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Guidelines for the collection of data on 18 HIS items

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Contents

1. Explanatory notes	3
Background.....	3
1.1. Health topics.....	4
1.2. Background variables.....	4
What should be sent to Eurostat	5
1.3. Tables.....	5
Micro data	5
Macro data	5
Transmission of files	5
1.4. Additional information	6
2. Specifications of the background variables.....	7
2.1. Sex [SEX].....	7
2.2. Age [AGEGROUP].....	7
2.3. Educational level [EDUC].....	7
2.4. Economic activity [ECON]	7
3 Specifications of the variables on the 18 topics	8
3.1. Chronic conditions.....	8
3.2. Self-perceived health.....	8
3.3. Activity restriction (general question)	8
3.4. Physical and sensory functional limitations	9
3.5. Personal care activities.....	9
3.6. Mental health.....	9
3.7. Temporary cut down of usual activities	10
3.8. Height and Weight.....	10
3.9. Present and former smoking.....	10
3.10. Consumption of alcohol	11
3.11. Physical activity.....	11
3.12. In patient care.....	12
3.13. Out patient care	12
3.14. Preventive care	12
3.15. Use of medicines.....	13
3.16. Use of drugs.....	13
3.17. Diet/food consumption habits.....	14
3.18. Quality of life.....	14
References	15
Annex 1 - Examples of SAS and SPSS set-ups to produce the macro data files requested by Eurostat	17
1. Example of SAS set up to produce the files requested	17
2. Example of SPSS set up to produce the files requested.....	19
3. Example to control the totals and sub-totals.....	21
Annex 2 – Mental Health	22

1. Explanatory notes

Background

In follow up to the discussions in the Task Force 'Health and health related survey data' (3-4 October 2001 and 18-19 April 2002), and in the Working Group Public Health Statistics (22-23 November 2001) Eurostat is collecting aggregated survey data on 18 HIS topics according to 4 background variables. In a first round of data collection in 1999/2000, 12 topics were initially selected, mainly on the basis of an inventory of health surveys in the EU (Hupkens, 1997). The list was subsequently modified and enlarged to 18 items, taking into account the work performed within the framework of the European Community Health Indicators project, the EuroHIS (Harmonization of Health Interview Surveys in Europe) project of the WHO, the Euro-REVES¹ network and others (see References). As a consequence, a new data collection round was carried out in 2002.

A comparison of the data collected in the first and second round showed remarkable progress not only in the amount of data obtained but also, in several instances, in their comparability. The comparative analysis of the data collected has highlighted both some of their common points and differences, which could be reduced in the future through the development and implementation of relatively simple common instruments. Surveys used for the second round included more internationally recommended questions than the surveys used in the first round. Moreover, countries followed more closely the recommendations proposed in the guidelines and were more willing to provide the documentation requested. Improved comparability is visible for the most popular topics (self perceived health, smoking, BMI, *inter alia*) but remains relatively low for some indicators, particularly those relating to the "new items". With a view to the work so far completed, there is a huge potential for improving the international comparability of health interview survey data.

For the second round of data collection it was noticed that most countries provided data from only one survey, generally an all-purpose health interview survey which included many, but not all of the 18 items requested. As a result, a number of existing data – particularly on the new six additional items – appeared to be "missing" in the database because they were not included in the general health interview surveys used. However, such data are known to exist, but to have been obtained from more specialized surveys.

Thus, the progress already made shows that it is possible to work towards achieving a high level of comparability. For the 2004 data collection round, including for the first time Acceding and Candidate Countries, it would be very useful that countries investigate the various national sources available and, when necessary, use more than one or two surveys for preparing the data sets (an inventory of the Health Interview & Health Examination Surveys carried out in EU Member States, EFTA countries and Candidate Countries is available on the Belgian Institute of Public Health (IPH) website <https://www.iph.fgov.be/hishes/>). This will allow a broader coverage of the items, as it is unlikely that so many of them - not covered by national data from various countries in the 2002 data collection – are not covered by any national survey. Nevertheless, it should be ensured that different surveys from a single country cover the same population and to the extent possible have the same reference year, although differences in survey period, age coverage or reference year would be acceptable.

As in previous rounds, data should relate to the total resident population or, for the items relevant only for women, to the total female resident population. Since little data is likely to be available on the institutional population, only persons residing in private households should be covered.

This document takes into consideration the recommendations from the analysis of the 2002 data collection round and specifies the variables related to the 18 topics, proposed variable names, with the recommended instruments and the background variables (reference year(s) should be indicated when submitting the data). Only the most recent available data are requested.

1 Euro-REVES is a European Concerted Action on Harmonization of Health Expectancy Calculations in Europe REVES is a French acronym of Réseau sur l'espérance de vie en santé (Network on Health Expectancy)

1.1. Health topics

18 HIS items

- 1 chronic conditions
- 2 self perceived health
- 3 activity restriction (general question)
- 4 physical and sensory functional limitations
- 5 personal care activities
- 6 mental health
- 7 temporary cut down of usual activities
- 8 height and weight (BMI)
- 9 present and former smoking
- 10 consumption of alcohol
- 11 physical activity
- 12 in patient care (hospitalisations)
- 13 out patient care (medical doctor, dentist)
- 14 preventive care (check ups)
- 15 use of medicines (prescribed/non prescribed)
- 16 use of drugs (specific items)
- 17 diet/food consumption habits
- 18 quality of life

1.2. Background variables

<u>Name</u>	<u>Variable</u>
SEX	sex
AGEGROUP	age
EDUC	educational level
ECON	economic activity

What should be sent to Eurostat

1.3. Tables

Data should preferably be sent as micro-data files (one file per survey used). The format should be 'export files' from SAS (or SPSS if you do not use SAS). If this is not possible you can send us macro (aggregated) data under the Excel format.

