



STATISTICAL  
OFFICE  
OF THE SLOVAK  
REPUBLIC



## Final report

„Preparatory work to revise the harmonised  
European Time Use survey for the implementation  
in the round 2020“

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**Elaborated by:**

Róbert Vlačuha, Grant Project Leader  
Department of Population Living Standard Statistics  
[Robert.Vlacuha@statistics.sk](mailto:Robert.Vlacuha@statistics.sk)

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## **INTRODUCTION**

Statistical Office of the Slovak Republic (SO SR) has never realized harmonized survey about time use in the full extent, and therefore it has only minimal experience with this type of survey.

For this reason we welcome the offer of the Eurostat for participation in Grant project "Preparatory work to revise the harmonised European Time Use survey for the implementation in the round 2020", so that SO SR was prepared for possible implementation of this survey in futures. The main objective of this Grant project was to study, test and outline effective solution for the future implementation TUS, which would be basis for revision of guidelines HETUS 2008. The revision of guidelines should have focused not only on aspect of survey, which would improve a data comparability among countries but also on capturing of new trends in HETUS survey arising from changing life-style and technology development.

The SO SR submitted Grant application 15<sup>th</sup> June 2016, which was subsequently approved 4<sup>th</sup> December 2017. The work on Grant project was started 1<sup>st</sup> February 2017.

Within the offered objectives, which was subject of solution of this Grant project, we participate in tasks, which cover of a content of following Topics of technical specification of the action:

1. **Topic 1** - Survey interview techniques, „**Subtopic a**“ Literature and best practices review of the communication strategies, respondent invitation process and incentives schemes in relation to the mode of interviewing (relate to **Objective 1** of this technical report)
2. **Topic 3** - The revision of activity coding list, „**Subtopic a**“ Review of the current activity list and „**Subtopic b**“ elaboration of the coding list and guidelines (relate to **Objective 2** of this technical report)

## **OBJECTIVE 1**

The main purpose of this objective was elaboration of methodical study, which summarized existing experiences and approaches concerning the realization of time use surveys in EU Member States as well as outside the EU.

The works on solution of Objective 1 ran from February to March 2017 and consisted of obtaining and studying the available foreign and national literature on the above-mentioned

issues, and developing a detailed methodical study capturing knowledge on the basis of available literary sources.

**The English version of this study is contained in ANNEX 1 of this report.**

The study is divided into two sections. **The first section** is focused on implementation of the Time Use Survey in selected countries. Within EU member states in particular regarding the survey implemented after second wave of harmonization HETUS, i.e. after 2008. Within countries outside EU, we focused on survey realized in Australia and New Zealand because of methodology data collection in these countries is similar to European countries.

**The second section** covers communications strategies and respondents addressing in sample survey in Slovak Republic, methods of addressing respondents in TUS in selected countries and new options of addressing respondents such as videos on youtube and social networks.

The study also includes the following enclosures:

Enclosure 1 contains summarizing table describing the basic information about methodology of TUS in individual documented countries.

Enclosure 2 contains general guide for fieldwork of interviewers.

Enclosures 3 and 4 includes examples of the letters, which are sent to mayors of municipalities and to households within sample survey implemented by the Statistical Office of the Slovak Republic.

Within methodical study are captured also available national well-tried methods concerning acquiring and addressing respondents and some national solution, which can improve quality of particular phases of implementation TUS, which were not included in recommendations of contents of guidelines HETUS 2008.

#### General conclusion from methodical study

Countries, which implemented TUS captured in above mentioned methodical study, for facilitating participation of selected household in survey, sent advance letters to these households in compliance with recommendation guidelines HETUS 2008. This letter usually contains information about survey, purpose of survey, information about visit of interviewer, assurance about confidentiality of provided data and information how contact interviewer or national statistical office. An information brochure was usually sent with letter, which propagated survey by interesting form.

Within available literature there are also known **other methods strengthening encouragement of participation of respondents in survey, or other possibilities how to address respondents**, which could be used in future TUS:

- Within surveys, which SO SR implements, it is well-tried to send also advance letters with information about survey jointly with leaflet to authorities of municipalities

included in survey. The municipalities on the basis of these letters inform citizens about realization survey through local media and increases probability in such way, that survey gets into awareness of citizens. This way substantially facilitates work of interviewers in particular municipality.

