



REPUBLIC OF SLOVENIA
STATISTICAL OFFICE

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Preparatory work to revise the harmonized European Time Use survey for the implementation in the round 2020

- Methodological report -

Slovenia

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1 Study of existing literature

Standard grant application form 2016: Detailed study of existing literature especially from international organisation. Furthermore detailed study of available literature (national questionnaires and guidelines) and outputs from 2010 wave available in web pages with main intention if it is possible to make questionnaire simple and user friendly. Special attention will be paid to diaries and the critical analyses of activity code list and other classifications used. One of the premises here is the contradictory between very detailed questioning and robust outputs on high levels of classifications.

The starting point was the evaluation of the data collection methods and questionnaires used for the Time Use Survey in the 2010 round in some selected countries with the questionnaire and methods used in Slovenia in 2000 round. For this purpose we started with the very useful and quality methodological guidelines prepared by the UNECE (Guidelines for Harmonizing Time-Use Surveys, 2013) which gave us broader insight in the survey objectives. Further methodological recommendations we found in 'Harmonised European time use surveys' guidelines prepared by Eurostat (2008).

1.1 LTUS diaries in different countries

As one of our primary goal was to decide between light and a full version of survey we put special attention on comparison between the two versions. As we found out that a light diary has many advantages in comparison to a full diary, we compared light versions of diaries in eight different countries:

- Serbia (conducted in 2015)
http://www.stat.gov.rs/WebSite/repository/documents/00/02/33/08/TUS2016_engleski.pdf;
- Ireland (conducted in 2005)
<https://www.ucd.ie/t4cms/TimeUse2005%20Report.pdf>;
- Sweden (conducted in 2010/2011)
statswiki.unece.org/download/attachments/102039716/Sweden_attachment_A_comparison_of_non_response_and_time_use.docx;
- United Kingdom (conducted in 2005)
https://www.timeuse.org/sites/ctur/files/public/ctur_report/4965/gatenby_2003_light_vs_heavy.pdf;
- Japan (conducted in 2016)
<http://www.stat.go.jp/english/data/shakai/2016/pdf/gua.pdf>;
- Finland (conducted in 2010) – we got printed version of a light diary when we were on study visit;
- Slovakia (conducted in 2006)
http://timeuse-2009.nsms.ox.ac.uk/information/studies/data/downloads/slovak-republic/2006/isi_erika.pdf;

- Netherlands (conducted in 2011/2012)
https://www.scp.nl/english/Publications/Publications_by_year/Publications_2013/Using_smartphones_in_survey_research_a_multifunctional_tool.

Characteristics of LTUS diaries in different countries

Diary	Serbia	Ireland	Sweden	UK	Japan	Finland	Slovakia	Netherlands
Who completes diary	each household member aged 15+	each household member aged 18+	each household member aged 15-84	1 household member aged 16+	each household member aged 10+	1 household member aged 25-64	each household member aged 10+	persons living in the Netherlands aged 16 +, in private households
Data collection mode	paper, web and app (android)	paper	paper	with interviewer	paper, web	paper	paper?	app
Number of diary days	2 days (1 weekday, 1 weekend day)	2 days (1 weekday, 1 weekend day)	2 days (1 weekday, 1 weekend day)	1 day	2 days	1 day	1 day?	2 days (1 weekday, 1 weekend day)
Secondary activity	no	yes	no	yes	no	no	yes	yes
Time period	10 minutes	15 minutes	10 minutes	10 minutes	15 minutes	10 minutes	10 minutes	10 minutes
Location	yes	yes	no	yes	no	no	yes	yes
Transport mode	yes	no	no	yes	no	no	yes	yes (only own/public)
Who with	no	yes	no	no	yes	yes	yes	yes
Today/previous day	today	today	today	previous day	today?	today	?	today
Purpose of travel	no	no	no	yes	no	no	yes	no
Use of computer, internet (e.g. for shopping)	no	yes	no	yes	yes	no	yes	yes

We tried to classify all HETUS activities to the activity codes of light diaries. We repeated the coding process twice, as we would like to found out if we will code HETUS activities twice in the same way or in the different light codes. Activities that were coded different are written in red. It is possible that respondents won't know how to classify these activities.

Serbia

LTUS activity codes 2015			HETUS 2008		
			Report 'Time Use in the Republic of Serbia, 2010 and 2015'	Coding 1	Coding 2
Personal care	1	Sleep	011, 012	011	011
	2	Washing and dressing	031, 039	031	031
	3	Rest	531, 023	531	531
Eating, drinking	4	Eating, drinking (at home or out of home)	021, 022	021	021
Housework and other household activities	5	Cooking, baking, preparing meals	311, 312	311	311
	6	Cleaning and tidying	321, 322, 323, 324, 329	321, 322	312, 321
	7	Clothes washing, ironing, sewing	331, 332, 333, 339	331, 332, 333, 339	331, 332
	8	Maintenance house, odd jobs, gardening, pet care and help to other household	300, 341, 343, 344, 349, 351, 352, 353, 354, 359, 371, 421, 422, 429	341, 343, 344, 349, 351, 352, 353, 359, 371	341, 343, 344, 349, 351, 352, 353, 354, 359
Travel	9	Travel to/from work	910	910	910
	10	Other travel	900, 920, 936, 938, 939, 940, 950, 960, 980	920, 936, 938, 939, 940, 950, 960, 980, 900	920, 936, 938, 939, 940, 950, 960, 980, 900
Work	11	Paid work	111, 121, 129	111, 121, 129	111
	12	Agricultural activities	342	342	
Education and	13	Study, courses, other	200, 211, 212, 221	200, 211, 212, 221	200, 211, 212, 221