Micro data

In case you can send a micro-data file, the requested tables will be produced by us. Please contact Mr. Lucian Agafitei (lucian.agafitei@cec.eu.int, tel. +352 43 01 36 461) on the preferred format of these files (e.g., SAS or SPSS export/portable files). The micro-data file (or several micro-data files, if different surveys are used), each line corresponding to a respondent, should be clearly documented as regards variables, response categories, codes for missing data, etc. The weights to be used should be provided as the individual weight assigned to each respondent.

Macro data

Two data tables (e.g., two distinct Excel files) including each the whole set of variables (see below, section 2) are requested:

- one table according to sex and age and educational level, and
- one table according to sex and age and economic activity.

Please find in Annex 1 dummy tables included as examples. This annex indicates, both for SPSS and SAS, the requested data format and the programme statements needed to obtain it. Please note that these examples, to fit on one page, use a very condensed variable for age (3 classes) and only contain a limited number of variables on the 18 topics (but sufficient to show examples on the 'sum' and 'mean' type of outcomes requested). In general, **weighted** (using the usual national weights) **absolute sample numbers** are requested. The numbers of **missing values** should be added in separate rows and columns. With the help of these figures, Eurostat should be able to calculate percentages.

It should be noted that these detailed tables are needed for standardisation, for example outcomes by education, standardised for age/sex differences between educational levels. It is not intended to publish these detailed tables as such or make them available in the original form.

Percentages and indicators can only be computed from the macro data provided. For example, if the number of replies "yes" and "no" are provided, the percentage of "yes" will be computed as number of "yes"/(number of "yes" + number of "no"), omitting the "missing values" category. Figures for the "missing values" category are needed to check the consistency between the numbers provided and the sample totals. Explanations should be provided for any discrepancy.

Please check carefully all the totals and sub-totals before sending the data files and beside the two data tables please send a specific file on the control of the totals and sub-totals (see in Annex 1 an example). In such a way, any discrepancy between the totals would be visible and would have to be documented.

Transmission of files

The macro or micro data files should be sent by e-mail or on diskette or CD-R to Mr. Lucian Agafitei (lucian.agafitei@cec.eu.int, tel. +352 43 01 36 461).

1.4. Additional information

To interpret these data Eurostat would like to receive, for each health survey used for the data delivery, background information on the methodology of the survey: check the information on the survey available from the HIS/HES database inventory (<https://www.iph.fgov.be/hishes/>). If this needs to be corrected or updated, please send us the new information on the survey. If you do not find information on a survey that you use for data delivery, provide us with the information on this survey in a table attached to your reply.

Names are proposed below for each variable. For classification variables (sex, age, education and economic activity, it is suggested to use numbers for each response category (e.g., male = 1, female = 2). For other variables, it is suggested to code each possible modality by adding a digit to the variable name.

For simplifying data entry, it would be desirable to provide a list of the names and labels of each response categories. For example, the possible responses to variable CHRON (chronic conditions) should be coded:

- CHRON1 have a long-standing illness or health problem
- CHRON2 do not have a long-standing illness or health problem
- CHRON3 missing value

For each survey, Eurostat would like to receive – preferably in electronic format - the printed questionnaire(s) used – or relevant parts - in the original language and in English (if available), clearly indicating the relevant questions and response categories by means of the variable names. For example, the following question could include the following (hand-written) indications:

‘Do you have any long-standing illness or health problem?’ (CHRON)
 Yes (CHRON1)
 No (CHRON2))
 Missing values (CHRON3)

Also, the interviewers’ and supervisors’ manuals, and other publications related to the surveys would be useful. Countries using computer-assisted interviewing (CAPI or CATI) are requested to provide a text equivalent of the questionnaire, including the skips.

This is necessary as the Database of the Belgian Institute of Public Health (IPH) provides the text of the survey questions, but the does not indicate the situation of the questions in the original questionnaire. The latter is therefore needed to detect the presence of a previous filter questions or the use of cross-references among questions.

Previous experience showed that some questionnaires include several questions on the same item, with little differences in their wording. When there is no indication on which question the data provided refer to, it can be difficult to know exactly to which question the data correspond in the database. Therefore, Eurostat would like that you fill a sheet as indicated below.

Additionally, complex cases occurred in the previous rounds, for example, one country sent a set of data on response categories about “physical activity” which did not correspond to those found in the IPH – Belgium database. Finally, it was discovered that the data resulted from a combination of several questions on physical activity.

