rather old period.

Eurostat proposed to adopt the proposed protection methods for the scientific use files of the Time Use Surveys wave 2010 and to accept the remaining small counts in the file. Also for countries with very small samples (notably Luxembourg) no additional measures were requested.

Annexes

ANNEX 1: HETUS wave 2010: Records, persons and households by country

ANNEX 2: List of HETUS wave 2010 variables (including rules to create SUF)

ANNEX 3: Tables A1 to A5 and B1 to B5 to check the anonymisation strategy

ANNEX 1: HETUS wave 2010: Records, persons and households by country*

Country	Concrete year of data collection	# of records (# of diary days) in sample	# of individuals in sample	# of records / # of individuals	# of households in sample	# of individuals / # households	# population in country (Census Hub2/ google)	# of individuals / # population in %
AT	2008 / 2009	8.234	8.234	1,00	4.757	1,73	8.401.940	0,098%
BE	2012 / 2013	11.118	5.559	2,00	2.744	2,03	11.000.638	0,051%
DE	2012 / 2013	27.143	9.051	3,00	4.021	2,25	80.219.695	0,011%
EE	2009 / 2010	9.946	5.005	1,99	2.425	2,06	1.294.455	0,387%
EL	2013 / 2014	14.274	7.137	2,00	3.371	2,12	10.816.286	0,066%
ES	2009 / 2010	19.295	19.295	1,00	9.541	2,02	46.815.910	0,041%
FI	2009 / 2010	7.480	3.795	1,97	1.983	1,91	5.375.276	0,071%
FR	2009 / 2010	27.903	16.242	1,72	10.675	1,52	64.933.400	0,025%
HU	2009 / 2010	8.391	8.391	1,00	8.391	1,00	9.937.628	0,084%
IT	2008 / 2009	38.234	38.234	1,00	17.633	2,17	59.433.744	0,064%
LU	2014 / 2015	4.162	2.082	2,00	954	2,18	562.958	0,370%
NL	2011 / 2012	14.035	2.005	7,00	2.005	1,00	16.655.799	0,012%
NO	2010 / 2011	7.882	3.949	2,00	3.949	1,00	4.979.954	0,079%
PL	2012 / 2013	78.759	40.048	1,97	27.309	1,47	38.044.565	0,105%
RO	2010 / 2011	56.514	28.257	2,00	14.627	1,93	20.121.641	0,140%
RS	2010 / 2011	6.835	3.431	1,99	1.861	1,84	7.200.000	0,048%
UK	2014 / 2015	16.118	8.059	2,00	4.229	1,91	63.182.180	0,013%
TOTAL	Wave 2010	356.323	208.774	1,71	120.475	1,73	448.976.069	0,047%

* Remark: Without Turkey (see point 3. AGREEMENT IN PRINCIPLE BY 17 COUNTRIES in the text).

ANNEX 2: List of HETUS wave 2010 variables (including rules to create SUF)

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
Technical survey variables: DDFILE / INDFILE / EFILE[10] (information from all three survey instruments[11])					
YEAR	Wave of HETUS	2010	All	4-digit number (F4)	unaltered
HID	Unique household identifier	1-99999; recoded into a new unique random number for the household (of the respondent)	All	5-digit number (F5)	recoded
PID	Unique person identifier	1-99; recoded into a new unique random number for the person (respondent)	All	2-digit number (F2)	recoded
DIARY[12]	Diary number of individual	1 = 1st diary completed; 2 = 2nd diary completed; 3 = 3rd diary day completed; 4 = 4th diary day completed; 5 = 5th diary day completed; 6 = 6th diary day completed; 7 = 7th diary day completed	All	1-digit number (F1)	unaltered

[9] See the remark for (*) at the end of the list.

[10] The original file structure of HETUS wave 2010 in EDAMIS (Electronic Data files Administration and Management Information System) consists of a set of tree SAS-files called DDFILE = Diary Day File, INDFILE = Individual File or EFILE = Episodes File. All three SAS-files contain unique household identifiers HID, unique person identifiers PID, the HETUS wave codes YEAR (2010) and specific country codes COUNTRY that allow to combine (merge) the information (variables) contained in the three SAS-files and to create one merged SAS-file per country.

So, the "Technical survey variables" YEAR, HID, PID, DIARY and COUNTRY come from all three original SAS-files; the "Background variables" come from either the DDFILE (and in this case from the time use diary as the survey instrument) or from the INDFILE (and in this case from the household questionnaire or from the individual questionnaire of HETUS). All so-called time use variables (main and secondary activity, where, ICT use, with whom) come from the EFILE.

[11] The model questionnaires/time use diary for all three HETUS wave 2010 survey instruments can be consulted in the HETUS 2008 guidelines (see: http://ec.europa.eu/eurostat/ramon/statmanuals/files/KS-RA-08-014-EN.pdf: ANNEX II – HOUSEHOLD QUESTIONNAIRE (p. 71 ff.), ANNEX III – INDIVIDUAL QUESTIONNAIRE (p. 85 ff.) and ANNEX IV – DIARY (p. 105 ff.).

[12] AT, ES, HU, IT: only one diary day, DE: 3 diary days, NL: 7 diary days.

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
COUNTRY	Country code	Country code (SCL GEO code: AT = Austria, BE = Belgium, … etc.);	All	2-digit code (A2)	unaltered
Background variables: DDFILE (time use diary)					
DDV1	Day of the week diary completed	1 = Sunday; 2 = Monday; 3 = Tuesday; 4 = Wednesday; 5 = Thursday; 6 = Friday; 7 = Saturday	All: from DDV2/ DDV3/ DDV4	1-digit number (F1)	unaltered
~~DDV2~~	~~Day of the month diary completed~~	~~1 to 31 (dd from RD = real date);~~	~~All~~	~~2-digit number (F2)~~	deleted
DDV3[13]	Month of the year diary completed	1 to 12 (mm from RD = real date);	All	2-digit number (F2)	unaltered
DDV4	Year diary completed	YYYY (yyyy from RD = real date);	All	4-digit number (F4)	unaltered
DDV5	Diarist feeling rushed on the diary day	1 = Yes; 2 = No; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	unaltered
DDV6	Employed/ student	1 = Yes; 2 = No; -6 = question not asked by the country; -7 = refusal;	All	1-digit number (F1)	unaltered

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[13] DE: months grouped.

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
		-8 = Don`t know; -9 = not available (no answer)			
DDV7[14]	What kind of day was the diary day	1 = Ordinary work day; 2 = Ordinary school day; 3 = Day off due to weekend/ holiday/ work schedule; 4 = Sick leave day; 5 = Vacation day; 6 = On leave for other reasons; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	DDV6=1	1-digit number (F1)	unaltered
DDV8[15]	Starting time of the first activity	00:00-23:59; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	5-digit code (A5)	unaltered
DDV9[16]	Ending time of the last activity	00:00-23:59; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	5-digit code (A5)	unaltered
WGHT1	Combined individual response and day weight	YYYYYYYYYY.YYYYY	All	15-digit number (F10.5)	unaltered

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[14] DE, EL, ES, IT, LU: not asked, EE: deviation: not possible to make difference between working and studying. Therefore, working or studying = 1.
[15] AT, DE, EE, EL, ES, FR, HU, IT, NL, NO, PL, UK: not asked, BE, FI: not reliable.
[16] AT, DE, EE, EL, ES, FR, HU, IT, NL, NO, PL, UK: not asked, BE, FI: not reliable.

