

METHODOLOGICAL REPORT ON THE TUS PILOT SURVEY

Eurostat Grant no. 07141.2016.001-2016.775

ROMÂNIA



National Institute of Statistics Romania - Preparatory work to revise the harmonised European Time Use survey for the implementation in the round 2020



CONTENT

				Page				
1.	Gen	eral (description of the Romanian Time Use Survey	4				
2.	General and specific objectives of the Grant project							
3.	The expected results of the Grant project							
4.	Brief description of all activities developed in the Grant project							
	4.1 The team of the Grant project							
	4.2	scription of the main activities developed in the Grant project	-					
		a.	Studying the best practices for carrying out the Time Use Survey and the latest publications on the time use elaborated by international organizations or statistical offices in other countries	;				
		b.	Analysing the national legislation on the implementation of direct interviews with children	9				
		c.	Elaborating the list of specific activities and codes for children aged under 15 years and revising the activity list for persons aged 15 years and over	10				
		d.	Elaborating the two project diaries for children by age group	1:				
		e.	Preparing the methodological specifications to be used for filling in the diaries for children and persons aged 15 years and over	10				
		f.	Sample selection for the TUS pilot survey	19				
		g.	Carrying out a pilot survey in five Romanian counties in order to collect the data and test the diaries for adults and children and the list of activities	20				
		h.	Analysing the test results (TUS pilot survey data) and the reports made by experts involved in the project at county level	23				
		i.	Elaborating a proposal for a new age limit for TUS target population, including a new age limit for children	2				
		j.	Elaborating a final project proposal for one or two diaries for children (after the field testing) and the diary for persons aged 15 years and over	28				
		k.	Elaborating a final project proposal for the new list of activities and coding system for the whole target population (including children)	29				
		1.	Elaborating the final proposal for the methodological specifications to be used to fill in the TUS diary by persons aged 3 years and over	29				
5			Conclusion	31				



ANNEXES

Annex 1	List of Activities and Coding System, Location/ Transport mode for 2017 TUS Pilot Survey
Annex 2	Methodological note for 2017 TUS Pilot Survey
Annex 3	Pilot survey documents (Diaries, Household Questionnaire, Household Letter)
Annex 4	Final proposal for the New List of Activities, Location/Transport Mode and Coding System for TUS 2020
Annex 5	The methodological explanations proposal for coding of activities, location/transport mode for HETUS 2020
Annex 6	Diaries proposal (for children aged between 3-7 years, children aged between 8-14 years and persons aged 15 years and over)
Annex 7	Mapping of the Old with New List of Activities and Coding System for TUS 2020



1. General description of the Romanian Time Use Survey

In 2006 NIS participated in the "European Database on Time Use Statistics" Grant, which involved the transmission of microdata of the survey carried out in 2000, according to the Eurostat guidelines 2000. Because the National Institute of Statistics (NIS) data were collected over a period of only two months and not 12 consecutive months, they are not fully comparable, since the survey methods used deviations from the European guidelines.

During 2011-2012 NIS carried out a TUS according to the European legal framework on the basis of a Gentlemen's Agreement, based on the Harmonised European Time Use Survey Methodology, January 2008 (HETUS 2008).

The objectives of TUS are to provide statistics about time use in Romania. The information is useful in order to: measure the amount of time people are spending doing various activities, such as paid work, household and family care, personal care, social life, travel and leisure activities; to provide external users with comparable data at national and international level, as well as internal users involved in defining, implementing and evaluating cultural and employment policies.

The data collection methods were face-to-face personal interviews (CI – Individual Questionnaire, CG – Household Questionnaire) and self-registration using diaries (JS – Weekly individual diary, JIAC – Daily individual diary for adults and children).

The 2011 TUS was conducted on a sample of 18,720 dwellings (1,560 dwellings per month) distributed in 4 waves, in all Romanian counties (in 2000, 9,018 dwellings were surveyed, distributed in two independent monthly sub-samples, consisting of 4,509 dwellings each). All persons aged 10 years and over, with usual residence in the survey centres (urban and rural), members of households from the dwellings systematically selected in all counties and Bucharest Municipality were subject of the survey. The TUS microdata and the Quality report were sent to Eurostat on the basis of the Grant "Time Use Survey data processing and dissemination".

2. General and specific objectives of the Grant project

The 2017 project's general objective was to design and test new instruments for TUS, in order to include them in the 2020 European TUS methodology. Taking into account the changes in society, the use of new technologies in daily life and the increasing role of the child as a social actor who has a considerable influence in an adult's life, the target population and the list of activities were analysed and revised.

The project carried out by NIS covered two specific objectives (actions):

Action 1: Designing and testing the TUS diaries, list of activities and methodological notes for persons aged under 15 years (action included in Topic 2 of Grant agreement - Survey questionnaire for persons aged under 15 years);

Action 2: Reviewing and testing the list of activities and methodological notes to include the activities that refer to new technologies used by the target population in daily activities (action included in Topic 3 of Grant agreement - Revision of activity list for TUS).



3. The expected results of the Grant project

The expected results are the following:

For specific action 1 (action included in Topic 2- Survey questionnaire for persons aged under 15 years):

- A proposal for a new age limit for TUS target population, including a new age limit for children (Topic 2 sub-topic a in Annex 1 on Technical specification);
- Proposing a project diary for children (Topic 2 sub-topic b in Annex 1 on Technical specification).

For specific action 2 (action included in Topic 3 - Revision of activity list for TUS):

- Proposing a "List of activities" (including for children) and updating the coding system accordingly (Topic 3 sub-topic a in Annex 1 on Technical specification);
- Updating methodological specifications (guidelines) for the new list of activities (including children) (Topic 3 sub-topic b in Annex 1 on Technical specification);
- Proposing a project diary for persons aged 15 years and over (Topic 3 sub-topic d in Annex 1 on Technical specification);

For both actions (action 1 and action 2):

 A methodological report describing the test (pilot survey), presenting the results and conclusions of the pilot survey, proposals for improving HETUS methodology for the 2020 round of TUS (target population, types of diaries, list of activities and coding system, improving methodological specifications on completion and coding of activities).

All these results will form a proposal for updating HETUS 2020.

4. Brief description of activities developed in the Grant project

4.1 The team of the Grant project

In order to carry out the activities of the Grant, a project team of 23 persons (of which 13 from NIS and 10 from the Territorial Statistical Directorates) was set-up. Beside this operational staff, 13 persons were indirectly involved (of which 8 persons in the NIS headquarter and 5 persons in the Territorial Statistical Directorates).

Among the team members there were experts involved in implementing TUS in Romania from the National Institute of Statistics and, also, from five Territorial Statistical Directorates (Statistical Directorate of Constanta, Statistical Directorate of Iaşi, Statistical Directorate of Sibiu, Regional Statistical Directorate of Olt and Statistical Directorate of Sălaj). The project's team comprised statistical experts both at national and county level. It was opted that the teams which carried out the pilot survey in the five counties to be made up of experts and not of interviewers, so that the results obtained could meet the Grant objectives.

The high-level management was directly involved in all technical activities of the Grant TUS. The project team included the high-level management staff due to personnel downsizing.



During the entire project, the NIS team has worked closely with the project team members from the five Territorial Statistical Directorates, so that all the objectives of the project were accomplished successfully and in quality conditions.