Question	Code of the question(s) in the “paper” questionnaire	Filter question(s), if any	Restriction (e.g., age group)	Combination used
Theme				
Code of the variable in the data file	Code of the first question used Code of the second question (if any)	Explanation on the filter used	Coverage of the question	Explanation of the combination used (if relevant)

2. Specifications of the background variables

2.1. Sex [SEX]

1. male
2. female

2.2. Age [AGEGROUP]

1. 15-24
2. 25-34
3. 35-44
4. 45-54
5. 55-64
6. 65-74
7. 75-84
8. 85+

If in your survey the age-range for a certain HIS topic is limited, please deliver the available age groups only

2.3. Educational level [EDUC]

It is proposed to use the same four categories as in the previous data collection exercise:

- classification according to highest level completed
- respondents still in full time education: classification according to the level they are attaining
- specification of the four ISCED 97² levels:
 1. pre-primary and primary (ISCED 0-1)
 2. lower secondary or second stage of basic education (ISCED 2)
 3. upper secondary (ISCED 3)
 4. post secondary and tertiary (ISCED (4-6))

If the specifications you used are different, please give details on your specifications in an attachment to your reply.

2.4. Economic activity [ECON]

The variable economic activity is described by the following classification (according to the ILO definitions on economically active population, employment and unemployment):

10. active, not specified
11. employees, at least 1 hour per week
12. self-employed persons, at least 1 hour per week (incl. family workers)
13. unemployed persons, taking active steps to find work
20. non-active, not specified
21. students and other persons in training
22. conscripts on compulsory military or community service
23. housewives, housemen
24. permanently disabled persons
25. retired persons

In case data for some of these categories are not available, please include them in the corresponding category x0 (i.e. 10 or 20). For example, no separate data are available for employees and self-employed, but are available only at aggregated level (employed and unemployed). Then, for the unemployed persons use the code 13 and for the employed persons use the code 10.

² See UNESCO (1997) and UNESCO Institute for Statistics (1999).

3 Specifications of the variables on the 18 topics

In order to enhance the international comparability of the data, Eurostat prefers to receive data that conform to the specifications as far as possible. The items below correspond to the specifications proposed by WHO (1996), EUROHIS (2001 & 2002), Euro-REVES (2000), and others.

Please note that Eurostat welcomes any similar data on these topics if the proposed data is not available.

3.1. Chronic conditions

The overall prevalence of chronic conditions is requested, preferably measured by means of the open-ended question: 'Do you have any long-standing illness or health problem?' Yes / No:

[CHRON] Prevalence of chronic conditions

1. Number of respondents having a long-standing illness or health problem
2. Number of respondents not having a long-standing illness or health problem

If you have used a similar question or if your response categories differ, please provide us with the corresponding data and indicate the wording of the question and/or the response categories used.

3.2. Self-perceived health

Data are requested on the replies to the question: 'How is your health in general?'

[HEALTH] Assessment of the self perceived health

1. Number of respondents replying 'very good'
2. Number of respondents replying 'good'
3. Number of respondents replying 'fair'
4. Number of respondents replying 'bad'
5. Number of respondents replying 'very bad'

If you have used a similar question or if your response categories differ, please provide us with the corresponding data and indicate the wording of the question and/or the response categories used.

3.3. Activity restriction (general question)

Data requested are replies to the question:

'For the past 6 months or more have you been limited in activities people usually do because of a health problem?':

[LIMACT] Assessment of the limitation because of a health problem in usual activities

1. Number of respondents replying "yes, strongly limited"
2. Number of respondents replying "yes, limited"
3. Number of respondents replying "no, not limited"

If you have used a similar question or if your response categories differ, please provide us with the corresponding data and indicate the wording of the question and/or the response categories used.

3.4. Physical and sensory functional limitations

Data requested on the Functional limitations refers to:

[WALK]	Limitation as regards walking (preferably 500 meters)
[SEENEAR]	Limitation in seeing clearly newspaper print
[SEEFAR]	Limitation in seeing clearly the face of someone from 4 meters (across a road)
[HEAR]	Limitation in hearing what is said in a conversation with one person
[CARRY]	Limitation in lifting and carrying a shopping bag of 5 kgs

For each item, please provide the number of replies according to the response categories (severity of the disability) of your national survey. Do not forget to provide the exact wording of the questions and the response categories used.

3.5. Personal care activities

Data requested are replies to the questions:

‘In everyday life, ignoring temporary problems, do you usually without any difficulty, without (human/technical) help, feed yourself / transfer in and out of bed / dress and undress yourself / use toilets/ bath and shower yourself?’.

[FEED]	Difficulty in feeding oneself
[BED]	Difficulty in transferring oneself in and out of bed
[DRESS]	Difficulty in dressing and undressing oneself
[TOILET]	Difficulty in using toilets
[BATH]	Difficulty in bathing and showering oneself

For each item, please provide the number of replies according to the response categories of your national survey. Do not forget to provide the exact wording of the questions.

If your data is not available in this but in a similar format, such as ADL items (items according to the WHO-Euro or OECD indicators) please provide it.

3.6. Mental health

Data requested on Mental Health refers to three summary scores (see annex 2):

[GHQ] **General Health Questionnaire GHQ-12**, using (0,0,1,1) scoring system:

1. Number of people who have a summary score = 0
2. Number of people who have a summary score = 1
3. Number of people who have a summary score = 2
4. Number of people who have a summary score = 3
5. Number of people who have a summary score \geq 4
6. Average summary score

[MHI] **Psychological distress (MHI-5 from the SF-36)** which items

1. Number of people who have a score \leq 56
2. Number of people who have a score between 60 and 76
3. Number of people who have a score \geq 80
4. Average summary score

[EVI] Positive mental health (5 questions in the SF36 on energy and vitality) which

1. Number of people who have a score ≤ 60
2. Number of people who have a score between 65 or 70
3. Number of people who have a scoring between 75 and 100
4. Average summary score

If it is impossible for you to use these thresholds, please indicate the thresholds you used instead.