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
Background variables: INDFILE (household questionnaire)					
HHC1	Household size (number of persons in the household)	1-5 (5=5+); -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	**unaltered**
~~**HHC2**[17]~~	~~Age of the youngest person in the household~~	~~0-85 (85=85+);~~ ~~-6 = question not asked by the country;~~ ~~-7 = refusal;~~ ~~-8 = Don`t know;~~ ~~-9 = not available (no answer)~~	~~All~~	~~2-digit number (F2)~~	**deleted**
HHC3	Number of persons aged <7 years in the household	0-2 (2=2 or more); -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	**unaltered**
HHC4	Number of persons aged 7-17 years in the household	~~0-3 (3=3+);~~ recoded to: 0-2 (2=2 or more); -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	**recoded**
HHC5	Number of persons aged 18+ years in household	~~1-4 (4=4+);~~ recoded to; 0-2 (2=2 or more); -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	**recoded**

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[17] ~~DE: cut at 75, age groups, LU:10-74, NO: 10-80~~

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
~~HHQ1~~[18]	~~Any children (persons <10 years old) in formal care on a long-term basis~~	~~1 = Yes;~~ ~~2 = No;~~ ~~-1 = not applicable;~~ ~~-6 = question not asked by the country;~~ ~~-7 = refusal;~~ ~~-8 = Don`t know;~~ ~~-9 = not available (no answer)~~	~~HHC2 < 10~~	~~1-digit number (F1)~~	**deleted**
~~HHQ2~~[19]	~~Public or private childcare~~	~~1 = All in public care; 2 = All in private care or some in private care, some in public care;~~ ~~-1 = not applicable;~~ ~~-6 = question not asked by the country;~~ ~~-7 = refusal;~~ ~~-8 = Don`t know;~~ ~~-9 = not available (no answer)~~	~~HHQ1 = 1~~	~~1-digit number (F1)~~	**deleted**
HHQ3_1[20]	Type of accommodation	1 = Detached, semi-detached or terraced single family house; 2 = An apartment or a flat in a building; 3 = Other accommodation; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	**unaltered**
HHQ4[21]	How many rooms in home (exclude kitchen, toilet, bathroom)	1-6; 6=6+; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	**unaltered**

[18] ~~AT, LU, NL, UK: not asked, FI: Only children below 8 years, FR: Not asked, if children are 7-9 years old.~~
[19] ~~AT, BE, DE, EE, ES, HU, IT, LU, NL, UK: not asked, FI: Only children below 8 years.~~
[20] AT, BE, DE, ES, PL: not asked.
[21] BE, ES, PL: not asked, FR: kitchen, toilet and bathroom are not excluded, IT: kitchen included, if it has characteristics of the room.

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
HHQ5	Own or rent home	1 = Own home; 2 = Rent home; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	**unaltered**
HHQ6c[22]	Number of TV sets in the household	0- 1; 1=1+; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	**unaltered**
HHQ6d	Household has a satellite/ cable receiver	1 = Yes; 2 = No; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	**unaltered**
HHQ6e	Household has a video recorder or DVD	1 = Yes; 2 = No; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	**unaltered**
HHQ6f	Household has a microwave oven	1 = Yes; 2 = No; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	**unaltered**

[22] Not all questions 6c to 6p were asked in several countries (e.g. AT, DE, ES, IT. LU, NL, NO, PL).

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
HHQ6g	Household has a dishwasher	1 = Yes; 2 = No; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	**unaltered**
HHQ6h	Household has a washing machine	1 = Yes; 2 = No; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	**unaltered**
HHQ6k	Household has a deep freeze	1 = Yes; 2 = No; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	**unaltered**
HHQ6l_1	Household has a landline telephone	1 = Yes; 2 = No; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	**unaltered**
HHQ6m	Household has a mobile phone	1 = Yes; 2 = No; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	**unaltered**
~~**HHQ6m_1**~~	~~Number of mobile telephones in the household?~~	~~0-5; 5=5+;~~ ~~-6 = question not asked by the country;~~ ~~-7 = refusal;~~ ~~-8 = Don`t know;~~	~~All~~	~~1-digit number (F1)~~	**deleted**

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Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
		-9 = not available (no answer)			
HHQ6n	Household has a second home	1 = Yes; 2 = No; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	unaltered
HHQ6o	Household has a personal computer	1 = Yes; 2 = No; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	unaltered
~~HHQ6o_1~~	~~Number of computers in the household?~~	~~0-3; 3=3+;~~ ~~-6 = question not asked by the country;~~ ~~-7 = refusal;~~ ~~-8 = Don`t know;~~ ~~-9 = not available (no answer)~~	~~All~~	~~1-digit number (F1)~~	deleted
HHQ6r[23]	Household has an Internet connection	1 = Yes; 2 = No; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	unaltered
HHQ6p	Number of cars or vans for private use	0-3; 3=3+; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	unaltered

[23] AT, BE, EE, ES, FR, IT, LU, NL, NO, PL, RS one or both questions HHQ6r and HHQ6p not asked.

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
HHQ9_1	Net monthly income band (household)	1 = <P20.0 (first income quintile group); 2 = P20 to <P40; 3 = P40 to <P60; 4 = P60 to <P80; 5 = P80 or more (fifth income quintile group); -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	unaltered
HHQ10a	Receive help with childcare	1 = Received help; 2 = Did not receive help; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	unaltered
HHQ10f	Receive help with care of adults	1 = Received help; 2 = Did not receive help; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	All	1-digit number (F1)	unaltered
INC1	Sex of respondent	1 = Male; 2 = Female;	All	1-digit number (F1)	unaltered (*)
INC2[24]	Age group of respondent in completed years	~~10-85 (85+=85);~~ recoded to age groups: 1 = 10-17 2 = 18-19 3 = 20-24; 4= 25-29; 5 = 30-34;	All	2-digit number (F2)	recoded (*)

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[24] FR: 11-85, LU: 10-74, NO: 10-80, RS: 15+.

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
		6 = 35-39; 7 = 40-44; 8 = 45-49; 9 = 50-54; 10 = 55-59; 11 = 60-64; 12 = 65-69; 13 = 70-74; 14 = 75-79; 15 = 80+; -6 = question not asked by country; -7 = refusal; -9 = not available			
INC3[25] (HHG)	Lifecycle	1 = Person below 25 years with no children < 18 years and living in parents' household; 2 = Person 25 – 44 years with no children < 18 years and living in parents' household; 3 = Person below 45 in a couple (married/cohabiting) with no children < 18 years; 4 = Person below 45 with no children < 18 years and living in another household arrangement; 5 = Single parent (all ages) youngest child <18 years; 6 = Person (all ages) in couple (married/cohabiting) with youngest child 0 – 6 years; 7 = Person (all ages) in couple (married/cohabiting) with, youngest child 7 - 17 years; 8 = Person 45 - 64 in a couple (married/ cohabiting) with no children < 18 years; 9 = Person 45 - 64 with no children < 18 years and living in	All	2-digit number (F2)	unaltered (*)

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[25] LU: not asked, NL: not possible to construct, BE, DE: in relation to the household reference person.