4.2 Description of the main activities developed in the Grant project

According to the Grant project agreement, the main activities developed were as following:

- a. Studying the best practices for carrying out the Time Use Survey and the latest publications on the time use elaborated by international organizations or statistical offices in other countries;
- b. Analysing the national legislation on the implementation of direct interviews with children;
- c. Elaborating the list of specific activities and codes for children aged under 15 years and revising the activity list for persons aged 15 years and over;
- d. Elaborating the two project diaries for children by age group;
- e. Preparing the methodological specifications to be used for completing the diaries for children and for persons aged 15 years and over;
- f. Sample selection for the TUS pilot survey;
- g. Carrying out a pilot survey in five Romanian counties in order to collect the data and test the diaries for adults and children and the list of activities;
- h. Analysing the test results (TUS pilot survey data) and the reports made by experts involved in the project at county level;
- i. Elaborating a proposal for a new age limit for TUS target population, including a new age limit for children;
- j. Elaborating a final project proposal for one or two diaries for children (after the field testing) and the diary for persons aged 15 years and over;
- k. Elaborating a final project proposal for the new list of activities and coding system for the whole target population (including children);
- 1. Elaborating the final proposal for the methodological specifications to be used to fill in the TUS diary by persons aged 3 years and over.

During the implementation of the Grant, the project manager oversaw and co-ordinated the project activities by:

- Establishing project team members;
- Organising the project team by setting a detailed calendar of the activities and by establishing responsibilities for every member of the team;
- Assessing the project progress through regular meetings with the project team members:
- Assessing the interim deliverables (Annexes 1 to 3) and final deliverables (Annexes 4-6) to be sent to Eurostat;
- Monitoring compliance with the deadlines;
- Monitoring of the calculation of the amount of time spent on the project;
- Monitoring the deadlines according to contractual terms;
- Monitoring the preparation of the methodological report.

The NIS team members communicated with the county experts prior to the lauch of the field activities by providing answers and clarifications regarding the survey methodology.



Throughout data collection, activities in the field and diary coding activities the NIS team provided support (help-desk) to the county experts.

a. Studying the best practices for carrying out the Time Use Survey and the latest publications on the time use elaborated by international organizations or statistical offices in other countries

Taking into account the general and specific objectives of the project described in point 2, the Grant project team at the NIS headquarters has studied the following materials regarding TUS methodology and implementation of TUS in other countries:

- Guidelines for Harmonizing Time-Use Surveys, Eurostat, 2008;
- Guidelines for Harmonizing Time-Use Surveys prepared by the Task Force on Time-Use Surveys presented at the Conference of European Statisticians in 2013, Geneva, October 2013 by United Nations Economic Commission for Europe;
- The documents and the reports elaborated by the eight Pilot Groups presented at Eurostat Working Group, "TIME USE SURVEY" Luxembourg, 13-14 January 2016;
- International Classifications of Activities for Time Use Statistics 2016 (ICATUS 2016) elaborated by United Nations Statistics Division;
- Measuring young people's time-use in the UK Millennium Cohort Study: A mixed-mode time diary approach elaborated by Centre for Longitudinal Studies UCL Institute of Education, UK, 2015 available online at the following address: https://www.google.ro/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=OahUKEwjg95LggcPXAhXGXBoKHderDqkQFggsMAA&url=http%3A%2F%2Fwww.cls.ioe.ac.uk%2Fshared%2Fget-
 - $\frac{file.ashx\%3Fid\%3D3098\%26itemtype\%3Ddocument\&usg=AOvVaw3CVWuOZ1eyUrTFwn6Bynzb;$
- Comparison of results from light diaries and full-scale diaries in the Finnish time use survey, Statistics Finland, 2012;
- Children's time use and family structure in Italy by Letizia Mencarini, Silvia Pasqua and Agnese Romiti;
- American Time Use Survey (ATUS) methodology: ATUS guide, ATUS questionnaire, ATUS activity classification scheme (including examples);
- General Social Survey on Time Use, 2015 Canada available information on the official Canada Statistics website at the following address: http://www23.statcan.gc.ca/imdb/p3Instr.pl?Function=assembleInstr&lang=en&Item_Id=217656;
- Children and parents: media use and attitudes report, Research document, October, 2014 elaborated by Ofcom UK;
- Time use in daily activities of working class children from 9 to 12 years of age article available online at the following address: https://www.revistas.usp.br/rto/article/viewFile/89617/101714;
- Survey on Time Use and Leisure Activities 2016 elaborated by Statistics Bureau Ministry of Internal Affairs and Communications Japan.



The documentation activities aimed at identifying the best practices for including children aged under 10 years old in TUS survey. Also, the aim was to study the experience of other countries on TUS surveys made on samples of children aged under 10 years.

According to the Eurostat Working Group presentations, the only EU countries that included in TUS children aged under 10 years old are Italy (includes children from the age of 3 years) and United Kingdom (includes children from the age of 8 years).

The project team has identified good practices for the light diaries for children in TUS - Japan and the UK. In both versions information has been collected only as it regards the main activity. In Japan, information has been collected only on the large categories of activities. In UK a web application has been used, to allow the collection of more detailed information on the children's activities. While the UK has opted for intervals of 10 minutes, in Japan the time frame have been a quarter of an hour. In both cases, no information has been collected as regards the use of smart devices.

In Romania the TUS survey has been carried out using printed diaries (PAPI), so that for the tested light diary it was opted for a model derived from the example of the two countries. A light diary has been designed (for one of the diary days), to collect information regarding only the main activity, at 15 minutes intervals. The activities preprinted in the diary complied with the new list of activities developed during the project.

b. Analysing the national legislation on the implementation of direct interviews with children

The national legislation on children's rights was identified and analysed in order to analyse the possibility of including children in the TUS statistical survey.

Therefore, the Grant TUS project team, together with an expert from the Legal and Contentious Department of NIS, identified and analysed the following legislative acts:

- Civil Code;
- Law no. 272/2004 on the protection and promotion of the children's rights with regard to the procedures for hearing of minors.

The conjunction of art. 501 paragraph (2), art. 503 paragraph (2) of the Civil Code with art. 28 paragraph (2) of the Law no. 272/2004 shows that until the age of 14, the parents answer in the name of their children, and after the age of 14 children can answer for themselves, with the consent of their parents.

Taking into consideration the national legislation, in order to carry out the pilot survey, a priority was to obtain the consent of one of the parents or of the legal guardian, as follows:

- **for children aged 3-7:** the consent of the parent / legal guardian was requested, that he/she himself/herself (parent/legal guardian) would fill in the child's diary or to allow another adult supervising the child to fill in the TUS diary on behalf of the child;
- **for children aged 8-14:** the consent of the parent / legal guardian was requested to allow the child to fill in the TUS diary for children within this age group.



c. Elaborating the list of specific activities and codes for children aged under 15 years and revising the activity list for persons aged 15 years and over

For the elaboration of the list of activities and the methodological specifications for the codification of the main and secondary activities included in the activity diaries, the TUS project team considered the following:

- what are the specific activities of young children of pre-school age?
- what are the activities that children aged 3-7 years can participate in as an adult's companion? In other words, it was intended to identify those activities carried out by parents or other adults that can take place while they are supervising a child, and the child accompanies the parent without performing itself an activity specific to his/her age or the scope of the activity does not involve the child.
- what are the specific activities of the 8-14 age group?
- what household administrative activities can children perform in each age group?
- what activities carried out by children are common with those already in the list of activities in HETUS 2008?
- for which activities do children use new technologies? For which activities do persons aged 15 years and over use smart-devices?
- what activities can be performed using the Internet (online)?
- how do people spend nowadays their time compared to the 2008-2010 period?
- are there other "places" where people can spend time compared to the 2008-2010 period?
- how some of the activities have evolved?
- how can breaks during school hours be identified?
- what further explanations or examples can be added, considering the past experience?