courses		education			
Child and adult care	14	Care of own minor children	381, 382, 383, 384, 388, 389	381, 382, 383, 384, 389	381, 382, 383, 384, 389
	15	Care of others	391, 392, 399, 423, 424, 425	391, 392, 399	391, 392
Shopping and services	16	Shopping and services	361, 362, 363, 369	361, 362, 363, 369	361, 362, 363, 369
Free time	17	TV and radio	821, 831	821, 831	821, 831
	18	Social life and entertainment	511, 512, 513, 514, 519, 521, 522, 523, 524, 525, 529	511, 512, 513, 514, 519, 521, 522, 523, 524, 525, 529	511, 512, 513, 514, 519, 521, 522, 523, 529
	19	Reading	811, 812, 819	811, 812, 819	811, 812, 819
	20	Hobbies and computing	711, 712, 713, 719, 721, 722, 723, 729, 731, 732, 733, 739	711, 712, 713, 719, 721, 722, 723, 729, 731, 732, 733, 739	711, 712, 719, 721, 722, 723, 729, 731, 732, 733, 739
	21	Sports and outdoors activities	611, 612, 613, 614, 615, 616, 619, 621, 631	611, 612, 613, 614, 615, 616, 619, 621, 631	611, 612, 613, 614, 615, 616, 619, 631
Other activities	22	Other activities	411, 431, 432, 439, 995, 998, 999	012, 039, 300, 312, 323, 324, 329, 354, 411, 421, 422, 423, 424, 425, 429, 431, 432, 439, 995, 998, 999	012, 039, 121, 129, 300, 322, 323, 324, 329, 333, 339, 342, 371, 399, 411, 421, 422, 423, 424, 425, 429, 431, 432, 439, 524, 525, 621, 713, 995, 998, 999

Problematic HETUS activities (coded differently):

- 121: Lunch break;
- 129: Other or unspecified activities related to employment;
- 312: Dish washing;
- 322: Cleaning garden;
- 333: Handicraft and producing textiles;
- 339: Other or unspecified making and care for textiles;
- 342: Tending domestic animals;

- 354: Vehicle maintenance;
- 371: Household management;
- 399: Help to a non-dependent adult household member;
- 524: Library;
- 525: Sports events;
- 621: Productive exercise (e.g. hunting, fishing, picking berries, mushrooms or herbs);
- 713: Correspondence.

‘Lunch break’ could be coded as ‘paid work’ or as ‘eating, drinking’. ‘Dish washing’ could be coded as ‘cooking, baking, preparing meals’, ‘cleaning and tidying’ or as ‘other activities’. ‘Cleaning garden’: is this ‘cleaning and tidying’ or ‘maintenance house, odd jobs, gardening, pet care and help to other household’? ‘Tending domestic animals’: in Slovenia, there are a lot of hobby farmers; how to code this activity? ‘Vehicle maintenance’ could be coded as ‘maintenance house, odd jobs, gardening, pet care and help to other household’ or as ‘other activities’ – the same applies for ‘household management’. ‘Sick in bed’ could maybe be coded as ‘rest’.

Category ‘maintenance house, odd jobs, gardening, pet care and help to other household’ include a lot of activities. It is not the best option to combine ‘pet care’ and ‘help to other household’ in the same category as both categories are important for National Accounts. Category ‘Care of others’: who are ‘others’; a dependent adult household member, a non-dependent adult household member, an adult of another household? Does category ‘Care of own minor children’ include also activity ‘care of own children living in another household’?

Ireland

LTUS activity codes 2005			HETUS 2008	
			Coding 1	Coding 2
PERSONAL CARE/RESTING	1	SLEEPING	011	011
	2	RESTING/RELAXING doing nothing, 'time out'	531	531
	3	PERSONAL CARE washing, dressing, toilet	031	031
	4	EATING/DRINKING/HAVING A MEAL	021	021
TRAVEL	5	TRAVEL including travel to and from work as well as leisure and domestic travel	910, 920, 936, 938, 939, 940, 950, 960, 980, 900	910, 920, 936, 938, 939, 940, 950, 960, 980, 900
PAID EMPLOYMENT OR STUDY	6	PAID EMPLOYMENT include paid and unpaid overtime, work from home, self-employment and farm work. Exclude lunch and other breaks.	111	111
	7	STUDY, EDUCATION include courses, night classes, studying at home. Exclude lunch and other	200, 211, 212	200, 211, 212, 221

		breaks.		
	8	BREAKS FROM WORK OR STUDY include tea/coffee, smoking and lunch breaks.	121	121
HOUSEWORK AND OTHER HOUSEHOLD TASKS	9	COOKING & preparing food (including making lunches), washing-up	311, 312	311, 312
	10	CLEANING the house, doing the laundry, ironing, hoovering, tidying up	321, 331, 332	321, 331, 332
	11	HOUSE REPAIRS & maintenance, DIY, gardening	341, 351, 352, 353, 354, 359	341, 351, 352, 353, 354, 359
SHOPPING AND APPOINTMENTS	12	SHOPPING, MESSAGES/ERRANDS & APPOINTMENTS shopping for food or leisure, services e.g. hairdressers, visiting doctor, paying bills	361, 362, 363, 369	361, 362, 363, 369
CARING FOR OTHERS	13	CHILDCARE looking after children, physical care, supervision	381	381
	14	PLAYING AND TALKING WITH CHILDREN include reading, games, helping with homework, accompanying children to activities	382, 383, 384	382, 383, 384
	15	CARING FOR ADULTS with special needs or elderly persons, either in your home or elsewhere (e.g. help with personal care)	391, 392	391, 392
VOLUNTARY AND RELIGIOUS ACTIVITY	16	VOLUNTARY ACTIVITY for a charitable organisation, sports club or other organisation, include meetings & informal helping outside the home	411	411, 421, 422, 431
	17	RELIGIOUS ACTIVITY Attending religious services, prayer	432	432
SOCIALISING AND GOING OUT	18	SPENDING TIME/CHATTING WITH FAMILY, FRIENDS, NEIGHBOURS including spouse	511, 512	511, 512
	19	PHONING/TEXTING FAMILY, FRIENDS, NEIGHBOURS include writing a letter	514, 713	514
	20	EATING OUT/GOING TO THE PUB include going to cafes, bars, restaurants, nightclubs		
	21	GOING OUT to concerts, theatre, cinema, galleries, sporting events, bookies, bingo	521, 522, 523, 525, 529	521, 522, 523, 525, 529
SPORTS & LEISURE	22	PLAYING SPORTS, EXERCISE AND OUTDOOR ACTIVITY including playing football, walking the dog, going to the park	344, 611, 612, 613, 614, 615, 616, 619, 631	344, 611, 612, 613, 614, 615, 616, 619, 631
	23	COMPUTER/INTERNET FOR PERSONAL USE e.g. play station, x-box, surfing the net, email, using	721, 722, 723, 729, 733	721, 722, 723, 729, 733

		computer for leisure, shopping		
	24	HOBBIES AND OTHER LEISURE ACTIVITIES e.g. playing musical instruments, playing cards, other games	711, 712, 731, 732, 739	711, 712, 713, 719, 731, 732, 739
TV, RADIO, READING	25	WATCHING TV and videos/DVDs	821	821
	26	READING a book, magazine or newspaper or LISTENING to radio or music	811, 812, 819, 831	811, 812, 819, 831
Undefined	/ /		012, 039, 129, 221, 300, 322, 323, 324, 329, 333, 339, 342, 343, 349, 371, 389, 399, 421, 422, 423, 424, 425, 429, 431, 439, 513, 519, 524, 621, 719, 995, 998, 999	012, 039, 129, 300, 322, 323, 324, 329, 333, 339, 342, 343, 349, 371, 389, 399, 423, 424, 425, 429, 439, 513, 519, 524, 621, 995, 998, 999

Problematic HETUS activities (coded differently):

- 221: Free time study;
- 421: Construction and repairs as help;
- 422: Help in employment and farming;
- 431: Meetings;
- 713: Correspondence;
- 719: Other or unspecified hobbies.