Variable code	Variable name	Categories	Filter	Format	**Applied rules to create SUF (*)[9]**
		another household arrangement (including those living in parents' households); 10 = Person 65 and above in a couple (married/cohabiting) with no children < 18 years; 11 = Person 65 and above with no children <18 years and living in another household arrangement; -6 = question not asked by country; -7 = refusal; -8 = don`t know; -9 = not available			
Background variables: INDFILE (individual questionnaire)					
INC4_1[26]	Main activity status (self-defined)	1 = Employed full-time; 2 = Employed part-time; 3 = On leave; 4 = Unemployed; 5 = Pupil, student, further training, unpaid traineeship; -1 = not applicable; -6 = question not asked by country; -7 = refusal; -8 = don`t know; -9 = not available	INC2 = 15+	1-digit number (F1)	**unaltered**
IND1[27]	Working last week	1 = Yes; 2 = No, temporarily absent from work; 3 = Not working; -1 = not applicable; -6 = question not asked by the country; -7 = refusal;	INC2 = 15+	1-digit number (F1)	**unaltered**

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[26] LU: not collected, NL: not all categories possible.
[27] LU: not asked, ES: 16+, HU: 17+, DE: temporary absent included in "Yes", NL: not asked, but constructed using INC4_1 and INC2, do not know whether the respondent was temporarily absent from work or did not work.

Variable code	Variable name	Categories	Filter	Format	**Applied rules to create SUF (*)[9]**
		-8 = Don`t know; -9 = not available (no answer)			
IND2[28]	Why not working last week	1 = On holiday; 2 = Other reason; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	INC2 = 15+ IND1 = 2	1-digit number (F1)	**unaltered**
IND3_1[29]	Economic activity of the local unit for main job (economic sector)	NACE Rev. 2 at 1-digit level; 1 = Agriculture, fishing, mining & quarrying, utility supply; 2 = Manufacturing and construction; 3 = Wholesale and retail trade; 4 = Hotels and restaurants, transport, storage and communication; 5 = Financial intermediation; real estate, renting and business activities; 6= Education, health and social work; 7 = Public administration, defense, social security, extra-territorial bodies; 8 = Other community, social, & personal service + employment in private households; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	INC2 = 15+ IND1 = 1, 2	1-digit number (F1)	**unaltered (*)**
IND5[30]	Occupation in main job	ISCO-88 at 1-digit level;	INC2 = 15+	1-digit number	**unaltered (*)**

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[28] DE, LU, NL: not asked.
[29] NL, NO: not asked, IT: not fully harmonized (-6).

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
		1 = Legislators, senior officials and managers; 2 = Professionals; 3 = Technicians and associate professionals; 4 = Clerks; 5 = Service, shop and market sales workers; 6 = Skilled agriculture and fishery workers; 7 = Craft and related trade workers; 8 = Plant/ machinery operators and assemblers; 9 = Elementary occupations; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	IND1 = 1, 2	(F1)	
IND6_1	Employment status in main job	1 = Self-employed; 2 = Employee; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	INC2 = 15+ IND1 = 1, 2	1-digit number (F1)	unaltered
IND44[31]	Permanent job or open ended work contract (main job)	1 = Permanent or open-ended; 2 = Temporary or fixed-duration; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	INC2 = 15+ IND1 = 1, 2 IND6_1 = 2	1-digit number (F1)	unaltered

[30] DE, FR, NL: not asked, IT: not fully harmonized (-6).
[31] NO: not asked.

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
IND7[32]	Full-time or part-time in main job	1 = Full-time; 2 = Part-time; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	INC2 = 15+ IND1 = 1, 2 IND6_1 = 2	1-digit number (F1)	**unaltered**
IND10_1[33]	Usual weekly working hours in main job	0-99; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	INC2 = 15+ IND1 = 1, 2	2-digit number (F2)	**unaltered**
IND13_1[34]	Net monthly income group (main job)	1 = <P20.0 (first income quintile group); 2 = P20 to <P40; 3 = P40 to <P60; 4 = P60 to <P80; 5 = P80 or more (fifth income quintile group); -1 = Not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	INC2 = 15+ IND1 = 1, 2	1-digit number (F1)	**unaltered**
IND14[35]	Has more than 1 job	1 = Yes; 2 = No; -1 = Not applicable;	INC2 = 15+ IND1 = 1, 2	1-digit number (F1)	**unaltered**

[32] HU: deviation.
[33] IT, LU: not asked, DE: cut at 60, 0-3 grouped, HU: deviation.
[34] BE, DE, ES, HU, IT, LU, NL, RS: not asked, DE: from all jobs, FI: from the register, PL: deviation
[35] LU not asked.

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
		-6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)			
IND38[36]	Usual weekly working hours in all second jobs	0-99; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	INC2 = 15+ IND1 = 1, 2 IND14 = 1	2-digit number (F2)	unaltered
IND15[37]	Looked for work in last 4 weeks	1 = Yes; 2 = No; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	INC2 = 15+ IND1 = 3	1-digit number (F1)	unaltered
IND16[38]	Able to start work in 2 weeks	1 = Yes; 2 = No; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	INC2 = 15+ IND1 = 3 IND15=1	1-digit number (F1)	unaltered
IND17_1[39]	Self-declared labour status	recoded: code 33 and 36 are combined into code 36: 10 = Employed;	INC2 = 15+	2-digit number (F2)	recoded

[36] HU, IT, LU, NL, PL: not asked.
[37] DE, ES, LU, NL, NO: not asked, FR, IT, PL: deviations.
[38] DE, ES, LU, NL, NO: not asked, UK: deviation.
[39] NL: not asked.

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
		20 = Unemployed; 31 = At school, student further training; 32 = In retirement or early retirement or has given up business; ~~33 = Permanently disabled;~~ 34 = In compulsory military or community service; 35 = Fulfilling domestic tasks; ~~36 = Other inactive person;~~ 36 = Other inactive person; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)			
IND19	Currently in education	1 = Yes; 2 = No;	INC2 = 10+	1-digit number (F1)	**unaltered**
~~IND20[40]~~	~~Level of education currently receiving~~	~~1 = General training: primary, lower secondary (ISCED 1-2);~~ ~~2 = General training: upper secondary, post-secondary (ISCED 3-4);~~ ~~3 = Vocational training (ISCED 2,3-4);~~ ~~4 = Tertiary (ISCED 5a,5b,6);~~ ~~5 = Other training (language, computer);~~ ~~-1 = not applicable;~~ ~~-6 = question not asked by the country;~~ ~~-7 = refusal;~~ ~~-8 = Don`t know;~~ ~~-9 = not available (no answer)~~	~~INC2 = 10+~~ ~~IND19 =1~~	~~1-digit number (F1)~~	**deleted**
IND22_1[41]	Educational attainment level (highest level of	01 = No formal education or below ISCED 1; 11 = Primary (ISCED 1);	INC2 = 15+	2-digit number (F2)	**unaltered (*)**

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[40] ~~DE, ES, NO: not asked; BE, FI, FR, IT, LU, TR: deviations, NL: other classification used (-6).~~

[41] NO, RS: core codification, BE, DE, ES, FI, FR, IT, TR: deviations, NL: other classification used (-6).

Variable code	Variable name	Categories	Filter	Format	**Applied rules to create SUF (*)[9]**
	education successfully completed)	21 = Lower secondary (ISCED 2); 22 = ISCED3c <2 years; 31 = ISCED3c>=2 years; 32 = ISCED 3 a, b; 39 = ISCED 3 (2 years or more without distinction a, b, c possible; 41 = ISCED 4 a, b; 42 = ISCED 4 c; 43 = ISCED 4 (without distinction a, b, c possible); 51 = ISCED 5a; 52 = ISCED 5b; 60 = ISCED 6; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)			
IND23[42]	Self-perceived general health	1 = Good; 2 = Fair; 3 = Bad; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	INC2 = 10+	1-digit number (F1)	**unaltered**
IND24[43]	Long-standing health problem	1 = Yes; 2 = No; -1 = not applicable;	INC2 = 10+ IND23 = 3	1-digit number (F1)	**unaltered**

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[42] AT, DE, LU, PL: not asked.
[43] AT, DE, ES, IT, LU, NL, PL: not asked.