Last but not least, a list of activities and a coding system were developed to ensure, as much as possible, comparability of the data that will be obtained in the future from TUS with the other TUS surveys carried out in the past.

Among the specific activities the following were identified: pre-school and school education, specific games for young children outdoor, at home or in education units, malls, etc., educational activities.

The main changes to the list of activities were the following:

Section 1. "EMPLOYMENT":

For work-related activities, the United Nations Statistics Division (UNSD) recommendations included in the International Classification of Activities for Time Use Statistics 2016 (ICATUS 2016) on the better separation of type of work, depending on the type of unit or the way of working were considered:

- enterprise, corporation, institution, public, private or non-profit organization (code 111);
- family business, individual enterprise or authorized natural person (code 112);
- **self-employment activities:** day labourers, activities carried out based on verbal agreements, family help (code 113);



- agricultural company or cooperative (code 114);
- **non-agricultural cooperative** (code 115).

In elaborating the work-related activities, the national legislation regarding the professional status was analysed:

- Law no. 36/1991 regarding on agricultural holdings and other forms of association in agriculture;
- Law no. 566/2004 regarding agricultural cooperative;
- Law no. 52/2011 on the exercise of some occasional activities by the day-labourers;
- Law no. 1/2005 on the organization and functioning of the co-operation;

Emergency Ordinance no. 44/2008 on the conduct of economic activities by authorized natural persons, individual enterprises and family businesses

Two other new codes have been introduced:

- code 116 "Short breaks at work in main and second job"- in order to better highlight and identify the actual working time and to differentiate between payed and un-payed breaks:
- code 119 "Working time in main or second job unspecified".

Section 2. "STUDY"

New activity codes have been introduced:

- code 209 "Unspecified activities related to time spent at nursery and kindergarten";
- code 213 "Breaks during school or university timetables"- useful, for example, for students who work and study to differentiate between work breaks and study breaks;
- code 219 "Other activities related to study".

A specific section for pre-school children has been added - code 23 "NURSERY OR KINDERGARTEN", with two specific activities introduced:

- code 231 "Recreational or educational activities" for specific compulsory educational and child development activities during nursery or kindergarten time, but also for extracurricular activities, play within the educational institution
- code 232 "Meal break".

Section 3. "HOUSEHOLD AND FAMILY CARE"

A new code has been added - code 385 "Child accompanying other person". The code was added in order to determine the scope of the activity for the young children, but also for the adult, in particular the parent. It goes further than identifying the other person who is present for a certain activity, showing the time spent by the child included in activities that are not directly involving him/her.

Section 4. "Voluntary work and meetings"

Additions were made regarding the definition of organisational work, following the specification in the national legislation regarding volunteer work: Law no. 78/2014 regulating volunteering in Romania and Government Ordinance no. 26/2000 on associations and foundations.



In contrast to ICATUS, where volunteer work included, for example out—of—pocket expenses to cover living expenses incurred for the activity, in Romania volunteers are not payed for these kind of activity, but the organisation for which they volunteer purchase these services directly on the basis of a services contract (for example living arrangements for activities that need traveling, are purchased and payed directly by the organisation and the volunteer is not provided with a sum for these expenses).

Section 5. "SOCIAL LIFE AND ENTERTAINMENT"

Code 514 "Telephone conversation" – has been changed with "Audio and video conversations".

Two new codes have been introduced:

- code 515 "Conversations by phone messaging";
- code 526 "Other visits for tourism".

The new coding was added in order to distinguish between the types of interactions in socialising, in particular to highlight the time spent connecting with others by audio or video instant interaction and by text or audio messages (that don't involve the use of an Internet connection) where it is not expected an instant reply.

Section 7. "HOBBIES AND COMPUTING"

Two additional codes have been introduced:

- code 714 "Making handmade products" introduced as we identified a surge in these type of activities among people used as self development and
- code 724 "Time spent on social networks" introduced in order to separate personal communication through social networks or instant messaging from communicating personal thoughts, without expectance of instant reply, on social networks such as Facebook, Twitter, blogs etc.

The names and rules for inclusion of two codes have been modified, as follows:

- code 722 "Information by computing" has been changed to "Information by computing or other smart device";
- code 723 "Communication by computing" has been changed to "Communication by computing using the Internet".

The list of activities designed for testing within the pilot survey carried out for the project is presented in **Annex 1**.



Also, a short list of activities was designed to be included in a light diary used for the 8-14 years of age group of children.

MAIN AND SECO	ONDARY ACTIVITY	ACTIVITY CODE
	Sleeping and resting (including lying sick in bed)	011
Sleep and personal care	Eating (breakfast, lunch, dinner, a snack, etc)	021
personal care	Bathing, showering, dressing, etc.	031
	At school, at kindergarten	20
School,	Break	213
homework and education	Homework	212
	Extracurricular activities and private lessons	221
Activities for money and products	Help given to the family at agricultural work, or distribution of flyers, acting in advertisements, movies (paid in money or in kind) and other	113
	Housekeeping (making the bed, sorting toys, clothes, books)	321
Housekeeping and caring for	Laundry and ironing clothes (including using the washing machine, hanging out, putting away dry clothes)	33 (331 and 332)
other persons	Taking care of other person in the household (siblings or other children)	381
	Caring for pets	342 and 343 and 344
Religious activities	In church, places of worship, listening the service on the radio, watching the service on TV, reading a prayer, etc.	432
Cultural activities and tourism	Movie theatres, stage theatres, concerts, museum, zoo, dolphinarium, visiting a monastery, a library, sights, etc.	52 (521-529)
Physical exercises and sports	Running, playing ball, tennis, skating, swimming, biking, training at a sporting club or a gym, dance, other.	61
Shopping and services	Going to a supermarket, commercial centre or other stores, alone, with the parents, friends or other persons to buy clothes, food or other objects; going to the doctor, hairdresser and other purchases.	36
Time spent socialising with family and friends	Socialising / conversations with the family or friends; visiting or being visited; parties, anniversaries or funerals, etc.	51 (511, 512, 513, 519)



MAIN AND SECO	ACTIVITY CODE		
Tuorral	Travel by bus, van, metro, airplane, etc.	31	
Travel (including to	Travel by car (including friends' or family), by taxi	24	
school)	Travel by bicycle or on foot	21 and 22	
	Audio and video conversations on mobile or fixed networks and the Internet (Skype, WhatsApp, Facebook, etc.)	514	
	Conversations by phone messaging (only written messages sent through phone networks - SMS)	515	
	Written conversations using the Internet (e-mail, instant messaging - Facebook, WhatsApp, IMessage, etc.).	723	
Internet, TV and digital media	Spending time on the Internet, on social networks without talking to other people, updating personal social networking pages (Facebook, Instagram, Snapchat, etc.)	724	
	Spending time on the internet looking for information (without the time spent on social media networks)	722	
	Listening to music, radio, podcasts, other audio content and devices	831	
	Playing games and other electronic applications	73	
	Looking at TV, DVD/BluRay, streaming media (YouTube and other websites), video-on-demand (Netflix)	821	
Hobbies and	Doing nothing, relaxing, bored, waiting	531	
other ways of spending free	Hobbies, arts and crafts, musical activities, writing stories, etc.	71	
time	Reading (not for school)	811 and 812	
Any other activity	Other unlisted activities	998	



d. Elaborating the two project diaries for children by age group

In order to decide the minimum age limit for which information on time use shall be collected, the following were considered:

- legal provisions on interviewing children in the TUS survey (described in the Report under chapter 4.2, paragraph b);
- the National Education Law (Law no. 1 of 2011) on the age at which children can have access to early childhood education and pre-school education and the age at which children can start school;
- Labour Code on the age at which a person acquires the work capacity and can have access to the labour market.