Is 'free time study' included in 'paid employment or study'? What is included in DIY (category 'House repairs & maintenance, DIY, gardening') – only male DIY (e.g. making furniture) or also female DIY (e.g. making soap)? In HETUS is 'walking the dog' classified as 'gardening and pet care' (household and family care); in this version of a light diary is 'walking the dog' classified as 'sports & leisure'. Category 'Caring for adults with special needs or elderly persons, either in your home or elsewhere (e.g. help with personal care)' is not the best option for National accounts – they need separate activities for household members and for another household; there is also a dilemma as activity 16 include 'informal helping outside the home'. 'Childcare' and 'playing and talking with children': only own children or also help another household with childcare? It is not the best option to combine reading and listening to the radio (category 'reading a book, magazine or newspaper or listening to radio or music') as reading a book is most often primary activity while listening to the radio is often secondary activity. Does activity 'eating out/going to the pub' has sense? Respondent could be eating out also as lunch breaks in paid employment or he could go for a lunch alone (this is not socialising); on the other hand, it is not defined a location for 'spending time/chatting with family, friends, neighbours' – what if they have lunch/dinner at home?

Sweden

LTUS activity codes 2010/2011			HETUS 2008	
			Coding 1	Coding 2
Personal needs	Sleep, rest	1	011, 531	011, 531
	Personal care, dressing	2	031	031
	Eating (at home)	3		
	Eating (at a restaurant etc.)	4		
	Meals and breaks at work or school	5	121	121
Travel	Travel	6	910, 920, 936, 939, 940, 950, 960, 980, 900	910, 920, 936, 939, 940, 950, 960, 980, 900
Domestic work, household upkeep	Cooking, baking	7	311	311
	Shopping etc.	8	361	361
	Cleaning, dishwashing etc.	9	312, 321	312, 321
	Laundry, ironing etc.	10	331, 332	331, 332
	Repairing, maintenance (dwelling, vehicle)	11	351, 352, 353, 354, 359	351, 352, 353, 354, 359
	Gardening, pet care etc.	12	341, 342, 343	341, 343, 349
Care	Child care (own) incl. transportation	13	381, 382, 384, 389, 938	381, 382, 384, 389, 938
	Care of other adults in own household	14	391, 392	391, 392
	Care of other households, voluntary work	15	411	411, 421, 422, 424, 425, 429
Employment (paid work)	Employment (paid work)	16		
	Employment (paid work) if at home	17		
Study	Education, study	18	211	
	Education, study if at home	19	212	
Free time	Playing with children	20	383	383
	TV, radio	21	821, 831	821, 831
	Socialising, conversation (phone)	22	514	511, 514
	Reading	23	811, 812, 819	811, 812, 819
	Hobbies, games (incl. computer)	24	711, 712, 721, 722, 729, 731, 732, 733, 739	711, 712, 713, 719, 721, 722, 723, 729, 731, 732, 733, 739
	Visiting friends	25		512
	Sports, exercise	26	615, 616	612, 613, 614, 615, 616, 619, 631
	Recreational walks, outdoor activities	27		611
	Cinema, theatre, concerts and sports	28	521, 522, 523, 525, 529	521, 522, 523, 525, 529
	Meetings (religious, political, other)	29	431	431,

Other	Other	30	012, 021, 039, 111, 129, 200, 221, 300, 322, 323, 324, 329, 333, 339, 344, 349, 362, 363, 369, 371, 399, 421, 422, 423, 424, 425, 429, 432, 439, 511, 512, 513, 519, 524, 611, 612, 613, 614, 619, 621, 631, 713, 719, 723, 995, 998, 999	012, 021, 039, 111, 129, 200, 211, 212, 221, 300, 322, 323, 324, 329, 333, 339, 342, 344, 362, 363, 369, 371, 399, 423, 432, 439, 513, 519, 524, 621, 995, 998, 999
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Problematic HETUS activities (coded differently):

- 211: Classes and lectures;
- 212: Homework;
- 342: Tending domestic animals;
- 349: Other or unspecified gardening and pet care;
- 421: Construction and repairs as help;
- 422: Help in employment and farming;
- 424: Other childcare as help to another household;
- 425: Help to an adult of another household;
- 429: Other or unspecified informal help to another household;
- 511: Socialising with family;
- 512: Visiting and receiving visitors;
- 611: Walking and hiking;
- 612: Jogging and running;
- 613: Cycling, skiing and skating;
- 614: Ball games;
- 619: Other or unspecified sports or outdoor activities.

We could use variable 'location' instead of separated activities for 'eating' (at home/at a restaurant), 'employment' and 'education'. There is no sense for three separate activities for eating – at home, at a restaurant, and at work/school; respondent could be confused if he went for a lunch in a restaurant during paid employment. Does activity 'care of other adults in own households' include also 'help to a non-dependent adult household member'? Is it correct to classify religious activities (e.g. visiting church) as 'meetings'? Does category 'socialising, conversation' include also socialising with family at home? There is category 'visiting friends' – is receiving visitors included in this category? It is not the best option to include computing in category 'hobbies, games' – does this category include also programming, information by computing and communication by computing? What is included in 'recreational walks, outdoor activities'; also jogging, running, cycling ...?