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
		-6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)			
IND26[44]	How often feel rushed	1 = Always rushed; 2 = Sometimes rushed; 3 = Almost never rushed; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	INC2 = 15 +	1-digit number (F1)	**unaltered**
IND39[45]	Children <18 who do not live with respondent, but are in contact	1 = Yes; 2 = No; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	INC2 = 18+	1-digit number (F1)	**unaltered**
IND40[46]	Car or motorbike driving license	1 = Yes; 2 = No; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	INC2 = 18+	1-digit number (F1)	**unaltered**
IND41_1[47]	Country of birth 1	1 = Born in this country;	INC2 = 10+	1-digit number	**unaltered (*)**

[44] AT, BE, DE, EE, EL, ES, LU, RS: not asked, FR, IT: deviations.
[45] AT, BE, DE, EE, EL, FR, HU, LU, PL, RS: not asked, IT: 25+.
[46] AT, DE, EE, EL, ES, HU, LU, NL, PL, RS, UK: not asked, FI: from the register.

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
		2 = Born in another EU Member state; 3 = Born in a non-EU country; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer); Comment: IND41_2 for Norway copied into IND41_1 before deleting IND41_2[48];		(F1)	
~~IND41_3[49]~~	~~Country of birth (Europe-an); see classification of countries~~	~~Country code (SCL GEO code:~~ ~~AT = Austria,~~ ~~BE = Belgium,~~ ~~... etc.);~~ ~~-1 = not applicable;~~ ~~-6 = question not asked by the country;~~ ~~-7 = refusal;~~ ~~-8 = Don`t know;~~ ~~-9 = not available (no answer)~~	~~INC2 = 10+~~ ~~IND41_2 = 1, 2~~	~~2-digit code (A2)~~	deleted
IND42_1	Country of main citizenship 1	1 = National of this country; 2 = National of another EU Member State; 3 = National of a non-EU country; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	INC2 = 10+	1-digit number (F1)	unaltered (*)

[47] IT, NL, NO: not asked, FI: from the register, DE: deviations

[48] The variables IND41_2 (Country of birth 2) and IND42_1 (Country of main citizenship 2) in the INDFILE had been deleted because they do not contain any additional information compared to IND41_1 (except for Norway, see Comment in IND41_1) or IND42_1.

[49] ~~BE, DE, ES, FI, IT, NL, RS: not asked.~~

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
~~IND42_3[50]~~	~~Country of main citizenship (European); see classification of countries~~	~~Country code (SCL GEO code:~~ ~~AT = Austria,~~ ~~BE = Belgium,~~ ~~… etc.);~~ ~~-1 = not applicable;~~ ~~-6 = question not asked by the country;~~ ~~-7 = refusal;~~ ~~-8 = Don`t know;~~ ~~-9 = not available (no answer)~~	~~INC2 = 10+~~ ~~IND42_2 = 1, 2~~	~~2-digit code (A2)~~	**deleted**
IND28_1	Present marital status	~~1 = Unmarried (never married);~~ ~~2 = Married (including registered partnership);~~ ~~3 = Widowed and not remarried;~~ ~~4 = Divorced and not remarried;~~ recoded to: 1 = Unmarried (never married); 2 = Married (including registered partnership); 3 = Other; -1 = not applicable; -6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)	INC2 = 10+	1-digit number (F1)	**recoded (*)**
IND29[51]	If not formally married, is diarist cohabiting	1 = Yes; 2 = No; -1 = not applicable;	INC2 = 10+ IND28_1≠2	1-digit number (F1)	**unaltered**

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[50] ~~BE, DE, ES, FI, HU, IT, NL, NO, RS: not asked, EE: deviation.~~

[51] ES: 18+, FI: 16+, DE: deviation, NL: not asked, constructed; further remark: The calculated/ combined variables on the spouse/ partner in the INDFILE produced by Statistics Finland are not proposed for the list of variables for the Scientific Use File SUF (i.e. are deleted from the INDFILE). These variables are: IND30 (Age of spouse/ partner) / IND31_1 (Spouse/ partner: highest level of completed education) / IND45 (Spouse/ partner worked last week) / IND32_1 (Spouse/ partner activity status) / IND32_1 (Spouse/ partner self-declared labour status) / IND33_1 (Spouse/ partner employment status) / IND43 (Spouse/ partner permanent job or open ended contract) / IND34 (Spouse/ partner full-time or part-time job) / IND36_1 (Spouse/ partner weekly usual working hours / IND37 (Spouse/ partner fixed start/ finishing hours).

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
		-6 = question not asked by the country; -7 = refusal; -8 = Don`t know; -9 = not available (no answer)			
WGHT2[52]	Individual response weight	YYYYYYYYYY.YYYYY	All	15-digit number (F10.5)	unaltered
Time use variables: EFILE (diary)					
Mact001	Main Activity 04:00 to 04:09	HETUS ACL 2008: Main Activity of the 10-minutes time slot (108 3-digit codes)	All	3-digit code (A3)	unaltered
Mact002	Main Activity 04:10 to 04:19	HETUS ACL 2008: Main Activity of the 10-minutes time slot (108 3-digit codes)	All	3-digit code (A3)	unaltered
…	…	…	…		unaltered
Mact143	Main Activity 03:40 to 03:49	HETUS ACL 2008: Main Activity of the 10-minutes time slot (108 3-digit codes)	All	3-digit code (A3)	unaltered
Mact144	Main activity 03:50 to 03:59	HETUS ACL 2008: Main Activity of the 10-minutes time slot (108 3-digit codes)	All	3-digit code (A3)	unaltered
Pact001	Aggregated Main Activity 04:00 to 04:09	HETUS ACL 2008: Aggregated Main Activity of the 10-minutes time slot (51 2-digit codes)	All	2-digit code (A2)	unaltered
Pact002	Aggregated Main activity 04:10 to 04:19	HETUS ACL 2008: Aggregated Main Activity of the 10-minutes time slot (51 2-digit codes)	All	2-digit code (A2)	unaltered
…	…	…	…		unaltered
Pact143	Aggregated Main Activity 03:40 to 03:49	HETUS ACL 2008: Aggregated Main Activity of the 10-minutes time slot (51 2-digit codes)	All	2-digit code (A2)	unaltered
Pact144	Aggregated Main Activity	HETUS ACL 2008: Aggregated Main Activity of the 10-minutes time slot (51 2-digit codes)	All	2-digit code (A2)	unaltered

[52] FI, FR, UK: No person weight for those with a diary, but without person interview, PL: individual weight only for persons15+.