Data requested are the summary scores calculated from the GHQ-12, MHI5 and Vitality as explained in EuroHIS Mental Health Indicator Network (2002) (See Reference 17)⁴.

3.7. Temporary cut down of usual activities

Data are requested on the replies to the question:

'Think about the two weeks ending yesterday. Have you cut down on any of the things you usually do about the house, at work or in your free time because of illness or injury?'

[CUTDOWN] Assessment of the temporary cut down in usual activities

1. Number of people who have cut down during these two weeks
2. Number of people who have not cut down during these two weeks
3. For people who have cut down: average number of days cut down during these two weeks, including Saturdays and Sundays
4. For people who have cut down: average number of days in bed for all or most of the day during these two weeks, including Saturdays and Sundays

If you have used a similar question or if your response categories differ, please provide us with the corresponding data and indicate the wording of the question and/or the response categories used.

3.8. Height and Weight

[BMI] Body Mass Index

BMI is calculated by dividing body weight in kg by body height (in m) squared. In order to accommodate both the "old" and the "new" BMI thresholds, the distribution of persons by BMI should be as follows:

1. Number of respondents who have a BMI < 18.0
2. Number of respondents who have: $18.0 \leq \text{BMI} < 18.5$
3. Number of respondents who have: $18.5 \leq \text{BMI} < 25.0$
4. Number of respondents who have: $25.0 \leq \text{BMI} < 27.0$
5. Number of respondents who have: $27.0 \leq \text{BMI} < 30.0$
6. Number of respondents who have: BMI ≥ 30.0

If it is impossible for you to use these cut-off points, please indicate the cut-off points you used instead.

3.9. Present and former smoking

Data are requested on:

[SMOKE] Present smoking

1. Number of respondents who do not smoke (non-smokers)
2. Number of respondents who smoke occasionally (smokers)
3. Number of respondents who smoke daily (smokers)

⁴ For further information, contact Mr Lucian Agafitei (lucian.agafitei@cec.eu.int)

[CIGSMOKE] Number of cigarettes smoked per day

1. For smokers: number of respondents who smoke less than 20 cigarettes per day
2. For smokers: number of respondents who smoke 20 cigarettes per day or more

[PASTSMOKE] Former smoking

1. For non-smokers: number of respondents who never smoked
2. For non-smokers: number of respondents who used to smoke occasionally
3. For non-smokers: number of respondents who used to smoke daily

If occasional smokers cannot be separated from daily smokers, then use the category 'smokers' including both daily and occasionally.

3.10. Consumption of alcohol

Data are requested on:

[DRINK_12M] Drinkers of alcohol in the past 12 months

1. Number of respondents who drank any alcohol (beer, wine, spirits, other local beverages) in the past 12 months
2. Number of respondents who did not drink any alcohol (beer, wine, spirits, other local beverages) in the past 12 months

[DRINK_4W] Drinkers of alcohol in the past 4 weeks

1. Number of respondents who drank any alcohol (beer, wine, spirits, other local beverages) in the past 4 weeks
2. Number of respondents who did not drink any alcohol (beer, wine, spirits, other local beverages) in the past 4 weeks
3. For drinkers in the past 4 weeks: average number of days in the past 4 weeks, where people drank any alcohol

If your response categories differ, please provide us with the corresponding data and indicate the wording of the question and/or the response categories used.

3.11. Physical activity

Data are requested on:

[PHYSACT] Physical activity practices

1. Number of respondents who practise hard training and competitive sports more than once a week in their leisure time activities
2. Number of respondents who practise jogging and other recreational sports or heavy gardening at least 4 hours a week in their leisure time activities
3. Number of respondents who practise walking, bicycling or other light activities at least 4 hours a week in their leisure time activities
4. Number of respondents who practise reading, watching TV or other sedentary activities in their leisure time activities

If more than one code applicable for a particular respondent: choose the lowest code ('the most active').
If your response categories differ, please provide us with the corresponding data and indicate the wording of the question and/or the response categories used.

3.12. In patient care

Data are requested on:

[INPAT] Inpatient hospitalisation in the past 12 months

1. Number of respondents with inpatient hospitalisation in the past 12 months
2. Number of respondents with no inpatient hospitalisation in the past 12 months

[DAYPAT] Daypatient hospitalisation in the past 12 months

1. Number of respondents with daypatient hospitalisation in the past 12 months
2. Number of respondents with no daypatient hospitalisation in the past 12 months

If your response categories differ, please provide us with the corresponding data and indicate the wording of the question and/or the response categories used.