- Another communication strategy towards respondents, how to propagate survey of national statistical office and to strengthen a credibility and participation in survey, is to display information about survey on website of statistical office. This is routine practice of the SO SR, but also other national statistical offices, of which some ones use for propagation survey social networks or videos on youtube, as a quick method dissemination of information among users (see **ANNEX 1\_Section II, Capture 6** of Methodical study).

## **OBJECTIVE 2**

Considering that SO SR has minimal experience with survey about time use and there does not exist national version of Activity Coding List (ACL), within Topic 3 we specified following objective:

- On the basis of current ACL 2008 to propose national version of ACL
- To realized revision of this national ACL through its testing on sample 50 selected Slovak households (i.e. to capture chiefly missing activities, which are related to new life style of household and they were not included in ACL 2008 and to elaborate proposal for their including into current ACL coding system)
- On the basis of realized revision to elaborate conclusions and recommendations which could be contributing also in international context for implementation TUS in future

## **METHODICAL PREPARATION OF THE SURVEY**

Methodical preparation of testing survey consists of followings steps:

1. The translation Activity Coding List (ACL 2008) into national language.
2. The proposal of questionnaire, "*Diary for recording activities*" of and "*Manual for survey and data processing*"
3. The preparation of programme for electronic data record

1. The translation Activity Coding List (ACL 2008) into the national language.

The translation of current ACL 2008 into national language was realized by 1 worker through working agreement in months April up to May 2017. The experts of the SO SR regularly checked and commented correctness of translation of individual items of ACL and if necessary, they modified a translation of some items and subsequently elaborated the proposal Slovak version of ACL 2008 for testing in field.

2. The proposal of questionnaire, Diary for recording activities and Manual for survey and data processing.

Because objective of this Grant Project was not implemented TUS in full extent, but only to test functionality of ACL for activities, which carried out members of Slovak households, in June 2017 for survey only two questionnaires were proposed mentioned in **ANNEX 2 and ANNEX 3**:

- “Questionnaire about household and its members” and
- “Diary for recording activities”

The proposal both these questionnaire were focused on PAPI mode of data collection.

“Questionnaire about Household and its members”, which completed interviewer during visit of household was proposed to collect only some basic information, which were subject of survey in “Household Questionnaire” and “Individual Questionnaire” recommended for HETUS 2008 and consisted of two modules namely module A\_Data about household and module B\_Data about household members.

Within “module A. Data about household” information was collected about kind of dwelling in which household lives and whether households cares for a garden or domestic animals or pets.

Within „module B. Data about household members „were collected the basic socio-demographical information about individual members of households, namely sex, month and year of birth, current economical status and highest attained educational level.

Information on the basis of surveyed variables in this questionnaires served as auxiliary factor for correct coding of written down activities by respondents in individual households.

“The Diary for recording Activities”

Sections and form of diary „Diary for Activity recording“ for testing ACL in field was proposed on basis of diary „Adult diary“ mentioned in HETUS 2008 guideline.

The Diary consisted of four sections, namely:

- A. Identification data (namely: code of interviewer; number of reporting unit; serial number of household member and his/her identification and contact on interviewer),
- B. Guides for respondent how to fill out Diaries,
- C. The examples on recorded activities and
- D. Diary for recording activities.

Individual rows of sheet for recording activity, where were written down activities as they were carried out in 10 minutes time intervals in particular „diary day“, divided on six columns, which contained following information:

- Column 1 – pre-filled out 10-minutes time intervals from 4:00 to 4:00 following „Diary day“)
- Column 2 - word description of main activity (filled out respondent)
- Column 3 - code main activity (coded interviewer during data recording)
- Column 4 - word description of secondary activity (filled out respondent)
- Column 5 - code main activity (coded interviewer during data recording)
- Column 6 - determined for record correction in case, respondent or interviewer did mistake in row during record of data

The purpose of implemented survey as was mentioned above was to test functionality ACL in slovak conditions, therefore “Diary” did not contain column for record locality where respondent performed given activity and which mode of transport used during it (if activity was connected with travel, mode of transport was recorded within main activity) and also column appointed for record with who was given activity performed was omitted.