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
	03:50 to 03:59				
Sactn001	Secondary Activity 04:00 to 04:09	HETUS ACL 2008: Secondary Activity of the 10-minutes time slot (108 3-digit codes)	All	3-digit code (A3)	unaltered
Sactn002	Secondary Activity 04:10 to 04:19	HETUS ACL 2008: Secondary Activity of the 10-minutes time slot (108 3-digit codes)	All	3-digit code (A3)	unaltered
…	…	…	…		unaltered
Sactn143	Secondary Activity 03:40 to 03:49	HETUS ACL 2008: Secondary Activity of the 10-minutes time slot (108 3-digit codes)	All	3-digit code (A3)	unaltered
Sactn144	Secondary Activity 03:50 to 03:59	HETUS ACL 2008: Secondary Activity of the 10-minutes time slot (108 3-digit codes)	All	3-digit code (A3)	unaltered
Sact001	Aggregated Secondary Activity 04:00 to 04:09	HETUS ACL 2008: Aggregated Secondary Activity of the 10-minutes time slot (22 2-digit codes)	All	2-digit code (A2)	unaltered
Sact002	Aggregated Secondary Activity 04:10 to 04:19	HETUS ACL 2008: Aggregated Secondary Activity of the 10-minutes time slot (22 2-digit codes)	All	2-digit code (A2)	unaltered
…	…	…	…		unaltered
Sact143	Aggregated Secondary Activity 03:40 to 03:49	HETUS ACL 2008: Aggregated Secondary Activity of the 10-minutes time slot (22 2-digit codes)	All	2-digit code (A2)	unaltered
Sact144	Aggregated Secondary Activity 03:50 to 03:59	HETUS ACL 2008: Aggregated Secondary Activity of the 10-minutes time slot (22 2-digit codes)	All	2-digit code (A2)	unaltered
Wherep001	Location/ Transport Mode 04:00 to 04:09	HETUS ACL 2008 Aggregated Location/ Transport Mode of the 10-minutes time slot (13 2-digit codes)	All	2-digit code (A2)	unaltered
Wherep002	Location/ Transport Mode 04:10 to 04:19	HETUS ACL 2008 Aggregated Location/ Transport Mode of the 10-minutes time slot (13 2-digit codes)	All	2-digit code (A2)	unaltered
…	…	…	…		unaltered
Wherep143	Location/ Transport Mode 03:40 to 03:49	HETUS ACL 2008 Aggregated Location/ Transport Mode of the 10-minutes time slot (13 2-digit codes)	All	2-digit code (A2)	unaltered
Wherep144	Location/ Transport	HETUS ACL 2008 Aggregated Location/ Transport Mode of the	All	2-digit code	unaltered

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
	Mode 3:50 to 03:59	10-minutes time slot (13 2-digit codes)		(A2)	
Alone001	Alone 04:00 to 04:09	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
Alone002	Alone 04:10 to 04:19	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
…	…	…	…		**unaltered**
Alone143	Alone 03:40 to 03:49	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
Alone144	Alone 03:50 to 03:59	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
Wpartner001	With partner 04:00 to 04:09	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
Wpartner002	With partner 04:10 to 04:19	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
…	…	…	…		**unaltered**

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
Wpartner143	With partner 03:40 to 03:49	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
Wpartner144	With partner 03:50 to 03:59	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
Wparent001	With parent 04:00 to 04:09	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
Wparent002	With parent 04:10 to 04:19	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
…	…	…	…		**unaltered**
Wparent143	With parent 03:40 to 03:49	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
Wparent144	With parent 03:50 to 03:59	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
Wchild001	With household member up to 9 years 04:00 to 04:09	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping)	All	1-digit number (F1)	**unaltered**

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
		-6 = question not asked by country; -9 = not available (no answer in 10-minute interval)			
Wchild002	With household member up to 9 years 04:00 to 04:09	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	unaltered
…	…	…	…		unaltered
Wchild143	With household member up to 9 years 04:00 to 04:09	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	unaltered
Wchild144	With household member up to 9 years 04:00 to 04:09	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	unaltered
Wotherh001	With other household member 04:00 to 04:09	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	unaltered
Wotherh002	With other household member 04:10 to 04:19	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	unaltered
…	…	…	…		unaltered
Wotherh143	With other household member 03:40 to 03:49	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	unaltered

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
Wotherh144	With other household member 03:50 to 03:59	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
Wotherp001	With other persons 04:00 to 04:09	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
Wotherp002	With other persons 04:10 to 04:19	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
…	…	…	…		**unaltered**
Wotherp143	With other persons 03:40 to 03:49	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
Wotherp144	With other persons 03:50 to 03:59	Missing = not ticked 1 = Yes; -1 = not applicable (sleeping) -6 = question not asked by country; -9 = not available (no answer in 10-minute interval)	All	1-digit number (F1)	**unaltered**
Mcom001	Computer used during main activity 04:00 to 04:09	0 = Neither computer or internet used in the main activity; 1 = Either computer or internet used in the main activity;	All	1-digit number (F1)	**unaltered**
Mcom002	Computer used during main activity 04:10 to 04:19	0 = Neither computer or internet used in the main activity; 1 = Either computer or internet used in the main activity;	All	1-digit number (F1)	**unaltered**
…	…	…	…		**unaltered**
Mcom143	Computer used during	0 = Neither computer or internet used in the main activity;	All	1-digit number	**unaltered**

Variable code	Variable name	Categories	Filter	Format	Applied rules to create SUF (*)[9]
	main activity 03:40 to 03:49	1 = Either computer or internet used in the main activity;		(F1)	
Mcom144	Computer used during main activity 03:50 to 03:59	0 = Neither computer or internet used in the main activity; 1 = Either computer or internet used in the main activity;	All	1-digit number (F1)	unaltered
Scom001	Computer used during secondary activity 04:00 to 04:09	0 = Neither computer or internet used in the secondary activity; 1 = Either computer or internet used in the secondary activity;	All	1-digit number (F1)	unaltered
Scom002	Computer used during secondary activity 04:10 to 04:19	0 = Neither computer or internet used in the secondary activity; 1 = Either computer or internet used in the secondary activity;	All	1-digit number (F1)	unaltered
…	…	…	…		unaltered
Scom143	Computer used during secondary activity 03:40 to 03:49	0 = Neither computer or internet used in the secondary activity; 1 = Either computer or internet used in the secondary activity;	All	1-digit number (F1)	unaltered
Scom144	Computer used during secondary activity 03:50 to 03:59	0 = Neither computer or internet used in the secondary activity; 1 = Either computer or internet used in the secondary activity;	All	1-digit number (F1)	unaltered

(*) Variables in the list flagged with this sign – these are the variables **INC1** (sex of respondent), **INC2** (age group of respondent in completed years, **INC3** (lifecycle variables), **IND22_1** (educational attainment level), **IND41_1** (country of birth), **IND42_1** (country of main citizenship), **IND28_1** (present marital status), economic activity for main job (**IND3_1**) and occupation in main job (**IND5**) – are further examined with respect to their (individual and combined) disclosure risk(s); see ANNEX 3.

ANNEX 3: Tables to check the anonymisation strategy

At the level of persons, the identifying variables in the file are: age, sex, lifecycle, country of birth, country of citizenship, marital status, educational attainment, economic activity and occupation.

Seven tables with four dimensions from the nine identifying variables are produced for all 17 countries to identify remaining small counts in HETUS wave 2010. The nine variables are:
age group (**INC2**), sex (**INC1**), lifecycle (**INC3**) educational attainment level (**IND22_1**), country of birth (**IND41_1**), country of main citizenship (**IND42_1**), present marital status (**IND28_1**), economic activity (**IND3_1**) and occupation (**IND5**).

1. Age by sex by country of birth by country of citizenship
2. Age by sex by country of birth by marital status
3. Age by sex by country of birth by educational attainment level
4. Age by sex by lifecycle by country of birth
5. Age by sex by lifecycle by marital status
6. Age by sex by lifecycle by educational attainment level
7. Age by sex by economic activity by occupation

Tables A1 to A5 below show the absolute and relative number of persons at risk of identification after the proposed protection (appearing in cells with value 1 or alternatively with value 1 or 2). In a cell with two records, there are two persons at risk. The percentage is relative to the total number of records in the file. Please note that the apparent risk partly stems from missing values particularly occurring in the variable educational attainment (in the tables 3 and 6).