3.13. Out patient care

Data are requested on:

[DOCTOR_4W] Consulting a medical doctor (including GP, Specialist) during the past 4 weeks

1. Number of respondents who consulted a medical doctor during the past 4 weeks
2. Number of respondents who did not consult a medical doctor during the past 4 weeks

[DOCTOR_1Y] Consulting a medical doctor (including GP, Specialist) during the past 12 months

1. Number of respondents who consulted a medical doctor during the past 12 months
2. Number of respondents who did not consult a medical doctor during the past 12 months
3. Estimate for average number of consultations in one year per person in the population

[DENTIST_4W] Consultations to the dentist/orthodontist (past 4 weeks)

1. Number of respondents who consulted a dentist/orthodontist during the past 4 weeks
2. Number of respondents who did not consult a dentist/orthodontist during the past 4 weeks

[DENTIST_1Y] Consultations to the dentist/orthodontist (past 12 months)

1. Number of respondents who consulted a dentist during the past 12 months
2. Number of respondents who did not consult a dentist during the past 12 months
3. Estimate for average number of consultations in one year per person in the population

If you use in your national questionnaire different reference periods, please specify the periods used. Note with respect to 'estimation for the average number of consultations etc: include persons with zero consultations in the denominator. If the reference period in your question is less than one year, multiply with the appropriate factor.

3.14. Preventive care

Data are requested on:

[VACCIN] Immunisation/vaccination against influenza:

1. number of respondents who have ever been vaccinated against influenza
2. number of respondents who have never been vaccinated against influenza

[DELAYVACCIN] Delay: for respondents who have been vaccinated against influenza

1. number of respondents who have had their last vaccination less than one year ago
2. number of respondents who have had their last vaccination between 1 and 2 years ago
3. number of people who have had their last vaccination 2 years ago or more

[BREAST] Screening on breast cancer

1. number of women who ever had a mammography
2. number of women who never had a mammography

[DELAYBREAST] Delay: for women who ever had a mammography

1. number of women who had their last mammography less than one year ago
2. number of women who had their last mammography between 1 and 2 years ago
3. number of women who had their last mammography 2 years ago or more

[CERVICAL] Screening on cervical cancer

1. number of respondents who ever had a cervical cancer test
2. number of respondents who never had a cervical cancer test

[DELAYCERVICAL] Delay: for respondents who ever had a cervical cancer test

1. number of respondents who had their last cervical cancer test less than one year ago
2. number of respondents who had their last cervical cancer test between 1 and 2 years ago
3. number of respondents who had their last cervical cancer test 2 years ago or more

If your response categories differ, please provide us with the corresponding data and indicate the wording of the question and/or the response categories used.

3.15. Use of medicines

Data are requested on:

[PRESCMED] Medicines prescribed by a physician

1. Number of respondents who used medicines prescribed by a physician during the past two weeks
2. Number of respondents who did not use medicines prescribed by a physician during the past two weeks

[NPRESMED] Medicines not prescribed by a physician

1. Number of respondents who used medicines not prescribed by a physician during the past two weeks
2. Number of respondents who did not use medicines not prescribed by a physician during the past two weeks

If your response categories differ, please provide us with the corresponding data and indicate the wording of the question and/or the response categories used.

3.16. Use of drugs

Data are requested on:

[DRUG_30D] Drugs used in the past 30 days

1. Number of respondents who have taken cannabis in the past 30 days
2. Number of respondents who have never taken cannabis in the past 30 days

[DRUG_12M] Drugs used in the past 12 months

1. Number of respondents who have taken cannabis in the past 12 months
2. Number of respondents who have never taken cannabis in the past 12 months

If your response categories differ, please provide us with the corresponding data and indicate the wording of the question and/or the response categories used.

3.17. Diet/food consumption habits

Data are requested on:

[DIET] Diet followed

1. Number of respondents who have a special diet or follow a particular dietary regime
2. Number of respondents who do not have a special diet or do not follow a particular dietary regime

[CHANGEAT] Change in eating habits

1. Number of respondents who have changed their eating habits in the past 3 years to lose weight
2. Number of respondents who have not changed their eating habits in the past 3 years to lose weight

If your response categories differ, please provide us with the corresponding data and indicate the wording of the question and/or the response categories used.

3.18. Quality of life

Data are requested on replies to the question: ‘How would you rate your quality of life?’

[QOL] Assessment of the quality of life

1. Number of respondents replying “very poor”
2. Number of respondents replying “poor”
3. Number of respondents replying “neither poor nor good”
4. Number of respondents replying “good”
5. Number of respondents replying “very good”

If you have used a similar question or if your response categories differ, please provide us with the corresponding data and indicate the wording of the question and/or the response categories used.

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Annex 1 - Examples of SAS and SPSS set-ups to produce the macro data files requested by Eurostat

1. Example of SAS set up to produce the files requested

Notes:

- (1) In this example the recode for age is shortened. As noted in the guidelines, the requested recode is 15-24, 25-34, .. , 75-84, 85+
- (2) The example is only on 'sex by age by education'. For making the table 'sex by age by economic activity' the variable 'education' is replaced by 'economic activity'
- (3) Only a limited number of topics/variables are shown in this example; refer to the guidelines for the full list of requested variables
- (4) The variable names in the file on which this example was based, were:

wgtfac = the usual weight factor for this file
gslop = sex (2 categories)
lftop = age (in years)
oplop = level of education completed (4 categories)
gezond = perceived health (6 categories with missing value)
langda = chronic condition(s) yes/no (3 categories with missing value)
var052 = cutdown in 2 weeks yes/no (3 categories with missing value)
var053 = number of days cutdown in 2 weeks (1-14)

```
data EURO (keep= wgtfac gslop agegroup health1-health6 chron1-chron3  
cutdown1-cutdown3 var053); set XXXX.XXX;
```

```
if (15 le lftop le 34) then agegroup=1;if (35 le lftop le 49) then  
agegroup=2;  
if (lftop ge 50) then agegroup=3; NOTE: these agegroups only for the  
example; 8 agegroups are requested  
if (oplop ge 4) then educ=4;  
else educ=oplop;
```

```
if ( gezond = 1 ) then health1 = 1 ;  
if ( gezond = 2 ) then health2 = 1 ;  
if ( gezond = 3 ) then health3 = 1 ;  
if ( gezond = 4 ) then health4 = 1 ;  
if ( gezond = 5 ) then health5 = 1 ;  
if ( gezond = . ) then health6 = 1 ;  
if ( langda = 1 ) then chron1 = 1 ;  
if ( langda = 2 ) then chron2 = 1 ;  
if ( langda = . ) then chron3 = 1 ;  
if ( var052 = 1 ) then cutdown1 = 1 ;  
if ( var052 = 2 ) then cutdown2 = 1 ;  
if ( var052 = . ) then cutdown3 = 1 ;
```

```
if (1 le var053 le 14) then var053=var053;  
else var053='.';
```

```
run;
```

```
proc sort data = EURO out=EURO; by sex agegroup educ; run;
```

```
proc means data=EURO noprint;  
by sex agegroup educ;  
var health1-health6 chron1-chron3 cutdown1-cutdown3 var053;  
weight wgtfac;  
output out=EUROSTAT (drop= _TYPE_ _FREQ_ var053) sum=  
mean(var053)=ncutdow;  
run;
```

Convert the resulting SAS-file (EUROSTAT) to a SAS Transport file with the Cport procedure. Send this SAS Transport file to Eurostat.

Note that it would be preferable to send a copy of this file in format Excel to Eurostat with the Export procedure explained below:

```
Proc Export data = EUROSTAT outfile = 'H:/.../.../EUROSTAT.xls'
          Dbms=excel replace;
run;
```

To show how the SAS-output file (and the Excel-output file) should look like see below:

SEX	AGE GROUP	ED UC	HEALTH 1	HEALTH 2	HEALTH 3	HEALTH 4	HEALTH 5	HEALTH 6	CHRO N1	CHRO N2	CHRO N3	CUTDO WN1	CUTDO WN2	CUTDO WN3	NCUTD OW
1	1	1	42	33	7	.	.	23	5	55	12	.	60	12	5
1	1	2	457	195	22	.	1	2	34	631	23	5	659	14	9,03
1	1	3	596	429	64	7	2	6	56	941	.	9	986	8	6,75
1	1	4	132	174	42	9	.	14	22	330	4	7	345	9	5,38
1	2	1	150	84	16	3	.	4	16	216	19	3	228	31	3,5
1	2	2	400	291	66	6	2	2	44	712	23	5	748	6	12,89
1	2	3	138	139	43	5	1	8	24	283	6	7	300	25	5,86
1	2	4	60	99	27	8	5	11	17	173	9	7	183	.	14
1	3	1	68	46	10	2	1	7	7	116	7	1	121	14	9,8
1	3	2	199	274	55	14	3	.	37	504	.	2	537	4	8,96
1	3	3	53	97	27	11	5	4	18	172	4	5	185	7	10,53
1	3	4	43	64	18	5	3	6	10	115	7	5	120	12	24
2	1	1	55	36	1	1	.	.	6	78	6	.	84	3	4,8
2	1	2	453	222	38	6	.	9	44	660	18	8	696	.	8,9
2	1	3	468	448	91	7	5	12	52	841	23	15	878	5	6,09
2	1	4	96	143	31	5	2	.	19	254	.	18	255	9	8,43
2	2	1	139	101	9	1	.	11	19	221	6	6	234	3	5,67
2	2	2	337	239	51	10	2	6	43	593	11	11	625	17	8,49
2	2	3	125	132	45	10	5	9	30	282	14	17	294	2	10,13
2	2	4	30	62	20	5	1	3	11	101	19	9	103	.	9
2	3	1	50	46	13	.	.	13	10	98	2	4	104	6	14,33
2	3	2	167	215	58	7	3	.	36	413	3	13	435	8	17,52
2	3	3	76	117	55	4	2	4	20	233	4	3	249	23	12,16
2	3	4	19	53	26	16	4	7	19	95	6	7	107	.	8,21

2. Example of SPSS set up to produce the files requested

Notes:

- (1) In this example the recode for age is shortened. As noted in the guidelines, the requested recode is 15-24, 25-34, .. , 75-84, 85+
- (2) The example is only on 'sex by age by education'. For making the table 'sex by age by economic activity' the variable 'education' is replaced by 'economic activity'
- (3) Only a limited number of topics/variables are shown in this example; refer to the guidelines for the full list of requested variables
- (4) The variable names in the file 'health96.sav' on which this example was based, were:

wgtfac = the usual weight factor for this file
gslop = sex (2 categories)
lftop = age (in years)
oplop = level of education completed (4 categories)
gezond = perceived health (6 categories with missing value)
langda = chronic condition(s) yes/no (3 categories with missing value)
var052 = cutdown in 2 weeks yes/no (3 categories with missing value)
var053 = number of days cutdown in 2 weeks (1-14)

```
GET FILE health96.sav.
```

```
WEIGHT BY wgtfac.
```

```
RECODE lftop ( 15 THRU 34 = 1 )( 35 THRU 49 = 2 )( 50 THRU HI = 3 )...  
      INTO agegroup. NOTE: these agegroups only for the example; 8 agegroups  
                        are requested
```

```
RECODE oplop ( 4 THRU HI = 4 ) INTO educ.
```

```
IF ( gezond = 1 ) health1 = 1.  
IF ( gezond = 2 ) health2 = 1.  
IF ( gezond = 3 ) health3 = 1.  
IF ( gezond = 4 ) health4 = 1.  
IF ( gezond = 5 ) health5 = 1.  
IF ( gezond = . ) health6 = 1.  
IF ( langda = 1 ) chron1 = 1.  
IF ( langda = 2 ) chron2 = 1.  
IF ( langda = . ) chron3 = 1.  
IF ( var052 = 1 ) cutdown1 = 1.  
IF ( var052 = 2 ) cutdown2 = 1.  
IF ( var052 = . ) cutdown3 = 1.
```

```
RECODE var053 ( 1 THRU 14 = COPY )( ELSE = SYSMIS )  
      INTO ncutdown.
```

```
AGGREGATE OUTFILE = *  
      / BREAK = sex agegroup educ  
      /      health1 health2 health3 health4 health5 health6  
      = SUM( health1 health2 health3 health4 health5 health6)  
      /      chron1 chron2 chron3 cutdown1 cutdown2 cutdown3  
      = SUM( chron1 chron2 chron3 cutdown1 cutdown2 cutdown3)  
      /      ncutdown  
      = MEAN(ncutdown ).
```

```
EXPORT OUTFILE = 'eurostat.por'. /* send this SPSS export file to  
Eurostat .
```

Note that it would be preferable to send a copy of this file in format Excel to Eurostat from SPSS with the command explained below:

SAVE OUTFILE ='H:\.....\...\eurostat.xls' /* send this Excel file to Eurostat .

To show how the output (SPSS and Excel Files) looks like, the following table was produced (by means of the 'LIST' command in SPSS (see below)):

A			H	H	H	H	H	H				C	C	C	N
G			E	E	E	E	E	E	C	C	C	U	U	U	N
E			A	A	A	A	A	A	H	H	H	T	T	T	C
G			L	L	L	L	L	L	R	R	R	O	O	O	U
R	E		T	T	T	T	T	T	O	O	O	W	W	W	D
S	O	D	H	H	H	H	H	H	N	N	N	N	N	N	O
E	U	U	1	2	3	4	5	6	1	2	3	1	2	3	W
X	P	C													
1	1	1	81	196	14	7	1	5	50	249	2	40	259	22	6,17
1	1	2	26	55	5	1	2	14	14	76	.	12	78	5	5,57
1	1	3	61	83	5	3	.	24	27	126	3	22	130	7	6,47
1	1	4	73	121	10	5	1	.	31	179	8	25	185	.	5,85
1	2	1	54	128	35	23	15	3	87	167	11	50	205	4	9,19
1	2	2	97	204	28	10	5	5	94	251	5	34	311	6	8,64
1	2	3	36	72	8	4	4	9	36	87	4	9	114	12	9,48
1	2	4	296	536	58	21	7	11	203	714	.	114	802	13	7,77
1	3	1	53	153	118	49	29	1	231	172	8	63	340	9	10,27
1	3	2	44	129	62	18	12	4	123	141	9	35	229	.	10,34
1	3	3	18	46	17	7	4	2	45	47	11	13	79	2	10,67
1	3	4	90	276	83	32	13	5	215	280	23	57	439	9	10,79
2	1	1	69	175	22	9	1	8	56	220	8	42	233	7	5,38
2	1	2	11	46	4	2	1	.	9	55	2	4	60	5	3,95
2	1	3	43	110	10	6	.	7	38	132	.	24	145	3	7,90
2	1	4	72	117	14	7	1	12	50	160	3	32	178	6	5,31
2	2	1	43	145	53	35	15	8	115	176	8	67	225	.	9,11
2	2	2	70	199	47	23	5	7	118	225	4	59	285	14	7,97
2	2	3	62	150	27	7	8	6	77	178	7	41	214	12	8,91
2	2	4	198	505	75	29	11	.	220	597	9	141	677	9	7,43
2	3	1	65	271	209	101	43	11	410	278	1	112	576	3	9,82
2	3	2	43	186	79	46	13	6	181	186	6	68	298	7	9,84
2	3	3	45	121	44	17	6	7	117	115	.	34	198	1	9,67
2	3	4	40	152	58	30	12	.	170	122	7	57	235	.	10,79

3. Example to control the totals and sub-totals

For example, here, the response category health6 is the “missing” category. The variable ‘Chron’ has 3 response categories (Chron1, Chron2, Chron3), Chron3 being the missing “category”.

Sex	Age group	Econ	Health 1	Health 2	Health 3	Health 4	Health 5	Health 6	Chron 1	Chron 2	Chron 3	...
1	1	1	180	361	259	128	70	2	420	312	263	...
...

Sex	Age group	Educ	Health 1	Health 2	Health 3	Health 4	Health 5	Health 6	Chron 1	Chron 2	Chron 3	...
1	1	1	150	246	284	75	43	2	225	112	463	...
...

We would like you send us a control files such as:

Sex	Age	Econ	Health	Chron	...
1	1	1	1000	995	...
...

Sex	Age	Educ	Health	Chron	...
1	1	1	800	800	...
...