### 3. The Preparation of programme for electronic data record

In order to the written down activities from selected sample of Slovak households were possible to analyse, in may 2017 programme named **File for data record in survey „Time use“** for electronic data record from reporting unit was created in programme MS Excel. The file represented sheets corresponded to electronic version of „Questionnaire about Household and its members” and „Diary for recording Activities” and sheet with codes of ACL with description. The data record related to individual reporting units was facilitated by means running macros programmed in Visual Basic. This macros in some cases assured also checks for data record.

In the folder **ANNEX 5\_TUS record**, which is appended to this technical report, there are following files:

- „*Record\_file\_description.docx*“ including description of this program.
- „*TUS.Eng.xlm*“and „*TUS.xlm*“ including English and Slovak version of this program.
- „*TUS\_manual.docx*“ containing detail user manual.

## FIELDWORK

The fieldwork was carried out in 50 randomly selected households from region Banska Bystrica in July 2017. All members of household at age 16 and over were included in survey. The fieldwork was carried out by 3 interviewers from region of Banska Bystrica, who had experiences with sample social surveys in households. The fieldwork preceded one day training of interviewers. The training led statisticians from SO SR, who participated in methodical preparation of survey. Account that tasks of interviewers was not only data collection in field but also primary processing of collected data i.e. coding activities which were written down by respondents in Diaries and their record in the ***File for data record in survey „Time use“***. Special attention was devoted to problems how to code correctly written down activities from respondents and how to work with “file for data record”. All topics which was subject of training was explain in detail also in “***Manual for survey and data processing***” (ANNEX 4), which is described in part „DATA ANALYSES“of this report and in “***TUS\_manual***” (folder ANNEX 5). The paper version of both questionnaires were provided interviewers before the training. The part of training was devoted also to practical exercises, in which interviewers could to try coding of activities in model diaries.

## DATA COLLECTION

Data collection was realized by means PAPI method. “Questionnaire about household and its members” was completed interviewers straight in household face to face with selected respondent older than 18 years and paper version of “Diary for recording activities” was provided every member of household at age 16 and over for self-completing, The member of household included in survey filled out diary 7 consecutive days so called „diary days“.

## DATA PROCESSING

Data processing ran in two phases. In the first phase interviewers recorded data from individual household from paper questionnaire into ***File for data record in survey „Time use“*** and carried out coding activities.

For the analyse recorded data was created the complete database of data from all surveyed household (from “Questionnaire about household and its members”) and the complete database of data from all individuals who wrote down data into “Diary for recording Activities”.

## DATA ANALYSES

Within 50 households which participated in survey was analysed activities 79 respondents. In order to be possible to analyse satisfactory number of activities, respondents wrote down activities 7 consecutive days. This way „79 632“of records were recorded as „main activity” and „10 636” of records as „secondary activity”. The table presented below contains numbers of respondents in breakdown by sex, age groups and level of highest attained education.

### Distribution of respondents by sex, age and level of highest attained education

Sex	Age group	The highest level of attained education (ISCED 2011)				Total
		Primary school	Secondary School without graduation	Secondary school with graduation	University	
<b>Man total</b>		<b><u>1</u></b>	<b><u>8</u></b>	<b><u>18</u></b>	<b><u>6</u></b>	<b><u>33</u></b>
	16-25			2		2
	26-35		1	4		5
	36-45		2	5	3	10
	46-55		2	1	1	4
	56-65		2	4	2	8
	66+	1	1	2		4
<b>Female total</b>		<b><u>3</u></b>	<b><u>5</u></b>	<b><u>21</u></b>	<b><u>17</u></b>	<b><u>46</u></b>
	16-25	1	1			2
	26-35		1	5	3	9
	36-45		1	3	6	10
	46-55			3	4	7
	56-65		2	6	4	12
	66+	2		4		6
<b>Total</b>		<b><u>4</u></b>	<b><u>13</u></b>	<b><u>39</u></b>	<b><u>23</u></b>	<b><u>79</u></b>

The recorded activities were analysed on the basis of **two type of analyses**:

1. On the basis the detail „Evaluation report“, which was elaborated on the ground of experiences of interviewers from fieldwork and their remarks which arose from when they coded activities.