A1: Number of records at risk of identification after the proposed treatment (percentage of records)		Austria		Germany		Luxembourg		The Netherlands	
	Critical cell value	COUNT	%	COUNT	%	COUNT	%	COUNT	%
Table 1	1	25	0.3	28	0.3	19	0.9	0	0.0
	1 or 2	73	0.9	54	0.6	57	2.7	0	0.0
Table 2	1	31	0.4	32	0.4	35	1.7	8	0.4
	1 or 2	71	0.9	52	0.6	73	2.5	16	0.8
Table 3	1	138	1.7	74	0,8	107	5.1	0	0.0
	1 or 2	254	3.1	136	1,5	199	9.6	0	0.0
Table 4	1	54	0.7	49	0,5	3	0.1	0	0.0
	1 or 2	106	1.3	91	1,0	7	0.3	0	0.0
Table 5	1	55	0.7	41	0.5	5	0.2	8	0.4
	1 or 2	105	1.3	83	0.9	17	0.8	16	0.8
Table 6	1	165	2.0	107	1.2	19	0.9	0	0.0
	1 or 2	315	3.8	209	2.3	41	2.0	0	0.0
Table 7	1	292	3.5	21	0,2	225	10.8	0	0,0
	1 or 2	610	7.4	47	0,5	411	19.7	0	0,0

A2: Number of records at risk of identification after the proposed treatment (percentage of records)									
		Belgium		Estonia		Greece		Spain	
	Critical cell value	COUNT	%	COUNT	%	COUNT	%	COUNT	%
Table 1	1	41	0,7	31	0,6	29	0,4	34	0,2
	1 or 2	65	1,2	47	0,9	63	0,9	70	0,4
Table 2	1	23	0,4	32	0,6	39	0,5	26	0,1
	1 or 2	57	1,0	68	1,4	67	0,9	68	0,4
Table 3	1	123	2,2	72	1,4	93	1,3	65	0,3
	1 or 2	267	4,8	120	2,4	203	2,8	151	0,8
Table 4	1	69	1,2	51	1,0	66	0,9	44	0,2
	1 or 2	163	2,9	103	2,1	128	1,8	108	0,6
Table 5	1	62	1,1	50	1,0	41	0,6	38	0,2
	1 or 2	134	2,4	120	2,4	81	1,1	82	0,4
Table 6	1	197	3,5	97	1,9	177	2,5	70	0,4
	1 or 2	375	6,7	189	3,8	367	5,1	158	0,8
Table 7	1	274	4,9	330	6,6	231	3,2	228	1,2
	1 or 2	558	10,0	650	13,0	483	6,8	484	2,5

A3: Number of records at risk of identification after the proposed treatment (percentage of records)		Finland		France		Hungary		Italy	
	Critical cell value	COUNT	%	COUNT	%	COUNT	%	COUNT	%
Table 1	1	37	1,0	21	0,1	41	0,5	0	0,0
	1 or 2	67	1,8	63	0,4	55	0,7	0	0,0
Table 2	1	26	0,7	17	0,1	39	0,5	0	0,0
	1 or 2	66	1,7	57	0,4	69	0,8	4	0,0
Table 3	1	76	2,0	82	0,5	101	1,2	3	0,0
	1 or 2	126	3,3	188	1,2	187	2,2	3	0,0
Table 4	1	49	1,3	44	0,3	46	0,5	11	0,0
	1 or 2	87	2,3	112	0,7	106	1,3	21	0,1
Table 5	1	40	1,1	29	0,2	74	0,9	36	0,1
	1 or 2	74	1,9	67	0,4	126	1,5	76	0,2
Table 6	1	117	3,1	93	0,6	154	1,8	65	0,2
	1 or 2	237	6,2	225	1,4	318	3,8	123	0,3
Table 7	1	282	7,4	21	0,1	278	3,3	0	0,0
	1 or 2	598	15,8	47	0,3	574	6,8	0	0,0

A4: Number of records at risk of identification after the proposed treatment (percentage of records)									
		Norway		Poland		Romania		Serbia	
	Critical cell value	COUNT	%	COUNT	%	COUNT	%	COUNT	%
Table 1	1	0	0,0	34	0,1	13	0,0	41	1,2
	1 or 2	0	0,0	60	0,1	13	0,0	55	1,6
Table 2	1	17	0,4	40	0,1	13	0,0	83	2,4
	1 or 2	41	1,0	74	0,2	19	0,1	145	4,2
Table 3	1	9	0,2	104	0,3	16	0,1	37	1,1
	1 or 2	13	0,3	158	0,4	34	0,1	75	2,2
Table 4	1	10	0,3	53	0,1	24	0,1	49	1,4
	1 or 2	24	0,6	95	0,2	36	0,1	91	2,7
Table 5	1	36	0,9	46	0,1	54	0,2	57	1,7
	1 or 2	82	2,1	90	0,2	96	0,3	117	3,4
Table 6	1	116	2,9	122	0,3	111	0,4	128	3,7
	1 or 2	240	6,1	252	0,6	219	0,8	202	5,9
Table 7	1	32	0,8	230	0,6	212	0,8	251	7,3
	1 or 2	72	1,8	536	1,3	474	1,7	479	14,0

A5: Number of records at risk of identification after the proposed treatment (percentage of records)								
	Critical cell value	United Kingdom						
		COUNT	%					
Table 1	1	39	0,5					
	1 or 2	93	1,2					
Table 2	1	49	0,6					
	1 or 2	121	1,5					
Table 3	1	163	2,0					
	1 or 2	361	4,5					
Table 4	1	73	0,9					
	1 or 2	189	2,3					
Table 5	1	39	0,5					
	1 or 2	79	1,0					
Table 6	1	133	1,7					
	1 or 2	313	3,9					
Table 7	1	372	4,6					
	1 or 2	722	9,0					

The tables B1 to B5 below show the same information but now counting number of cells and also calculating the percentage relative to the total number of cells in the table.

B1: Number of small cell values after applying the proposed protection of the TUS 2010 for the production of SUFs (percentage of cells)									
		Austria		Germany		Luxembourg		The Netherlands	
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 1	0	115	42.6	50	29.8	83	35.5	0	0.0
	1	25	9.3	28	16.7	19	8.1	0	0.0
	2	24	8.9	13	7.7	19	8.1	0	0.0
	3	13	4.8	9	5.4	17	7.3	0	0.0
	4	10	3.7	6	3.6	15	6.4	0	0.0
	5	9	3.3	4	2.4	10	4.3	0	0.0
	Higher	74	27.4	58	34.5	71	30.3	30	100.0
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 2	0	65	24.1	94	37.3	61	26.1	40	33.3
	1	31	11.5	32	12.7	35	15.0	8	6.7
	2	20	7.4	10	4.0	19	8.1	4	3.3
	3	17	6.3	11	4.4	9	3.8	5	4.2
	4	10	3.7	6	2.4	13	5.6	0	0.0
	5	8	3.0	4	1.6	12	5.1	1	0.8
	Higher	119	44.1	95	37.7	85	36.3	62	51.7
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 3	0	426	47.3	381	56.7	323	46.0	0	0.0
	1	138	15.3	74	11.0	107	15.2	0	0.0
	2	58	6.4	31	4.6	46	6.6	0	0.0
	3	33	3.7	16	2.4	50	7.1	0	0.0
	4	30	3.3	13	1.9	36	5.1	0	0.0
	5	30	3.3	15	2.2	29	4.1	0	0.0
	Higher	185	20.6	142	21.1	111	15.8	30	100.0
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 4	0	713	72.0	698	75.5	2	2.6	0	0.0
	1	54	5.5	49	5.3	3	3.8	0	0.0
	2	26	2.6	21	2.3	2	2.6	0	0.0
	3	26	2.6	11	1.2	1	1.3	0	0.0
	4	20	2.0	12	1.3	2	2.6	0	0.0
	5	14	1.4	9	1.0	1	1.3	0	0.0
	Higher	137	13.8	124	13.4	67	85.9	30	100.0