In this case we can see that for sex 1, age 1, econ 1, there is a discrepancy between the total number of cases in the survey for the health and chron variables. The reason of this discrepancy (e.g. filter) should be systematically explained here.

Annex 2 – Mental Health

General Health Questionnaire

The General Health Questionnaire – 12-item version is proposed. The wording of the introductory sentences and items are given below:

Introduction: “We would like to know if you have had any medical complaints, and how your health has been in general, over the past few weeks. Please answer ALL the questions simply by underlining which you think most nearly applies to you. Remember that we want to know about present and recent complaints, not those that you have had in the past.” Have you recently:

	<i>Score 0</i>	<i>Score 0*</i>	<i>Score 1</i>	<i>Score 1</i>
1. Lost much sleep over worry?	Not, at all	No more than usual	Rather more than usual	Much more than usual
2. Felt constantly under strain?	Not, at all	No more than usual	Rather more than usual	Much more than usual
3. Been able to concentrate on whatever you are doing?	Better than usual	Same as usual	Less than usual	Much less than usual
4. Felt that you are playing a useful part in things?	More so than usual	Same as usual	Less useful than usual	Much less useful
5. Been able to face up to your problems?	More so than usual	Same as usual	Less able than usual	Much less able
6. Felt capable of making decisions about things?	More so than usual	Same as usual	Less capable than usual	Much less capable
7. Felt you couldn't overcome your difficulties?	Not at all	No more than usual	Rather more than usual	Much more than usual
8. Been feeling reasonably happy, all things considered?	More so than usual	About the same as usual	Less so than usual	Much less than usual
9. Been able to enjoy your normal day-to-day activities?	More so than usual	About the same as usual	Less so than usual	Much less than usual
10. Been feeling unhappy and depressed?	Not at all	No more than usual	Rather more than usual	Much more than usual
11. Been losing confidence in yourself?	Not at all	No more than usual	Rather more than usual	Much more than usual
12. Been thinking of yourself as a worthless person?	Not at all	No more than usual	Rather more than usual	Much more than usual

Psychological distress

VITALITY: VERBATIM ITEMS AND SCORING INFORMATION

Verbatim Items

- 9a. Did you feel full or pep?
 9e. Did you have a lot of energy?
 9g. Did you feel worn out?
 9i. Did you feel tired?

Precoded and Final Values for Items 9a, 9e, 9g, & 9i.

Items 9a & 9e	<u>Response choices</u>	<u>Precoded Item Value</u>	<u>Final Item Value</u>
	All of the time	1	6
	Most of the time	2	5
	A good bit of the time	3	4
	Some of the time	4	3
	A little of the time	5	2
	None of the time	6	1
Items 9g & 9i	<u>Response choices</u>	<u>Precoded Item Value</u>	<u>Final Item Value</u>
	All of the time	1	6
	Most of the time	2	5
	A good bit of the time	3	4
	Some of the time	4	3
	A little of the time	5	2
	None of the time	6	1

Scale scoring

Compute the simple algebraic sum of the final item values as shown in the table “Formulas for scoring and transforming scales”. See text for handling of missing item responses. This scale is scored so that a high score indicates more vitality.

Note. Precoded value are as shown on the appended form. This scale requires recoding of two items prior to computation of the scale score.

Positive mental health

MENTAL HEALTH: VERBATIM ITEMS AND SCORING INFORMATION

Verbatim Items

- 9b. Have you been a very nervous person?
- 9c. Have you felt so down in the dumps that nothing could cheer you up?
- 9d. Have you felt calm and peaceful?
- 9f. Have you felt downhearted and blue?
- 9h. Have you been a happy person?

Precoded and Final Values for Items 9b, 9c, 9d, 9f, & 9h

Items 9b, 9c, & 9f	<u>Response choices</u>	<u>Precoded Item Value</u>	<u>Final Item Value</u>
	All of the time	1	6
	Most of the time	2	5
	A good bit of the time	3	4
	Some of the time	4	3
	A little of the time	5	2
	None of the time	6	1

Items 9d & 9h	<u>Response choices</u>	<u>Precoded Item Value</u>	<u>Final Item Value</u>
	All of the time	1	6
	Most of the time	2	5
	A good bit of the time	3	4
	Some of the time	4	3
	A little of the time	5	2
	None of the time	6	1

Scale scoring

Compute the simple algebraic sum of the final item values as shown in the table “Formulas for scoring and transforming scales”. See the text for handling of missing item responses. This scale is scored so that a high score indicates better mental health.

Note. Precoded value are as shown on the appended form. This scale requires recoding of two items prior to computation of the scale score.

Formulas

FORMULAS FOR SCORING AND TRANSFORMING SCALES

Scale	Sum Final Item Values (<i>after recoding items</i>)	Lowest and highest possible raw scores	Possible raw score range
Vitality	$9a+9e+9g+9i$	4, 24	20
Mental Health	$9b+9c+9d+9f+9h$	5, 30	25

Formula and example for transforming of raw scale scores

$$\text{Transformed Scale} = \left(\frac{(\text{Actual raw score} - \text{lowest possible raw score})}{\text{Possible raw score range}} \right) \times 100$$

Example: A Vitality raw score of 21 would be transformed as follows:

$$\left(\frac{(21-4)}{20} \right) \times 100 = 85$$

Where lowest possible score = 4 and possible raw score = 20