United Kingdom

LTUS activity codes 2005			HETUS 2008	
			Coding 1	Coding 2
Personal care	1	Sleeping, resting	011, 531	011, 531
	2	Washing, dressing/undressing, etc.	031	031
Eating, drinking	3	Eating or drinking/ having a meal (at home or away from home)	021	021
Housework and other household tasks	4	Preparing food and drinks; cooking; washing up	311, 312	311, 312
	5	Cleaning, tidying house	321	321
	6	Washing, ironing or mending clothes etc.	331, 332, 339	331, 332
	7	Maintenance of house, DIY, gardening	341, 351, 352	341, 351, 352, 353
Travel	8	Pet care	343	343
	9	Travelling	910, 920, 936, 938, 939, 940, 950, 960, 980, 900	910, 920, 936, 938, 939, 940, 950, 960, 980, 900
	9a	How you travelled (enter letter - see right page)		
	9b	Purpose of journey (enter letter - see right page)		
Paid work	10	Work for job outside home (ordinary working arrangements)		
	11	Work for job at home (ordinary working arrangements)		
	12	Additional work for job (overtime, work brought home etc.)		
Education and courses	13	Formal education	211, 212	211
	14	Recreational courses and study	221	221
Voluntary work	15	Voluntary work for or on behalf of an organisation or charity	411	411
Caring for children and adults	16	Caring for/ looking after and playing with own children	381, 382, 383, 384, 389	381, 382, 383, 384, 389
	17	Caring for/looking after other children	424	424
	18	Helping or caring for adults who live with you	391, 392, 399	391, 392, 399
	19	Helping or caring for other adults who don't live with you (not as voluntary or paid work)	421, 422, 423, 425, 429	425
Shopping and appointments	20	Shopping, banking, post-office	361	361, 362
	21	Appointments with the doctor, dentist, hairdresser, DSS plumber, etc.		363

Leisure	22	Watching TV and videos/DVDs, listening to radio or music	821, 831	821, 831
	23	Reading	811, 812, 819	811, 812, 819
	24	Playing sports, exercising	611, 612, 613, 614, 615, 616, 619	611, 612, 613, 614, 615, 616, 619, 631
	25	Visiting/going out with friends, family, neighbours		
	26	Spending time with friends, family, neighbours at your home		
	27	Contact with friends and family by telephone, email, or letter	514	514, 713, 723
	28	Visits to cinema, theatre, concerts, sporting events, museums, galleries, historical monuments, library etc.	521, 522, 523, 524, 525, 529	521, 522, 523, 524, 525, 529
	29	Attending church, temple, mosque, synagogue, or other religious meetings, praying alone, attending political or other meetings	431, 432, 439	431, 432, 439
	30	Hobbies and other leisure activities	711, 712, 719	711, 712, 719
Computer and internet use	31	Accessing the internet/emailing (see note below 32)		
	32	Using a computer (not internet)	721, 722, 723, 729, 733, 739	
		31 & 32: Internet and computer use to be coded as secondary activity only. Code what they were using computer for as main activity (see right hand page).		
Other	33	Other activities not listed (please write in below)	012, 039, 111, 121, 129, 200, 300, 322, 323, 324, 329, 333, 342, 344, 349, 353 , 354, 359, 362, 363 , 369, 371, 511, 512, 513, 519, 621, 631, 713 , 731, 732, 995, 998, 999	012, 039, 111, 121, 129, 200, 212 , 300, 322, 323, 324, 329, 333, 339 , 342, 344, 349, 354, 359, 369, 371, 421, 422, 423, 429 , 511, 512, 513, 519, 621, 721, 722, 729 , 731, 732, 733, 739 , 995, 998, 999

Problematic HETUS activities (coded differently):

- 212: Homework;
- 339: Other or unspecified making and care for textiles;
- 353: Making, repairing and maintaining equipment;
- 362: Commercial and administrative services;

- 363: Personal services;
- 421: Construction and repairs as help;
- 422: Help in employment and farming;
- 423: Care of own children living in another household;
- 429: Other or unspecified informal help to another household;
- 631: Sports-related activities;
- 713: Correspondence;
- 721: Computing — programming;
- 722: Information by computing;
- 723: Communication by computing;
- 729: Other or unspecified computing;
- 733: Computer games;
- 739: Other or unspecified games.

Is it important to separate work for job and additional work for a job (overtime)? Is it 'homework' included in category 'formal education' or not? Activity 'caring for/looking after and playing with own children' – does include also care of own children living in another household? What means 'not as voluntary or paid work' in activity 19 (helping or caring for other adults who don't live with you) – 'informal help to other households' (HETUS: 42) is not included? Category 'visiting/going out with friends, family, neighbours' includes visiting; what about 'receiving visitors'? It is not the best option to code computer and internet use only as a secondary activity.

Japan

LTUS activity codes 2016		HETUS 2008	
		Coding 1	Coding 2
1	Sleep	011	011
2	Personal care	031, 039	031, 039
3	Meals	021	021
4	Commuting to and from school or work	910, 920	910, 920
5	Work	111	111, 129
6	Schoolwork	211, 212	211, 212
7	Housework	311, 312, 321, 322, 323, 324, 329, 331, 332, 339, 341, 342, 343, 344, 351, 352, 353, 354, 359, 371	300, 311, 312, 321, 322, 323, 324, 329, 331, 332, 351, 352, 353, 354, 359, 371
8	Caring or nursing	391, 392	391, 392
9	Child care	381, 382, 383, 384, 389	381, 382, 383, 384, 389
10	Shopping	361	361
11	Moving (excluding commuting)	936, 938, 939, 940, 950, 960, 980, 900	936, 938, 939, 940, 950, 960, 980, 900
12	Watching TV, listening to the radio, reading newspapers or magazines	811, 812, 819, 821, 831	811, 819, 821, 831
13	Rest and relaxation	531	531
14	Learning, self-education, and training (except for school work)	221	221
15	Hobbies and amusements	711, 712, 719	711, 712, 713, 719
16	Sports	611, 612, 613, 614, 615, 616, 619	611, 612, 613, 614, 615, 616, 619, 631
17	Volunteer and social activities	411	411
18	Social life	511, 512, 513	513, 519
19	Medical examination or treatment		
20	Other activities	012, 121, 129, 200, 300, 333, 349, 362, 363, 369, 399, 421, 422, 423, 424, 425, 429, 431, 432, 439, 514, 519, 521, 522, 523, 524, 525, 529, 621, 631, 713, 721, 722, 723, 729, 731, 732, 733, 739, 995, 998, 999	012, 121, 200, 333, 339, 341, 342, 343, 344, 349, 362, 363, 369, 399, 421, 422, 423, 424, 425, 429, 431, 432, 439, 511, 512, 514, 521, 522, 523, 524, 525, 529, 621, 721, 722, 723, 729, 731, 732, 733, 739, 812, 995, 998, 999

Problematic HETUS activities (coded differently):

- 129: Other or unspecified activities related to employment;
- 300: Unspecified household and family care;

- 339: Other or unspecified making and care for textiles;
- 341: Gardening;
- 342: Tending domestic animals;
- 343: Caring for pets;
- 344: Walking the dog;
- 511: Socialising with family;
- 512: Visiting and receiving visitors;
- 519: Other or unspecified social life;
- 631: Sports-related activities;
- 713: Correspondence;
- 812: Reading books.