After analysing the legislation, it emerged that parents or the legal guardian should agree that their children to fill in the diary.

From a different perspective, a person has the legal capacity to work from the age of 16, but with the consent of his/her parents or legal guardian a work contract can be concluded starting from the age of 15.

From the point of view of acquiring writing and comprehension skills, the vast majority of children know to write and read after graduating first grade in primary school at the age of 7. However, most likely after graduating the second grade, around the age of 8, children could be able to fill in a diary.

In view of this analysis, it was decided to design two diaries for children aged under 15 years:

- a diary for children aged 3 to 7 years the diary was filled in using proxy (by one of the parents or the legal guardian, or with their written consent, the diary have been filled in by another adult(s) who supervised the child on the day selected to fill in the diary);
- a diary for children aged 8 to 14 years filled in by children themselves, after the written consent of one of the parents or of the legal guardian has been obtained.

The written consent of the parents/ legal guardian has been obtained for each child on the front page of each diary.

Also, to fully test the list of activities and the methodological specifications, **a diary for persons aged 15 years and over** has been designed, being filled in by each person (15 years and over) in the household.

For an accurate accomplishment of the pilot survey and for ensuring the integrity of the collected data, the Grant TUS project team designed, also, a household questionnaire in which a minimum number of information has been collected.

In order to meet the project objectives and to identify the best solutions for designing the diaries for each target group in the population, each diary included two versions (one for the first day and the other one for the second day).

Therefore, for **children aged 3-7 years** and for **persons aged 15 years and over** (diaries that had to be filled in by adults or children aged 15 years and over) on the first day of the journal,



the information on the use of computer, laptop, tablet or other devices had to be filled in using codes already written in the questionnaire, and on the second day the respondents had to tick the device used.

The diary designed for **children aged 8-14** included a long version for the first day of the diary, and for the second day a light version has been designed. With the light version of the diary the information collected was only about one of the activities, and the activities were grouped and pre-printed on the diary. Information was collected for 15 minutes, and the time interval was 6:00-23:00 for design reasons and considering that during the interval 23:00-6:00 most children in this age group are sleeping. To make the diary more attractive, emoticons have been used.

All diaries included, also, the questions recommended by HETUS 2008 to be included in the diaries, namely: when was the data collected, the time when started the first activity filled in the diary and the time when the last activity filled in the diary has been finished, how was the day of the diary, if the respondent made a trip during the day of the diary and the distance he/she travelled, as well as new questions about the most enjoyable activity, the most unpleasant activity or the most stressful activity.

The diaries designed and tested for the pilot survey can be found in **Annex 3.**

e. Preparing the methodological specifications to be used for filling in the diaries for children and persons aged 15 years and over

The methodological specifications (Methodological Notes on the 2017 Pilot Survey on Time Use) can be found in **Annex 2**.

In the methodological specifications, the main changes to the list of activities referred to the following:

Section 0. "PERSONAL CARE":

For each type of activity, child-specific activities and additional examples have been added. At code 021 "Eating" the example "Using narcotics" has been removed because its meaning is unclear and can not be considered as "eating" activity. As for "Using narcotics" activity Eurostat should analyse what it was intended to be included in this activity and to provide additional explanations.

Section 1. EMPLOYMENT:

For the newly introduced activities the definitions and characteristics of each type of work definitions, examples, methodological notes on the inclusion or exclusion of some new activities and explanations have been extracted and formulated from the national legislation.

Section 2. "STUDY"

The name of the section has been changed to "STUDY AND EDUCATION".

New activity codes have been introduced (codes 209 "Unspecified activities related to time spent at nursery, kindergarten", 219 "Other activities related to study" and 213 "Breaks during



school or university timetables") for which methodological specifications and examples have been developed.

At Code 211 "Classes and lectures" to regular education and distance learning, "on-line or by mail learning" was added.

Examples have been added for the whole range of school activities performed by children: afterschool, exams, contests or school olympiads, private lessons, activities performed during the week "A Different Kind of School", etc.

A section specific to pre-school children was added - code 23 "NURSERY OR KINDERGARTEN", two specific activities being introduced (code 231 "Recreational or educational activities" and code 232 "Meal break").

Also, new definitions were included and more examples were listed.

Section 3. "HOUSEHOLD AND FAMILY CARE"

The most important changes have been made to the following activities:

- code 36 "Shopping and services" - purchases made online using a computer or other smart device, including a phone, as well as purchases or services made through the phone (off-line) have been included.

A new code has been introduced - code 368 "Child accompanying other person".

Examples and definitions have been added, especially with reference to children and smart devices.

Section 4. "VOLUNTARY WORK AND MEETINGS"

> Sub-section 41. "ORGANISATIONAL WORK"

The definition has been harmonized with the United Nations Statistics Division (UNSD) definition included in ICATUS 2016, meaning that *volunteers*, although they generally do unpaid work in cash or in kind, can be paid occasionally minor amounts as a reward or may receive minor material benefits or occasional benefits (e.g. on holidays, on the anniversary of the organization for which the voluntary work is done, on volunteer's day). Examples of volunteer activities have been added.

> Sub-section 43. ", PARTICIPATORY ACTIVITIES"

At Code 431 "Meetings" specific activities for pupils or students were added.

Section 5. "SOCIAL LIFE AND ENTERTAINMENT"

> Subsection 51. "SOCIAL LIFE"

The main changes were the following:

- code 511 "Socialising with family" examples for children have been added;
- code 514 "Telephone conversation" the title has been changed to "Audio and video conversations" to include both conversations made using landline or mobile networks and conversations made using the Internet. Also, the definition has been changed, additional rules and notes were introduced for a correct allocation of some activities and more examples were listed;
- a new code has been introduced: code 515 "Conversations by phone messaging" and methodological specifications were developed.



Sub-section 52. "ENTERTAINMENT AND CULTURE"

A new code has been introduced: code 526 - "Other visits for tourism" to capture all the activities with touristic purpose performed by the respondents.

Section 6. "SPORTS AND OUTDOOR ACTIVITIES"

Several examples have been provided, in particular for codes: 616 "Water sports" and 619 "Other or unspecified sports or outdoor activities".

Section 7. "HOBBIES AND COMPUTING"

> Sub-section 71. "ARTS AND HOBBIES"

The additional code have been introduced: 714 "Making hand-made products" and distinct specifications have been formulated to differentiate this code from the code 333 "Making handicrafts, fabrics, crocheted or knitted (hand-made) items".

> Sub-section 72. "COMPUTING"

The names and rules for inclusion of the two codes have been modified, as follows:

- code 722 "Information by computer" has been changed to "Information by computer or other smart-device"
- code 723 "Communication by computing" has been changed to "Communication using the Internet".

The code 724 "Time spent on social networks" was added. The purpose of the code 724 "Time spent on social networks" was to make possible to distinguish socialising activity from the activities included under the codes 722 "Information by computer and other smart-device" or 723 "Communication using the Internet".

➤ Sub-section 73. "GAMES"

- Additional specifications have been provided for a better delimitation of parlour games from solo games;
- The name and inclusion rules for the code 733 have been changed "Computer games" to "Games on computer, tablet, mobile phone, console, other smart-device".