B1: Number of small cell values after applying the proposed protection of the TUS 2010 for the production of SUFs (percentage of cells)									
		Austria		Germany		Luxembourg		The Netherlands	
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 5	0	700	70.7	680	73.6	9	11.5	40	33.3
	1	55	5.6	41	4.4	5	6.4	8	6.7
	2	25	2.5	21	2.3	6	7.7	4	3.3
	3	22	2.2	12	1.3	4	5.1	5	4.2
	4	14	1.4	12	1.3	2	2.6	0	0.0
	5	9	0.9	15	1.6	1	1.3	1	0.8
	Higher	165	16.7	143	15.5	51	65.4	62	51.7
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 6	0	2588	78.4	1980	80.4	67	28.6	0	0.0
	1	165	5.0	107	4.3	19	8.1	0	0.0
	2	75	2.3	51	2.1	11	4.7	0	0.0
	3	71	2.2	36	1.5	12	5.1	0	0.0
	4	45	1.4	31	1.3	15	6.4	0	0.0
	5	35	1.1	24	1.0	12	5.1	0	0.0
	Higher	321	9.7	235	9.5	98	41.9	30	100.0
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 7	0	2348	71,2	34	12,1	2374	83,0	0	0.0
	1	292	8,8	21	7,5	225	7,9	0	0.0
	2	159	4,8	13	4,6	93	3,3	0	0.0
	3	98	3,0	16	5,7	57	2,0	0	0.0
	4	70	2,1	4	1,4	23	0,8	0	0.0
	5	48	1,5	4	1,4	21	0,7	0	0.0
	Higher	285	8,6	188	67,1	67	2,3	30	100.0

B2: Number of small cell values after applying the proposed protection of the TUS 2010 for the production of SUFs (percentage of cells)									
		Belgium		Estonia		Greece		Spain	
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 1	0	109	40,4	135	50,0	131	48,5	91	33,7
	1	41	15,2	31	11,5	29	10,7	34	12,6
	2	12	4,4	8	3,0	17	6,3	18	6,7
	3	21	7,8	5	1,9	16	5,9	10	3,7
	4	22	8,1	4	1,5	9	3,3	13	4,8
	5	13	4,8	10	3,7	9	3,3	3	1,1
	Higher	52	19,3	77	28,5	59	21,9	101	37,4
Table 2	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
	0	86	31,9	98	36,3	91	33,7	41	15,2
	1	23	8,5	32	11,9	39	14,4	26	9,6
	2	17	6,3	18	6,7	14	5,2	21	7,8
	3	20	7,4	13	4,8	11	4,1	15	5,6
	4	16	5,9	2	0,7	6	2,2	6	2,2
	5	16	5,9	3	1,1	8	3,0	8	3,0
	Higher	92	34,1	104	38,5	101	37,4	153	56,7
Table 3	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
	0	460	51,1	544	67,2	504	56,0	178	28,3
	1	123	13,7	72	8,9	93	10,3	65	10,3
	2	72	8,0	24	3,0	55	6,1	43	6,8
	3	39	4,3	14	1,7	27	3,0	41	6,5
	4	28	3,1	14	1,7	25	2,8	20	3,2
	5	17	1,9	6	0,7	13	1,4	11	1,7
	Higher	161	17,9	136	16,8	183	20,3	272	43,2
Table 4	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
	0	786	72,8	767	77,5	712	71,9	656	66,3
	1	69	6,4	51	5,2	66	6,7	44	4,4
	2	47	4,4	26	2,6	31	3,1	32	3,2
	3	32	3,0	9	0,9	32	3,2	18	1,8
	4	21	1,9	2	0,2	14	1,4	21	2,1
	5	21	1,9	10	1,0	7	0,7	14	1,4
	Higher	104	9,6	125	12,6	128	12,9	205	20,7

B2: Number of small cell values after applying the proposed protection of the TUS 2010 for the production of SUFs (percentage of cells)									
		Belgium		Estonia		Greece		Spain	
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 5	0	783	72,5	703	71,0	776	78,4	673	68,0
	1	62	5,7	50	5,1	41	4,1	38	3,8
	2	36	3,3	35	3,5	20	2,0	22	2,2
	3	25	2,3	23	2,3	17	1,7	25	2,5
	4	15	1,4	20	2,0	5	0,5	18	1,8
	5	13	1,2	8	0,8	6	0,6	16	1,6
	Higher	146	13,5	151	15,3	125	12,6	198	20,0
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 6	0	2898	80,5	2556	86,1	2635	79,8	1653	71,6
	1	197	5,5	97	3,3	177	5,4	70	3,0
	2	89	2,5	46	1,5	95	2,9	44	1,9
	3	68	1,9	36	1,2	61	1,8	27	1,2
	4	42	1,2	22	0,7	34	1,0	39	1,7
	5	30	0,8	24	0,8	36	1,1	25	1,1
	Higher	276	7,7	189	6,4	262	7,9	452	19,6
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 7	0	2187	73,6	2512	76,1	2344	78,9	2230	67,6
	1	274	9,2	330	10,0	231	7,8	228	6,9
	2	142	4,8	160	4,8	126	4,2	128	3,9
	3	98	3,3	93	2,8	54	1,8	102	3,1
	4	56	1,9	60	1,8	49	1,6	86	2,6
	5	44	1,5	27	0,8	24	0,8	67	2,0
	Higher	169	5,7	703	71,0	142	4,8	459	13,9

B3: Number of small cell values after applying the proposed protection of the TUS 2010 for the production of SUFs (percentage of cells)									
		Finland		**France**		**Hungary**		**Italy**	
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 1	0	182	67,4	71	26,3	163	60,4	0	0.0
	1	37	13,7	21	7,8	41	15,2	0	0.0
	2	15	5,6	21	7,8	7	2,6	0	0.0
	3	4	1,5	12	4,4	10	3,7	0	0.0
	4	2	0,7	16	5,9	7	2,6	0	0.0
	5	30	11,1	12	4,4	3	1,1	0	0.0
	Higher	0	0.0	117	43,3	39	14,4	30	100,0
Table 2	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
	0	141	52,2	52	19,3	109	40,4	7	7,8
	1	26	9,6	17	6,3	39	14,4	0	0.0
	2	20	7,4	20	7,4	15	5,6	2	2,2
	3	4	1,5	16	5,9	15	5,6	0	0.0
	4	11	4,1	11	4,1	7	2,6	1	1,1
	5	68	25,2	16	5,9	5	1,9	0	0.0
	Higher	0	0.0	138	51,1	80	29,6	80	88,9
Table 3	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
	0	577	71,2	239	33,2	612	61,8	35	19,4
	1	76	9,4	82	11,4	101	10,2	3	1,7
	2	25	3,1	53	7,4	43	4,3	0	0.0
	3	14	1,7	44	6,1	19	1,9	2	1,1
	4	5	0,6	35	4,9	18	1,8	1	0,6
	5	5	0,6	27	3,8	10	1,0	2	1,1
	Higher	108	13,3	240	33,3	187	18,9	137	76,1
Table 4	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
	0	818	82,6	700	70,7	709	71,6	199	60,3
	1	49	4,9	44	4,4	46	4,6	11	3,3
	2	19	1,9	34	3,4	30	3,0	5	1,5
	3	9	0,9	16	1,6	21	2,1	2	0,6
	4	4	0,4	16	1,6	16	1,6	1	0,3
	5	3	0,3	12	1,2	19	1,9	2	0,6
	Higher	88	8,9	168	17,0	149	15,1	110	33,3