What is included in category ‘housework’? Is activity ‘food preparation, baking and preserving’ included in category ‘housework’ or in category ‘meals’? Is activity ‘making, repairing and maintaining equipment’ (and other ‘male’ housework) included in ‘housework’ or not? How can ‘gardening’ be classified – as ‘housework’ or as ‘hobbies and amusements’ or ...? What is included in category ‘caring or nursing’ – care of a dependent adult household member, help to a non-dependent adult household member, help to an adult of another household ...? Does category ‘child care’ include only ‘care of own children’ or also ‘care of own children living in another household’ and ‘other childcare as help to another household’? What is included in category ‘social life’ – only socialising with friends or also with family? How can activity ‘cinema’ be classified – as ‘social life’ or as ‘hobbies and amusements’? What about ‘games’ – as ‘hobbies and amusements’? It is not the best option to have TV, radio and reading in the same category – ‘listening to radio’ is often secondary activity while ‘reading’ is most often primary activity. Does category ‘watching TV, listening to the radio, reading newspapers or magazines’ include also ‘reading books’?

Finland

LTUS activity codes 2010			HETUS 2008	
			Coding 1	Coding 2
Personal care	Sleeping, napping	1	011	011
	Resting	2	531	531
	Washing, dressing, sauna, personal hygiene, make-up	3	031	031
	Meals, snacks, coffee	4	021	021, 121
Gainful work and studying	Gainful work (also at home, unpaid overtime, excl. meal breaks)	5	111	111, 129
	Studying, also during free-time (e.g. homework, music lessons, courses)	6	200, 211, 212, 221	200, 211, 212, 221
Travel	Travel (to work, school, shop, gym, or the like, also on foot)	7	910, 920, 936, 938, 939, 940, 950, 960, 980, 900	910, 920, 936, 938, 939, 940, 950, 960, 980, 900

Domestic work	Cooking, preparing snacks, dish washing	8	311, 312	311, 312
	Cleaning and tidying, taking goods out, packing	9	321	321
	Home maintenance (gardening, snow clearing, heating)	10	322, 323, 341	323, 341
	Caring for textiles (laundry, ironing, handicrafts, etc.)	11	331, 332, 333, 339	331, 332, 339
	Refurbishments and repairs, construction, car service, etc.	12	351, 352, 353, 354, 359	351, 352, 353, 354, 359
	Shopping and use of services (online shopping is recorded under computing)	13	361, 362, 363, 369	361, 362, 363, 369
	Caring for and helping family's children	14	381	381
	Playing and reading with children, teaching children	15	382, 383	382, 383
	Other domestic work (helping a family member, pet care, planning)	16	343, 391, 392, 399	343, 371, 399
	Helping relatives or acquaintances (also caring for another family's children)	17	421, 422, 423, 424, 425, 429	424
Socialising	Socialising with family (only when something is not done together)	18	511	511
	Socialising with friends at home or in their home (only when something is not done together)	19	512	512
	Socialising with friends elsewhere (in the street, cafe or the like)	20		
	Phone calls and text messages during free-time	21	514	514
Participation	Activity in organisations, voluntary work, religious activity, parents' evenings, etc.	22	411, 432	411, 432
	Attending cinema, sports events, fairs, exhibitions, library, concerts, etc.	23	521, 522, 523, 524, 525, 529	521, 522, 523, 524, 525, 529
Sports and outdoor activities	Outdoor activity and walking (also with dog. Going to work on foot is recorded under travel)	24	344, 611	344, 611
	Other physical exercise hobby (jogging, gym, ball games, swimming, etc.)	25	612, 613, 614, 615, 616	612, 613, 614, 615, 616, 619
	Fishing, berry or mushroom picking, hunting	26	621	621
Computing	Computer games (incl. Play Station, X-box, Nintendo)	27	733	733
	Other computing during free-time (Internet, email, online)	28	721, 722, 723, 729	721, 722, 723, 729

	shopping, etc.)			
Media	Reading a book (excl. books related to employment or studying)	29	812	812
	Reading printed media, brochures, post, etc.	30	811, 819	811, 819
	Watching television (incl. videos, DVDs)	31	821	821
	Listening to radio or music	32	831	831
Other free-time	Other hobbies (drawing, playing an instrument, collecting, card games, etc.)	33	711, 712, 719, 731, 732	711, 712, 719, 731, 732, 739
	Sitting around, inactivity, doing nothing, smoking, etc.	34		
Other	Something else, what?	35	012, 039, 121, 129 , 300, 324, 329, 342, 349, 371 , 384, 389, 431, 439, 513, 519, 619 , 631, 713, 739 , 995, 998, 999	012, 039, 300, 322 , 324, 329, 333 , 342, 349, 384, 389, 391 , 392 , 421 , 422 , 423 , 425 , 429 , 431, 439, 513, 519, 631, 713, 995, 998, 999

Problematic HETUS activities (coded differently):

- 121: Lunch break;
- 129: Other or unspecified activities related to employment;
- 322: Cleaning garden;
- 333: Handicraft and producing textiles;
- 371: Household management;
- 391: Physical care of a dependent adult household member;
- 392: Other help to a dependent adult household member;
- 421: Construction and repairs as help;
- 422: Help in employment and farming;
- 423: Care of own children living in another household;
- 425: Help to an adult of another household;
- 429: Other or unspecified informal help to another household;
- 619: Other or unspecified sports or outdoor activities;
- 739: Other or unspecified games.

What is included in category 'Cleaning and tidying, taking goods out, packing' – also activity 'cleaning garden'? Does activity 'Playing and reading with children, teaching children' include also 'care of own children living in another household' and 'other childcare as help to another household'? How can we classify activity 'accompanying child' – as 'Caring for and helping family's children' or as 'Playing and reading with children, teaching children'? Does category 'Helping relatives or acquaintances (also caring for another family's children)' include only help to another household? What is included in category 'Other domestic work (helping a family member, pet care, planning)' – only help to a dependent household member or also help to a non-dependent household member? What is included in category 'Activity in organisations, voluntary work, religious activity, parents' evenings, etc.' – only voluntary work for or through an organisation or also informal help to other households (direct volunteering)? Socialising

with family and friends could be the same activity – it is not the best option to have two different codes if there is no possibility of secondary activity.