Section 8. "MASS MEDIA"

In this section were added the activities performed on-line and those for which smart-devices are used.

Section 9. "TRAVEL AND UNSPECIFIED TIME USE"

To code 920 it has been added "Travel to the school/university (campus)".

USE OF A DEVICE

A system consisting of 6 codes was used for coding the devices.

Two types of journal mode of registering of devices used were tested in the TUS pilot (Annex 3). In one day of the journal the person filled in the type of device used by writing the corresponding device code, the codes for the devices were presented at the bottom of every



journal page. In the other day of the journal, the person checked the box corresponding to the column for each device used.

LOCATION AND TRANSPORT MODE

The main changes were the following:

- to code 13 it has been added: "School, kindergarten, nursery";
- it has been added the code 18 "Malls";
- code 22 "Travelling by bicycle" the scope of inclusion has been changed, as meaning that to include, also, other vehicles actuated by pedals.

In the process of developing the Methodological specifications on filling in the activities, all notes were reviewed and new notes were introduced. Also, more examples have been added to almost all activities.

f. Sample selection for the TUS pilot survey

To carry out the pilot survey, the project team analysed the data on household structure by age groups, obtained after carrying out the selective households statistical surveys, such as: Statistics on Income and Living Conditions (SILC Survey) or Population Access to Information and Communication Technology (ICT Survey).

To identify the children in the age groups concerned, a sample of dwellings has been selected out of the dwellings that have participated in household surveys over the past years.

Therefore, at the time of sampling extraction it was estimated that 130 dwellings had to be selected for the pilot survey (with 10 dwellings more than in the Grant agreement) and in the selected dwellings should be identified about 60 children in the age group 3-7 years, over 100 children in the age group 8-14 years and nearly 300 persons aged 15 years and over.

The data analysed indicated that the same number of dwellings cannot be included in each county, because not enough children aged 3-7 years, 7-15 years respectively, would be identified in each of the 5 counties.

Thus, the distribution of the dwellings included in the sample and their estimated component, according to the age group of the household members, was the following:

	Number of	Number of persons identified at previous selective surveys					
County	dwellings	by age group:					
		3-7 years	8-14 years	15 years and over			
Constanta	44	20	37	104			
Iasi	40	15	41	93			
Olt	17	8	11	38			
Sibiu	6	4	2	12			
Salaj	23	15	25	51			
Total	130	62	116	298			



Usually, in Romania, for participating in the TUS survey, the households receive an incentive consisting of a small amount of money. The pilot survey has been carried out by voluntary participation of the households, without any material reward or gifts of a small value.

g. Carrying out a pilot survey in five Romanian counties in order to collect the data and test the diaries for adults and children and the list of activities

The pilot survey was carried out in the 5 counties included in the project (Constanța, Iași, Olt, Sibiu and Sălaj), during 15-25 June 2017. The data was collected by 2 experts, members of the Grant project team, and civil servants of the Territorial Statistical Directorates. The statistical experts from the Territorial Statistical Directorates were persons experienced in the coordination of household surveys and some of these experts have also participated in the other TUS surveys carried out in Romania in 2008 and even in TUS survey in 2000.

Within the pilot survey at the level of each county that participated in the Grant project, the following activities have been performed:

- Activity 1 Data collection during 15-25 June 2017;
- Activity 2 Checking and coding the Household questionnaires (CG) and Individual Diaries (JIAC);
- Activity 3 Elaborating the Technical Report and the Progress Report;
- Activity 4 Submitting to NIS the filled in questionnaires and the Progress Report.

Activity 1 – Data collection

Prior to the period settled for data collection, the project teams in the counties studied the methodology and asked for some additional explanations on the methodological aspects or the activities to be carried out in the counties.

One week before the data collection, the experts carried out the **first visit** to the dwellings included in the sample. Each expert chose the most appropriate time interval to find as many household members as possible in the dwelling. The purpose of these visits was to inform the household members that they have been selected to participate in the pilot survey and to provide them with a letter on the objectives of the TUS pilot survey (Annex 3). At the same time, during this visit, the household questionnaire has been filled in, the diaries specific to each household member and age group of which he/she is part were handed over, and for children under the age of 15 years the written consent of a parent or legal guardian (on the front page of each journal) was obtained. In the absence of the parent / legal guardian at the first visit, the consent was given at the moment when the parent come back home (on the diaries left to the households) before the diaries was handed over to the children.

During the first visit the two days of the diary were settled. Due to the fact it was a pilot survey, the days of the diary have not been extracted during the sampling period in order to avoid a greater number of refusals. These days were settled with each household, but it was taken into account that in a county the days of the diary should be allocated as uniformly as possible during all working days (Monday to Friday) and during the two days of weekend. For half of the dwellings in each sample (in each county) it was established that the **first day**



of the diary shall be a working day and the second day of the diary shall be a weekend day and for the other half of the dwellings the algorithm was inverse: the first day of the diary shall be a weekend day and the second day of the diary shall be a working day. Thus, it was intended to test each type of diary, both on working days and on non-working days (weekend days).

Also, during the first visit, the project team experts explained to the household members how to fill in the diaries and they indicated that each diary includes one example on how to fill it in. In particular, children (aged 8-14 years) were explained how to fill in the diaries and that they would need to fill in two types of diaries, the light version requesting the activities carried out every 15 minutes. Children were advised to ask for explanations or help from the adults in the household if they are not sure they understood exactly how to fill in, but they will have to fill in by themselves the activities and not to ask for help from their parents to decide which activities to fill in the diaries. If the children were not in households at the time of the visit, the expert explained to the adults how the children would have to fill in and they were asked to provide help.

During the second visit the experts have taken over the diaries from each household. This visit was made after the week of the diaries.

Activity 2 - Checking and coding the Household questionnaires (CG) and Individual Diaries (JIAC)

Within this activity, the following were considered:

- During the second visit to the household it was checked the integrity of the diaries, in comparison with the household component registered during the first visit, so it was checked whether each person aged 3 years and over had a filled in diary;
- It was checked whether on each journal for persons aged under 15 years there is the written consent of the parent/ guardian. In case the diaries were filled-in, but the written consent (the parent/ legal guardian signature) was missing, the experts requested the consent before taking the diaries. In cases where the consent was not obtained, the diaries should have not been taken from the households;
- The activities recorded in the individual diaries were checked and coded using the Methodological specifications developed by the NIS project team;
- When coding the activities in the diary, the following rules were considered:
 - 1. Separation of secondary activities from the main ones, an activity being generally defined using a single verb;
 - 2. If two separate activities were recorded in the main activity, both the main and the secondary activities were coded according to the methodological specifications or a logical inference;
 - 3. All methodological difficulties encountered by each expert during the checking and coding process were registered;
 - 4. During the coding process the experts had to identify also other activities and methodological specifications that could be added to the TUS methodology, to improve and complete it;



- 5. **For children aged under 15 years**, analyses and statistics have been made on the results obtained, afterward they have been included in the Technical Report.
- Each expert has checked and coded the diaries and questionnaires collected from half of the dwellings from which the data was collected.

Activity 3 - Elaborating the Technical Report and the Progress Report

Each expert involved in data collection elaborated a Technical Report according to a uniform structure developed by the project leader and the NIS project team.