The activities in this report were evaluated on the basis of following criteria:

- To specify activities, which were not possible classified within activity list ACL
- To indicate for which ACL codes more detailed description missed or definition
- To indicate for which codes it is necessary to provide more examples of activities, which are covered this code
- To specify experiences, problems, proposals for activity coding for future TUS.



2. Analyse which was focused on assessment whether there is not necessary to break down more detail individual categories activities at two digit level.

The analysis was done with use of complete database of data for all recorded individuals and by means tools of programme MS Excel. Number and type of activities was evaluated, which was coded as „**other or unspecified activities**“ (namely activities which was coded as 039, 129, 329, 339, 349, 359, 369, 389, 429, 439, 519, 529, 619, 719, 729, 739 and 819).

The results of this analyse included in **ANNEX 6\_Data Analyses**. Tables 1 and 2 in this file contains total number of main activities and secondary activities which was coded as „**other or unspecified activities**“ within individual categories at 2 digit level and their percentage proportion from total number of activities included into individual categories at 2 digit level. Table 3 and 4 in this files contained the proposal of inclusion of new **3 digit codes** into categories of activities **42\_ Informal help to other households** and **52\_Entertainment and Culture**.

All changes and supplements which was included into proposed national version coded activity list (ACL), which arose from above mentioned analyses was included into proposal of *“Manual for survey and data processing”* (**ANNEX 4**) and are highlighted in yellow.

#### **Results of analyses:**

On the basis of „Evaluation report „from fieldwork following findings” and into proposed national version of ACL were included following proposals for revision:

- a) On the basis of proposed national version ACL, it was possible to code all described activities, which did individuals of surveyed households excluding activities connected with visit of cemetery (number of records 34). This activity can be connected with cleaning of grave place (cleaning, decoration and it is not only with activities connected with tending flowers on a grave -current code 341). In proposed national version of ACL this activity was preliminary included in code **999\_Other unspecified time use**.
- b) The code contents 72 and 82 was supplemented on new ICT technology and on new recording medias, the content of code 121 on meal break during work in shift and the content of code 33 on care for shoes.
- c) Definition was chiefly supplemented for following codes 312, 351, 353, 432, 512, 513, 521, 722, 723, 811, 812 for purpose of better understandability of their content
- d) For some codes were supplemented examples of activities which were identified in process of coding and characterized a new life style or technological development or

improved understandability of content of individual codes. For example code 723\_Communication was supplemented on some examples activities, which individual can do on Facebook or code 811\_Reading periodicals was supplemented on example activity, namely Reading online newspaper etc..

On the basis of the **second type of analysis**, which was focused on the exploration whether a more detail breakdown is needed in the individual categories of activities, there is a need for a more detailed breakdown of **42\_Informal help to other households** and for **52\_Entertainment and Culture**. The proposal of new codes and their description is included in the revised proposal of “*Manual for survey and data processing*” (**ANNEX 4**).

## CONCLUSIONS AND RECOMMENDATIONS

The revision of the national version of the ACL mainly consisted of in capturing new types of activities or in better specification of contents of individual codes of current valid ACL 2008.

The basis for this revision was only an analysis of the content of recorded activities of individuals from 50 selected slovak households. On the basis of this analysis we recommended to do in current ACL 2008 **chiefly** following modification:

- To supplement contents of codes 72 and 82 on new ICT technology or recording media and to include some examples of characteristic activities concerning use of these technologies for these code (see **ANNEX 4**; section 8.1 and 8.2 )
- To introduce a more detail breakdown of codes 42 and 52 (see **ANNEX 4** and **ANNEX 6**)

In future we will plan to continue in revision of above mentioned proposed national version of ACL within Eurostat Grant project “Modernisation of the Harmonised European Time Use Survey”. Our future works will be focused on study, identification of new types of activities in international classification ICATUS 2016, which are not covered in ACL 2008 and in elaboration of proposal to incorporate them into ACL 2008.

Another area we would like to focus on concerning possibilities of inclusion of well-being dimension „in Diary”.