Slovakia

LTUS activity codes 2006			HETUS 2008	
			Coding 1	Coding 2
Personnel carrying	1	Sleeping	011	011
	2	Resting (do nothing, break, waiting)	531	531
	3	Washing, dressing etc.	031	031
Eating, drinking	4	Eating, drinking (at home or outside)	021	021
Home work	5	Preparing of food/drinks, cooking, washing up	311, 312	311, 312
	6	Cleaning, tidying house/flat	321	321
	7	Washing, ironing, mending clothes	331, 332, 339	331, 332
	8	House maintenance, DIY, gardening	341	341, 351, 352
	9	Pet keeping and care (incl. pet walking etc.)	343, 344	343, 344
Travelling	10	Travelling	910, 920, 936, 938, 939, 940, 950, 960, 980, 900	910, 920, 936, 938, 939, 940, 950, 960, 980, 900
	10a	Kind of travel (use the letter-see right page)		
	10b	Purpose of travel (use the letter-see right page)		
Payed employment	11	Employment (incl. paid or unpaid hours and work brought home. Exclude lunch and other breaks)	111	111
Break at work	11a	Breaks at work (snack, lunch, smoking break)	121	121
Education and courses	12	Formal education, school	211	211
	12a	Breaks at school		
	12b	Homework	212	212
	13	Recreational courses and informal study	221	221
Voluntary work	14	Voluntary work on behalf of an organization, charity, sports club etc.	411	411
Child care and adults care	15	Looking after/caring for own/step children, playing with them etc.	381, 382, 383, 384, 389	381, 382, 383, 384, 389
	16	Caring for/looking after other children	424	424
	17	Helping and caring of adults,	391, 392	391, 392

		who live with you at your household		
	18	Helping and caring of adults, who do not live with you at your household(not as voluntary or paid work)	425	
Shopping and visits	19	Shopping (incl. Internet), banking (Internet-banking), post-office, doctor, dentist, coiffeur, plumber etc.	361, 362, 363, 369	361, 362, 363, 369
Leisure	20	TV, video, DVD watching, radio, music listening	821, 831	821, 831
	21	Reading	811, 812, 819	811, 812, 819
	22	Playing sports, exercising	611, 612, 613, 614, 615, 616, 619	611, 612, 613, 614, 615, 616, 619, 631
	23	Spending time with friends, family, neighbours, at home or at their home	511, 512	512
	24	Visit restaurants, disco alone or with friends, family, neighbours etc.		
	25	Contact with friends and family by telephone, fax, e-mail, sms, letter etc.	514	514, 713, 723
	26	Visit to cinema, theatre, concerts, sports events, museums, galleries, library, historical monuments etc.	521, 522, 523, 524, 525, 529	521, 522, 523, 524, 525, 529
	27	Attending church, cathedral, mosque, synagogue, or other religious meetings, praying alone, attending political/other meetings	431, 432, 439	431, 432
	28	Hobbies and other leisure activities	711, 712	711, 712, 719
PC using and Internet	29	PC/Internet using or Internet access. Write down the code for Internet using, e.g. Internet-banking - line 19, playing games - line 28, e-mailing - line 25 etc.	721, 722, 729, 733	721, 722, 733
Other	30	Other activities not listed (write down with words)	012, 039, 129, 200, 300, 322, 323, 324, 329, 333, 342, 349, 351, 352, 353, 354, 359, 371, 399, 421, 422, 423, 429, 513,	012, 039, 129, 200, 300, 322, 323, 324, 329, 333, 339, 342, 349, 353, 354, 359, 371, 399, 421, 422, 423, 425, 429, 439,

			519, 621, 631, 713, 719, 723, 731, 732, 739, 995, 998, 999	511, 513, 519, 621, 729, 731, 732, 739, 995, 998, 999
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Problematic HETUS activities (coded differently):

- 339: Other or unspecified making and care for textiles;
- 351: House construction and renovation;
- 352: Repairs of dwelling;
- 425: Help to an adult of another household;
- 439: Other or unspecified participatory activities;
- 511: Socialising with family;
- 631: Sports-related activities;
- 713: Correspondence;
- 719: Other or unspecified hobbies;
- 723: Communication by computing;
- 729: Other or unspecified computing.

How can preparing for an exam be classified – as ‘homework’? What is included in DIY (category ‘House maintenance, DIY, gardening’)? ‘DIY’ is usually used for all ‘do it yourself’ things such as making furniture (HETUS activity ‘making, repairing and maintaining equipment’), making sculpture (HETUS activity ‘arts (visual, performing, literary)’), making miniatures (HETUS activity ‘other or unspecified hobbies’) etc. What does category ‘Helping and caring of adults, who live with you at your household’ include– only dependent or also non-dependent household members? How to classify activities ‘help to an adult of another household’, ‘construction and repairs as help’ etc. – it is not ‘Voluntary work on behalf of an organization, charity, sports club etc.’ (as is not help on behalf of an organization) nor ‘Helping and caring of adults, who do not live with you at your household (not as voluntary or paid work)’ (as this help is direct volunteering). What is included in category ‘Looking after/caring for own/step children, playing with them etc.’ – only children living in the household or also own children living in another household?