The main aspects related to the fieldwork undertaken for the pilot survey revealed in the technical reports were as follows:

- Refusals to participate in the TUS pilot survey were generated by the activities in the diaries that require registration of activities over very short periods of time (10 minutes. Respondents have mentioned that they cannot perform their daily activities "carrying the clock in the hand", "keeping an eye on the clock" to fill in the diaries.
- In more than 60% cases, most experts have reported in the reports that more than two visits were made to households to increase the response rate.
- Experts mentioned the most important difficulties encountered in coding the data and for which activities more methodological specifications and examples are needed.
- It was proposed the use of code 999 "Other unspecified time use" if no answer has been filled in to one or more questions regarding "the most enjoyable activity", "the most unpleasant activity" or "the most stressful activity" on the day of the diary.

Regarding the filling in of the diaries, among the issues mentioned by the project teams in the Territorial Statistical Directorates, the main aspects were the following:

- All project teams in the counties specified that respondents mistakenly recorded the main activity and the second activity during the visits (512) and the lunch break (121) and they have come to the conclusion that maintaining this rule hinders the data entry process and requires many corrections.
- It was specified that the respondents who live as a couple and children mentioned that they do not sleep alone, so there are numerous registration errors.
- The light version of the diary is hard to follow and the main and secondary activities cannot be separated (two activities were often ticked in the light logs for the same time). The long version is more appropriate for recording activities.
- The light version of the diary (with intervals every 15 minutes) will make impossible to correlate the activities between the household members. The same situation also occurs when diaries are filled in by the household members at different times (for example, a person is filling in the diary on the day of the diary and another person in the same household is filling in the diary one or two days after the day of the diary).
- Elderly persons, especially those with poor eyesight, refuse to fill in the diaries.

The experts in the Territorial Statistical Directorates considered that the TUS survey is particularly complex as regards both the respondents and the organization, carrying out, collecting, coding and data validation. It was appreciated that, to increase the response rate, each diary/ questionnaire that has been filled in should be paid.



Activity 4 - Submitting to NIS the filled in questionnaires and the Progress Report

- The paper questionnaires grouped by centres and dwellings have been sent by special courier mail to the NIS project team.
- The Progress Report of each expert has been sent by special courier mail and electronic mail, to the project manager.

h. Analysing the test results (TUS pilot survey data) and the reports made by experts involved in the project at county level

In order to perform the data analysis, the reports prepared by the expert teams at county level were taken into consideration. Also, the NIS project team centralized in excel files the data collected, making possible a detailed analysis on how the data were filled in, by age and age groups.

Of the 130 dwellings in the TUS pilot survey, 126 were permanent dwellings and 4 were holiday dwellings, which were excluded from the pilot survey.

Household participation in the TUS pilot survey is presented in the table below:

County	Number of	Number of		Permanent (main) dwellings						
	dwellings	households	Total	Total of which: Dwellings distributed by the household						
		in		participation in the survey						
		permanent		Have	Have Contacted		Household			
		dwellings		accepted	household,	household,	is absent			
				participation	but refused	but could	for a			
				in TUS	the	not be	lengthy			
					interview	contacted	period of			
							time			
Constanța	44	43	43	35	8	-	1	1		
Iași	40	40	40	29	3	6	2	-		
Olt	17	15	15	15	-	-	ı	2		
Sibiu	6	6	6	4	2	-	-	-		
Sălaj	23	22	22	18	2	-	2	1		
Total	130	126	126	101	15	6	4	4		

The response rate of the households in the TUS pilot survey was 80.2%. In the 126 permanent dwellings, 126 households have been identified, of which 101 households agreed to participate in the TUS pilot survey.

All household members aged 3 years and over participated in the pilot survey, except children under the age of 14 years, whose parents refused their participation in the survey (there were 3 cases of parents who did not signed the consent by which children in the age group 8-14 years could have participated in the TUS pilot survey and had to complete the individual diaries).



The distribution of the population aged 3 years and over by age group for which data were collected in the TUS pilot survey is presented in the following table:

County	Number of persons aged 3 years and over	Number of persons registered in the TUS pilot survey, by age group:					
		3-7 years	15 years and over				
Constanța	117	14	24	79			
Iași	105	8	19	78			
Olt	50	5	9	36			
Sibiu	30	9	13	8			
Sălaj	46	2	2	42			
Total	348	38	67	243			

The objectives set out in the Grant agreement were to ensure the collection of a minimum 50 sets of diaries for each age group. If for children in the age group 8-14 years and for persons aged 15 years and over the objective has been reached, for children in the age group 3-7 years this objective could not be achieved. This risk was mentioned in the Grant agreement (see point e - Arrangements for monitoring/ supervision of operation and any risks involved in its implementation, page 18 of the Grant agreement No 07141.2016.001-2016.775).

➤ Data analysis in diaries of children aged 3-7 years

In the pilot survey, for children aged 3-7 the diaries have been filled in by adults. Therefore, from this point of view, only a quarter of the diaries have been filled in on the day of the diary (most of them at the end of the day of the diary). More than half of the children's diaries aged 3-7 years have been filled in the next day or few days after the day of the diary, but during the reference week. The situation was similar in all the counties that participated in the pilot survey and in both days of the diary (working day or weekend day).

The distribution of children aged 3-7 years by the time of filling in the diaries in the two days of the diary and by the age of children, is as follows:

Age of	Number	Weekday in the diary				Weekend day in the diary				
the	of	(Monday–Friday)					(Sunday-Saturday)			
children	children	The diary has been filled in			T	The diary has been filled in				
(years)	aged	During At the		The next	More	During	At the	The next	More	
	3-7	the day	end of	day after	than	the day	end of	day after	than	
	years	of the	the day	the day	one day	of the	the day	the day	one day	
		diary	of the	of the	after	diary	of the	of the	after	
			diary	diary	the day		diary	diary	the day	
					of the				of the	
					diary				diary	
3 years	6	1	-	4	2	-	ı	4	2	
4 years	4	ı	2	1	1	1	1	2	1	
5 years	12	1	3	7	2	-	3	6	3	
6 years	10	2	1	6	1	ı	2	7	1	
7 years	6	1	2	3	1	-	2	3	1	
Total	38	3	7	21	7	1	8	22	7	

From the point of view of the answers to questions regarding the starting time of the first activity in the day of the diary, respectively the finishing time of the last activity in the day of the diary these have been filled in correctly.



In Romania the school year ends on 15 June. Due to the data collection period, 89% (34 out of the 38 children) answered that it was a holiday or a free day to the question "What kind of day was the day of the diary for your child?", so the impact of this question cannot be assessed.

To the question "What was the most stressful activity the child did?" in 36 out of the 38 diaries the answer was not completed, therefore the question is not relevant to such young children and the project team proposed to remove this question in the final version of the diary specific to children aged 3-7 years.

The most pleasant activities mentioned by children in this age group were those covered in the GAMES category (code 73), which are mentioned by 36.8% (14 children) in the first day of the diary, respectively 34.2% (13 children) on the second day of the diary.

In almost half of the diaries for children aged 3-7 years no answer regarding "the most unpleasant activity performed" was filled in, and among the diaries providing the answer to this question 33.3% (6 out of 18 children) mentioned that "Sleep" (code 011) was the most unpleasant activity and 33.3% mentioned that "Eating" (code 021) or "Dressing" (code 031) were the most unpleasant activities. In the light of the testing results, we propose that the question regarding the most unpleasant activity should not be included in the diaries intended for children aged under 7 years.

As regards the question "How would you appreciate, in general, the day of the diary?" 92% of the children appreciated the first day of the diary as being very pleasant or pleasant (in the case of the first day of the diary) and 100% of the children (in the case of the second day of the diary).