B3: Number of small cell values after applying the proposed protection of the TUS 2010 for the production of SUFs (percentage of cells)									
		Finland		**France**		**Hungary**		**Italy**	
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 5	0	783	72,5	703	71,0	776	78,4	673	68,0
	1	62	5,7	50	5,1	41	4,1	38	3,8
	2	36	3,3	35	3,5	20	2,0	22	2,2
	3	25	2,3	23	2,3	17	1,7	25	2,5
	4	15	1,4	20	2,0	5	0,5	18	1,8
	5	13	1,2	8	0,8	6	0,6	16	1,6
	Higher	146	13,5	151	15,3	125	12,6	198	20,0
Table 6	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
	0	2898	80,5	2556	86,1	2635	79,8	1653	71,6
	1	197	5,5	97	3,3	177	5,4	70	3,0
	2	89	2,5	46	1,5	95	2,9	44	1,9
	3	68	1,9	36	1,2	61	1,8	27	1,2
	4	42	1,2	22	0,7	34	1,0	39	1,7
	5	30	0,8	24	0,8	36	1,1	25	1,1
	Higher	276	7,7	189	6,4	262	7,9	452	19,6
Table 7	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
	0	2187	73,6	2512	76,1	2344	78,9	2230	67,6
	1	274	9,2	330	10,0	231	7,8	228	6,9
	2	142	4,8	160	4,8	126	4,2	128	3,9
	3	98	3,3	93	2,8	54	1,8	102	3,1
	4	56	1,9	60	1,8	49	1,6	86	2,6
	5	44	1,5	27	0,8	24	0,8	67	2,0
	Higher	169	5,7	703	71,0	142	4,8	459	13,9

B4: Number of small cell values after applying the proposed protection of the TUS 2010 for the production of SUFs (percentage of cells)									
		Norway		Poland		Romania		Serbia	
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 1	0	0	0.0	164	60,7	226	83,7	254	70,6
	1	0	0.0	34	12,6	13	4,8	41	11,4
	2	0	0.0	13	4,8	0	0.0	7	1,9
	3	0	0.0	7	2,6	1	0,4	2	0,6
	4	0	0.0	4	1,5	0	0.0	0	0.0
	5	1	3,3	2	0,7	0	0.0	3	0,8
	Higher	29	96,7	46	17,0	30	11,1	53	14,7
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 2	0	93	38,8	91	33,7	172	63,7	523	64,6
	1	17	7,1	40	14,8	13	4,8	83	10,2
	2	12	5,0	17	6,3	3	1,1	31	3,8
	3	11	4,6	11	4,1	2	0,7	29	3,6
	4	9	3,8	3	1,1	1	0,4	16	2,0
	5	4	1,7	5	1,9	1	0,4	8	1,0
	Higher	94	39,2	103	38,1	78	28,9	120	14,8
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 3	0	35	29,2	529	58,8	601	74,2	104	38,5
	1	9	7,5	104	11,6	16	2,0	37	13,7
	2	2	1,7	27	3,0	9	1,1	19	7,0
	3	2	1,7	26	2,9	9	1,1	4	1,5
	4	2	1,7	12	1,3	4	0,5	11	4,1
	5	2	1,7	7	0,8	4	0,5	9	3,3
	Higher	68	56,7	195	21,7	167	20,6	86	31,9
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 4	0	212	64,2	758	76,6	844	85,3	786	79,4
	1	10	3,0	53	5,4	24	2,4	49	4,9
	2	7	2,1	21	2,1	6	0,6	21	2,1
	3	4	1,2	10	1,0	3	0,3	16	1,6
	4	6	1,8	5	0,5	2	0,2	9	0,9
	5	3	0,9	6	0,6	2	0,2	10	1,0
	Higher	88	26,7	137	13,8	109	11,0	110	33,3

B4: Number of small cell values after applying the proposed protection of the TUS 2010 for the production of SUFs (percentage of cells)									
		Norway		Poland		Romania		Serbia	
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 5	0	1088	82,4	660	66,7	674	68,1	767	77,5
	1	36	2,7	46	4,6	54	5,5	57	5,8
	2	23	1,7	22	2,2	21	2,1	30	3,0
	3	17	1,3	18	1,8	15	1,5	22	2,2
	4	13	1,0	18	1,8	14	1,4	11	1,1
	5	10	0,8	12	1,2	10	1,0	7	0,7
	Higher	133	10,1	214	21,6	202	20,4	96	9,7
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 6	0	2218	84,0	2562	77,6	2305	77,6	2572	86,6
	1	116	4,4	122	3,7	111	3,7	128	4,3
	2	62	2,3	65	2,0	54	1,8	37	1,2
	3	35	1,3	46	1,4	34	1,1	31	1,0
	4	25	0,9	31	0,9	36	1,2	31	1,0
	5	17	0,6	21	0,6	29	1,0	21	0,7
	Higher	167	6,3	453	13,7	401	13,5	150	5,1
	Value	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
Table 7	0	80	24,2	2027	61,4	1717	63,6	2136	79,1
	1	32	9,7	230	7,0	212	7,9	251	9,3
	2	20	6,1	153	4,6	131	4,9	114	4,2
	3	16	4,8	82	2,5	78	2,9	52	1,9
	4	18	5,5	84	2,5	66	2,4	39	1,4
	5	20	6,1	74	2,2	57	2,1	17	0,6
	Higher	144	43,6	650	19,7	439	16,3	91	3,4

B5: Number of small cell values after applying the proposed protection of the TUS 2010 for the production of SUFs (percentage of cells)

		United Kingdom	
	Value	COUNT	PERCENT
Table 1	0	0	0.0
	1	0	0.0
	2	0	0.0
	3	0	0.0
	4	0	0.0
	5	1	3,3
	Higher	29	96,7
	Value	COUNT	PERCENT
Table 2	0	93	38,8
	1	17	7,1
	2	12	5,0
	3	11	4,6
	4	9	3,8
	5	4	1,7
	Higher	94	39,2
	Value	COUNT	PERCENT
Table 3	0	35	29,2
	1	9	7,5
	2	2	1,7
	3	2	1,7
	4	2	1,7
	5	2	1,7
	Higher	68	56,7
	Value	COUNT	PERCENT
Table 4	0	212	64,2
	1	10	3,0
	2	7	2,1
	3	4	1,2
	4	6	1,8
	5	3	0,9
	Higher	88	26,7

		United Kingdom	
	Value	COUNT	PERCENT
Table 5	0	1088	82,4
	1	36	2,7
	2	23	1,7
	3	17	1,3
	4	13	1,0
	5	10	0,8
	Higher	133	10,1
	Value	COUNT	PERCENT
Table 6	0	2218	84,0
	1	116	4,4
	2	62	2,3
	3	35	1,3
	4	25	0,9
	5	17	0,6
	Higher	167	6,3
	Value	COUNT	PERCENT
Table 7	0	80	24,2
	1	32	9,7
	2	20	6,1
	3	16	4,8
	4	18	5,5
	5	20	6,1
	Higher	144	43,6