Netherlands

LTUS activity codes 2011/2012			HETUS 2008	
			Coding 1	Coding 2
V0100	1	Sleeping	011	011
Eating and drinking				
V0200	2	Eating and drinking at home, work or school		
V0214	3	Going out for eating and drinking		
V0300	4	Personal or medical care	031, 039	031, 039
V1000	5	Employment	111	111
Study/education				
V2100	6	School, university	211, 212	211, 212

V2200	7	Study, course as a hobby	221	221
Domestic work				
V3100	8	Cooking/food preparation	311	311
V3200	9	Household upkeep, cleaning	321	321
V3400	10	Gardening and taking care of pets	341, 343, 344, 349	341, 343
V3500	11	DIY, construction and repairs	351, 352, 353, 354, 359	351, 352, 353, 354, 359
V3700	12	Administration/paper work		371
Shopping and services				
V3610	13	Shopping/groceries	361	361
V3620	14	Services	362, 363	362, 363
Caring for/helping children and adults				
V3800	15	Caring and supervising children (of own family)	381, 382, 383, 384, 389	381, 382, 383, 384, 389
V3910	16	Helping other adults within own family	391, 392, 399	391, 392, 399
V4200	17	Helping others outside the family	421, 422, 423, 424, 425, 429	421, 422, 424, 425, 429
Social contacts				
V5100	18	Visits/having visitors, parties	512, 513	512
V5110	19	Having a talk		
V5140	20	Using the telephone	514	514
Television, radio, reading				
V8210	21	Watching television	821	821
V8300	22	Listening to radio and music	831	831
V8100	23	Reading	811, 812, 819	811, 812, 819
Computer and internet				
V7230	24	Gathering information and news via the internet	722	722
V7235	25	Online banking and online shopping		
V7240	26	Communicating through the internet (online)	723	723
V7250	27	Other pc/internet offline		
V7330	28	Computer games	733	733
(Other) leisure				
V4100	29	Voluntary work	411	411
V6000	30	Sports	611, 612, 613, 614, 615, 616, 619	611, 612, 613, 614, 615, 616, 619, 631
V5250	31	Visiting sports/competitions	525	525
V5210	32	Going out, cultural visits	522, 523	523
V5241	33	Library	524	524
V5260	34	Trips		
V7100	35	Hobby	711, 712	711, 712, 719

V7310	36	Playing games	731, 732, 739	731, 732
V5310	37	Resting	531	531
V4320	38	Religious and ceremonial activities	432	432
Travelling				
V9000_1	39	Travelling by own means/transport		
V9000_2	40	Travelling by public transport		
V9100	41	Registering time use by the smartphone		
Undefined	/ /		012, 021, 121, 129, 200, 300, 312, 322, 323, 324, 329, 331, 332, 333, 339, 342, 369, 371 , 431, 439, 511, 519, 521, 529, 621, 631 , 713, 719 , 721, 729, 910, 920, 936, 938, 939, 940, 950, 960, 980, 900, 995, 998, 999	012, 021, 121, 129, 200, 300, 312, 322, 323, 324, 329, 331, 332, 333, 339, 342, 344 , 349 , 369, 423 , 431, 439, 511, 513 , 519, 521, 522 , 529, 621, 713, 721, 729, 739 , 910, 920, 936, 938, 939, 940, 950, 960, 980, 900, 995, 998, 999

Problematic HETUS activities (coded differently):

- 344: Walking the dog;
- 349: Other or unspecified gardening and pet care;
- 371: Household management;
- 423: Care of own children living in another household;
- 513: Celebrations;
- 522: Theatre and concerts;
- 631: Sports-related activities;
- 719: Other or unspecified hobbies;
- 739: Other or unspecified games.

How can 'lunch break' in restaurant be classified – as 'Eating and drinking at home, work or school' or as 'Going out for eating and drinking'? How can 'dish washing' be classified – as 'Cooking/food preparation' or as 'Household upkeep, cleaning'? How can we classify 'cleaning garden' – as 'Household upkeep, cleaning' or as 'Gardening and taking care of pets'? In which category can we classify 'laundry' and 'ironing'? How can 'walking the dog' be classified – as 'sports' or as 'gardening and taking care of pets'? What is included in category 'DIY, construction and repairs' – only male DIY work (making furniture) or also female DIY work (making soap or sculpture)? Does category 'voluntary work' include only formal voluntary work (for or through an organisation) or also informal, direct voluntary work? How can we classify 'care of own children living in another household' – as 'Helping others outside the family'? How can 'celebrations' be classified – as 'visits/having visitors, parties' or as 'going out, cultural visits'? What does activity 'using the telephone' include – only telephone conversation or also writing text messages, using the internet, playing games etc.? Using the telephone does not

always mean that respondents have social contacts. What is included in category 'going out, cultural visits' – only museums or also a cinema and a rock concert?

1.2 The Survey of Health, Ageing and Retirement in Europe (SHARE)

During our work on grant 'Preparatory work to revise the harmonized European Time Use survey' we were invited to participate in preparation work for the seventh wave of SHARE in Slovenia. The Survey of Health, Ageing and Retirement in Europe (SHARE) is a multidisciplinary and cross-national panel database of micro data on health, socio-economic status and social and family networks. Similar to all other waves, SHARE's seventh wave collects health variables (e.g. self-reported health, physical and cognitive functioning, use of health care facilities), psychological variables (e.g. well-being, life satisfaction, control beliefs), economic variables (e.g. work activity, income, retirement behaviour, wealth and consumption), social support variables, (e.g. family and social network, family support, intergenerational transfers of money and time).

One of the topics in seventh wave was dedicated to time use of elderly population and other variables connected with this topics: how much time do the respondents devote to different activities (such as paid and unpaid work, free time, personal hygiene, education and sleeping) and how much they can rely on the help of others or how others can rely on them.

Main consideration of the preparation of survey design was the design of a light version of the diary: choosing the adequate activities with descriptions and suitable form/format of a diary. In this process we got many useful information on survey and diary design, which could be introduced in our TUS.

1.3 IATUR conference and task force group

In July 2017 we attended 39th IATUR conference in Madrid ('Time use research: past, present and future perspectives'; <http://www.iatur.org/events/detail/ecc478bb-76d3-4d3a-90be-9f4a2cd875c1>). The conference was very useful for preparatory work to revise the harmonized European Time Use survey (in the scope of Grant) and also for preparatory work to carry out the Time Use Survey in 2020. Authors of presentations have opened many consultations and intentionally or unintentionally pointed at some weaknesses, which we should have in mind while planning a time use survey.

We also joined the task force group for Innovative Tools and Sources for TUS. Slovenia is a beginner in a Time use survey (we conducted TUS only once, almost 20 years ago) and also in web surveys. We have only three surveys with web questionnaires - Consumer Opinion; Energy consumption in households; and Adult Education Survey. We probably won't be equivalent member of this task force group, but we joined to follow up the latest ideas.

Summary of Chapter 1

We compared eight light versions of diaries. We tried to classify all HETUS activities to the activity codes of light diaries. The coding process was repeated twice as to assure proper classification of activities. We found out that some activities were problematic as we coded them differently in both coding processes.