➤ Data analysis in diaries of children aged 8-14 years

During the pilot survey, children aged 8-14 years were required to fill in the TUS diaries with their written consent of the parents/ legal guardian. Methodology recommends that children should ask for their parents help if they feel they would need some clarifications, but children were also asked to fill in the diaries themselves. However, only 43% of the diaries were filled in directly by the children. Most diaries were filled in by the mother (for 31 out of the 67 children who participated in the pilot survey) and only in some situations the diaries were filled in by the father or one of the grandparents.

The proxy interview was, however, accepted with the aim of reducing the refusal rate.

Although 56 out of the 67 children who filled in the diaries for children aged 8-14 years have mentioned that the diaries are difficult to fill in and that they would prefer the light version; from the point of view of using the light diary compared to the detailed diary, it was noted that in both diaries children often tried to wrote exactly the kind of activities they did. Thus, in the light diary, in many cases, children ticked several activities within the same timeframe and even underlined with a ball-point pen the exact activity they were doing, among of the pre-printed activities in the diary.

Another challenge of the light diaries would be that during the data coding phase and the code entry using the IT application, the statistical staff involved in these activities should decide what are the main and the secondary activities if children have ticked several simultaneous activities. These decisions will generate a different distribution of activities into main and



secondary activities, differences that will be obvious from one county to another (from one region to another) and in the case of the European TUS survey from one country to another, and the data comparability of data would be distorted.

Having in view the data analysis, the light version has revealed numerous shortcomings, in the diaries the activities were grouped, this fact raises problems in aggregating the data and implies a separate analysis of the results for this segment of the population.

The light diaries cannot be designed for all time frames (in the case of paper printed diaries).

In the regular version of the diary, children understood how to fill in and were able to mention both main and secondary activities.

As an age group of interest for recording activity and communication online, the results show a good use of the codes regarding these activities, the activities filled in by children giving sufficient details to use different codes introduced in this section.

Thus, we propose that TUS 2020 survey to use a regular diary for children aged 8-14 years and not a light version of the diary.

Regarding the questions added in the diaries, the data analysis process revealed that for children aged 8-14 years most errors occurred for the two questions regarding "the time when the first activity in the day of the diary started" and respectively "the time when the last activity in the day of the diary ended". About 10% of the answers to this question were wrong.

For the first day of the diary, 46.3% of children (31 out of 67 children aged 8-14 years) and for the second day of the diary 62.7% (42 children) have filled in the diaries the next day. Also, 5 children (7.4%) have filled in the diaries after two or more days, but during the reference week.

As regards the specifying "the most enjoyable", "the most unpleasant" or "the most stressful" activity, children aged 8-14 years can answer these questions, any problems have been identified in the pilot survey, and we consider that the questions can be included in the diaries of children in this age group.

➤ Data analysis in diaries of persons aged 15 years and over

Generally, persons aged 15 years and over have easily filled in the diaries. However, mistakes regarding the recording of "the time when the first activity in the day of the diary started" and "the time when the last activity in the day of the diary ended" were observed. Thus, "the time when the first activity in the first day of the diary started" 10.3% - on the first day of the diary and 8.6% on the second day of the diary, specified the wrong time or did not answer this question. As regards "the time when the last activity in the day of the diary ended" the respondents recorded wrong answers (6.2%) - on the first day of the diary and 5.8% on the second day of the diary.

The pilot survey revealed that both persons aged 15 years and children prefer the questionnaires in which the activities carried out using smart-devices are pre-printed and can be ticked as the activities are recorded in the diary.



With regard to the time of filling in the diaries, more than half of the respondents have filled in the diaries the next day or more than one day after the day of the diary (56.0% - in the case of the first day of the diary and 56.4% in the case of the second day of the diary). About half of the persons aged 15 years and over have considered that the diaries are difficult to be filled in

In many diaries can be found inconsistencies between household members regarding the answers to the question "Have you been alone or together with someone you know?" the answers often being mismatched. This situation was encountered both in the TUS pilot survey and in the TUS survey carried out in Romania in 2011-2012. Most likely the mismatch occurs when the household members fill in the diaries at different times (for the same day of the diary), some persons fill in the diary on the day of the diary, other household members fill in the diary the next day or after several days.

In conclusion, the pilot survey highlighted that respondents can fill in the diaries and they have clearly expressed their preference on how these diaries should be designed. During the coding process were identified some activities that required methodological explanations accompanied by example of coding and assigning. Overall, we consider that the pilot survey has achieved its purpose and the designed methodology could be used for coding the activities in TUS 2020. Based on these conclusions, the diaries, the list of activities and the methodological specifications of coding the main and secondary activities have been finalized.

i. Elaborating a proposal for a new age limit for TUS target population, including a new age limit for children

After analysing the results of the pilot survey, it appears that the <u>minimum age limit</u> at which children can participate directly in the TUS survey is 8 years. However, due to the legal provisions on children's rights, we consider that the proxy interview should be accepted for children aged 8-14 years, maintaining the recommendation that children themselves should fill in the diary with the consent of their parents / legal guardian.

Diaries for children aged 3-7 years can be filled in by parents/ legal guardian or other persons supervising the children (with the consent of the parents/ legal guardian), but the data should be analysed separately, for the following reasons:

- in the case of the dwelling samples where all household members participated in the survey, the children's diaries aged 3-7 years may be filled in with delays;
- children can be supervised by more than one person during the same day (at kindergarten by an educator or teacher, at home by a baby-sitter or grandparents, in the evening and in the morning by parents), which may lead to a sub-registration of some activities.



j. Elaborating a final project proposal for one or two diaries for children (after the field testing) and the diary for persons aged 15 years and over

The achievement of children diaries was based on the pilot survey results. Thus, the project team decided that three types of diaries should be designed for each age group (3-7 years, 8-14 years and 15 years and over).

It is highly desirable that these age groups should use separate diaries, for the following reasons:

- for young children aged 3-6 years, diaries must be filled in by adults, because at this age group the diary is hard to understand by these children, and most of them do not know to read and write;
- it is necessary to get the consent of the parent/legal guardian to obtain the information covered in the diary, and the agreement can be taken directly on the first page of the diary (as in our proposal of diary);
- the wording of questions must be indirect (questions have to be addressed to adults with reference to children aged 3-6 years);
- even if not too much information about secondary activity will be collected, the secondary activity can still be collected using the diary;
- when designing the diaries for children in age group 8-14 years, various emotions or other drawings that make the diary more attractive can be used;
- for the age group 8-14 years, parents'/ legal guardian' consent is required for participating in the survey, and this consent can be taken directly on the diary;
- some questions included at the end of each day of the diary should be specific to each age group, for example, the question "How was the day of the diary" cannot refer to the workplace in case of children; for children aged 3-7 years it is not recommended the question about "the most stressful activity"; also, for children aged under 15 years it is difficult to understand the questions regarding the time when started the activity performed at 4 a.m. on the day of the diary and, respectively, the time when ended the activity performed at 4 a.m., the next day when finalizing the completion of the diary;
- developing specific diaries for persons aged 15 years and over, for a better connection to weekly diaries for persons in employment.

Implementation of TUS for the age group 3-7 years at European level shall take into account that data for this age group will provide only a general idea of the time spent by young children, the data being often provided by several persons supervising the child during the day, or in the case of older children, aged 5-6 years, the children report to adults who completes the diary how they spent their time and one cannot be sure of the duration of the activities.

However, we recommend that the TUS should be implemented for children starting from the age of 8 years and not earlier.

For children aged 8-14 years we do not suggest the light version of the diary. During the testing it was noticed that, although this version should have been more attractive, there were numerous errors in recording the activities. Many of the children have ticked with the pen on the pre-printed page the exact activity they performed from the group of activities enumerated in the diary. Very often children have ticked multiple activities in the same tick-box (during



the same timeframe). It is difficult to design (at least in a paper version) a light version comprising 24 hours.

From a different perspective, using a light version with a smaller number of activities will make difficult the data analysis, while the mapping can only be achieved by 2 digits of activity codes and in some cases only by first digit.

Testing the extensive diary version has shown that children can complete the activities they perform. However, in the case of the pilot survey in Romania, many diaries were filled-in by adults in the name of the children, so we propose to accept the completion of the diaries using proxy.

The set of diaries proposed for the three age groups can be found in Annex 6.

k. Elaborating a final project proposal for the new list of activities and coding system for the whole target population (including children)

The tested list of activities was appropriate for the purpose of the TUS. After the testing, slight modifications have been made comparing with the tested list:

- to the code 113 has been added "family worker";
- the name of the activity under code 34 has been changed to "GARDENING AND ANIMAL CARE" "pet care" restricts the category although it includes caring for domestic animals, when the activity only benefits the persons' own household;
- the name of the activity under code 349 has been changed to "Other or unspecified gardening and animal care":
- the name of the activity under code 399 has been changed to "Help to a non dependent adult household member without disabilities".

The final proposal for the New List of Activities and Coding System for the target population (persons aged 3 years and over) are presented in Annex 4.

1. Elaborating the final proposal for the methodological specifications to be used to fill in the TUS diary by persons aged 3 years and over

The methodology for coding the activities served largely to the pilot survey purpose. Taking into account some activities written in the pilot survey diaries, as well as some proposals of the expert teams from the 5 Territorial Statistical Directorates participating in the TUS Grant project, some improvements were made to the proposed methodology.

The main changes to the methodological specifications were as follows:

Section 1. EMPLOYMENT:

To each code (111, 112, 113, 114, 115 and 119) it was added the specification that the aim of primary or secondary activity is to obtain revenues in cash or in kind.

Section 2. "STUDY AND EDUCATION"

An example was added for the 212 Homework code, "reading a book" as part of the



homework (such as reading a novel which is mandatory for study), in order to differentiate from the leisure reading included in code 812 Reading books

Section 3. "HOUSEHOLD AND FAMILY CARE"

- The last point in the "Note" has been complemented, meaning that the aid for revenues in cash or in kind is assigned at 1. "EMPLOYMENT";
- An example has been added to code 329 (Brought water in the household, without specifying the purpose). This activity is especially characteristic to rural areas, where some households are lacking running water;
- The name of the activity 34 "GARDENING AND PET CARE" has been changed to "GARDENING AND ANIMALS CARE", to capture the care of any animal raised in the population households;
- The definition used for code 36. "SHOPPING AND SERVICES" has been complemented;
- An example has been added to code 371 "Household management": "services supplied by television, telephone providers, etc., including services provided on-line or by telephone".

Section 4 "VOLUNTARY WORK AND MEETINGS" – although we would have liked to include examples of remuneration with minor amounts of the volunteers to cover some expenses, such as accommodation or meals during the volunteering activity, the TUS project team has abandoned this idea, because in Romania the national legislation does not allow the provision of such remunerations. Thus, each Member State should adapt the definition to its national legislation.

An example has been added to code 411: "courses of any type, offered by volunteer teachers".

Section 6 "SPORTS AND OUTDOOR ACTIVITIES"

Several examples have been added to code 619: "playing at home, in the yard", "playing in the park", "playing outdoors", "playing in the sand, in the park or at the beach", following some activities included in the pilot diaries, especially for children play.

Section 9 "TRAVEL AND UNSPECIFIED TIME USE"

A specification regarding travel code 920 Travel related to study was added regarding the person journey to the education unit that should be included in this code, while the travels of adults accompanying children to the education unit (at kindergarten, school, etc.) are included in 938 Travel related to childcare.

LOCATION

- A few examples were added for location code 19 Other specified location (not travelling) as the county experts suggested the need for more specification for some locations.
- Location code 22 was amended with "or other means of transport with pedals", while traveling with vehicles actuated by pedals for water transport is not included.

USE OF THE INTERNET

The previous coding of internet use with "01" was change with the thick of the box in the diary



The final version of the proposed methodology for completing and coding the TUS 2020 activities is presented in Annex 5. Also, in Annex 7 was included a comparison of the methodological specifications between HETUS 2008 and the Specifications on coding the TUS activities designed for the Grant project.

5. Conclusion

For the project team in Romania, the Grant project provided a good opportunity to analyse the possibility of developing a new TUS and broadening its scope by including also in the survey scope the population aged under 10 years. Inclusion of new activities in relation to the development of new technology and new habits in social life is of utmost necessity and will most probably outline the change in the population behaviour, especially in the young population. At the same time, the project allowed the revision of the existing methodology and the inclusion of new examples to support the staff involved in coding activities.

We consider that some unitary decisions are still to be taken at European level as regards some aspects of the coding rules for certain activities, such as: 121 Lunch break or 512 Visiting and receiving visitors (that become secondary activities in case of other simultaneous activities). Coding these as secondary activities, according to the old methodology, generates a great deal of effort because almost all respondents recorded the two activities (Lunch break and Visiting) on the "Main activity" column, which requires automatic corrections on the database. From a different point of view, it should be decided whether other activities (e.g. breaks during school time) could be treated too, or which is considered the main activity and which is considered the secondary activity if the children accompany their parents for certain tasks (e.g. the child going with his/her mother to pay the bills or for shopping, talking with each other on their way to the shop).

Also, for the question "Have you been alone or together with someone you know?" the European methodology provides that for the "sleep" activity it is considered that each respondent is "alone". As regards the couples, the two partners always fill in the answer they are sleeping together, the same situation being recorded in children who sleep with their parents or siblings. We suggest that this rule should be reviewed and to accept that the population perceives that "sleep" is done with another person. We consider that the revision of the present rule will not affect the data analysis, nor its comparability with the old data series. Having in view the complexity of the TUS survey, in order to increase the response rate, each person who fill in the individual diaries should be paid.

Also, for the 2020 TUS survey, we propose that specifications regarding the calculation of main indicators should be made available to the member states, as well as a method for weighting the survey results that includes the distribution per diary day.

Regarding the schedule time, clear rules should be discussed and established at European level regarding the treatment of the "lunch breaks", considering that in Romania (probably in other countries) there are various situations: some employees have official lunch breaks (a set period of time) established through the work contract with the condition that there are 8 hours worked per day (the break is additional to the 8 hours per day work program) and other



employees have no lunch break officially established by the employer and the breaks are not either continuous or of a certain length (40 hours worked are compulsory per week). Thus, unitary methods for calculating work related indicators should be set at European level (including or excluding the breaks).

The results of the Grant project indicated that the Time Use Survey could be implemented starting with the age of 8 years. Under this age, the results could only indicate the general aspects on how children use time. While our proposal is that TUS should be implemented for population aged 8 years and over, we included our findings and proposals for the 3 to 7 age group for consideration if a lower age limit will be proposed at European level.

It is still a challenge for Romania to implement this survey as a web survey and this aspect will depend on a large extent on the funding subsequently available allocated to NIS.

NIS team consider that the TUS survey should be supported by an European regulation specific to this sample survey and that the reference year of the survey should be the same for all Member States, so that the results would allow a better data comparability.



ANNEXES