Problematic activities	Number of countries
713 - Correspondence	5
339 - Other or unspecified making and care for textiles	4
421 - Construction and repairs as help	4
422 - Help in employment and farming	4
631 - Sports-related activities	4
129 - Other or unspecified activities related to employment	3
342 - Tending domestic animals	3
371 - Household management	3
423 - Care of own children living in another household	3
425 - Help to an adult of another household	3
429 - Other or unspecified informal help to another household	3
511 - Socialising with family	3
719 - Other or unspecified hobbies	3
739 - Other or unspecified games	3
121 - Lunch break	2
212 - Homework	2
322 - Cleaning garden	2
333 - Handicraft and producing textiles	2
344 - Walking the dog	2
349 - Other or unspecified gardening and pet care	2
512 - Visiting and receiving visitors	2
619 - Other or unspecified sports or outdoor activities	2
723 - Communication by computing	2
729 - Other or unspecified computing	2

We found out that the most problematic activity is '713 - Correspondence' as it was marked as problematic in five countries. Problematic activities are also '339 - Other or unspecified making and care for textiles', '421 - Construction and repairs as help', '422 - Help in employment and farming' and '631 - Sports-related activities' – these activities were problematic in four countries.

When we are going to prepare a list of activities for a light diary we have to dedicate special attention to these activities. It is really important that activities are logical and understandable to respondents and that they know how to classify activities that they have performed.

2 User needs

Standard grant application form 2016: We are going to elaborate user needs in two ways. On the first step we will investigate internal demands for TUS data in different statistical domains especially needs of national accounts, quality of life (well-being, social conditions), transport statistics and others. Beside that we will consult the main external users of our data and we will prepare a short questionnaire to collect their needs/priorities in terms of TUS data and evaluation of their needs comparing to other statistical surveys.

2.1 Internal users

Our internal users from the department for national accounts and external users (researchers from university) have similar needs. They need information about unpaid work in households, voluntary work and unpaid work outside of households and data about education and training. Persons of age 15 or more are interesting for them. Data for all household members is wished for estimation of the value of unpaid work in households. The biggest problem for us is measuring voluntary work because department for national accounts needs an annual number of hours for voluntary work by ISCO activities. It is possible that respondents practiced voluntary work in more organisations or practiced different activities, with different ISCO codes. That means a lot of questions and we are afraid that voluntary work would get too much attention in a questionnaire.

Voluntary work:

- internal users need a number of hours for voluntary work by ISCO classification;
- ILO concept (Manual on the measurement of volunteer work) will be used to measuring volunteer work;
- internal users are not sure if they need separate data for formal and informal voluntary work and also if they need the name of the organisation, where voluntary work was done.

Unpaid work in households:

- internal users need only eight activities:
 - Household upkeep: decoration, cleaning, gardening, repairs;
 - Food management: food preparation, dish washing;
 - Making and care for textiles: laundry, ironing;
 - Help to other household members: children, adult, pet;
 - Voluntary work: help to other households; work for or through organisation;
 - Shopping;
 - Travel: related to shopping, childcare, etc.;
 - Household management.

Education and training:

- internal users need numbers of hours for education and training and years of education → we think that it is possible to get this data with SILC and LFS.

2.1.1 Estimating the level of volunteering activity in Slovenia via TUS 2020

Within the National Accounts Section of the Statistical Office of the Republic of Slovenia we would like to start estimating the level of volunteering activity for the following variables:

- No. of volunteers,
- No. of hours volunteered,
- Type of work performed (occupation),
- Institutional setting of the work (direct volunteering or via organisation),
- Industry (field of work).

As one of the purpose of the data collected is that they are internationally comparable we decided that the measurement of volunteering will be done in line with the Manual on the measurement of volunteer work issued by the International Labour Office (ILO). The manual recommends national labour force survey as an optimal tool for data collection. It was decided however that a forthcoming TUS 2020 would be most suitable tool for measuring volunteering activity in Slovenia.

As it is not decided yet if the TUS 2020 in Slovenia will be in the form of a 'light' or 'full' version we proposed that only the basic variables regarding volunteering would be measured thus enabling National Accounts Section to establish basic information on the level of volunteering activity in Slovenia.

Detailed explanation of information needed in order to estimate individual variable

The measurement of the level of the first two variables (no. of volunteers and of hours volunteered) will be done automatically based on the number of respondents with positive reply on the question on the work done that suits the definition of volunteer work in the reference period. Detailed description on the level of measurement of other variables is described below:

Type of work performed (occupation)

The questionnaire will be structured around individual activities therefore the respondent would have to cite all the activities that suit the definition of volunteer work that they performed in the reference period. The interviewer would then code each individual activity. The Manual recommends the use of the International Standard Classification of Occupations (ISCO) 2008 for the measurement of the type of work performed, namely at the level of unit group. In line with this the questionnaire would have to include 10 activities, namely:

- 0 Armed Forces Occupations
- 1 Managers

- 2 Professionals
- 3 Technicians and Associate Professionals
- 4 Clerical Support Workers
- 5 Services and Sales Workers
- 6 Skilled Agricultural, Forestry and Fishery Workers
- 7 Craft and Related Trades Workers
- 8 Plant and Machine Operators and Assemblers
- 9 Elementary Occupations

For each activity the interviewer would have to name few examples of the occupations which are most common within a single group, especially the occupations which are country specific for Slovenia (i.e. volunteer firemen, blood donation etc.).

Institutional setting of the work

Volunteering can be performed in an organised manner (via organisation) or unorganised (directly helping other individuals). This is the first level of defining institutional setting. On the second level, the nature of organisation, within which the work was done, is determined. This is crucial for the measurement of sector productivity. However, this variable is not crucial for the measurement of the level of volunteer work and could be excluded from the questionnaire in the case of the 'light version'.

Industry (field of work)

The information is needed in order to set the volunteer work performed (productivity) within suitable activity. In the case of organised volunteering the main activity is the main activity of the unit. If the work done is direct it is considered that the work is done for the household (work for own use). The Manual recommends also the use of ISIC classification. Also this variable is not crucial for the measurement of the level of volunteer work and could be excluded from the questionnaire in the case of the 'light version'.

2.1.2 Measuring of unpaid household service work

Within the National accounts section we will start to measure and value unpaid service work performed within households. Time Use Survey 2020 will be our source of data. Methodology of calculation is described in detail in 'Guide for Valuing Unpaid Household Service Work' by UNECE. The Guide contains recommendations about methodology and Time Use Survey as well. Guidelines for carrying out the survey are described in more detail within the 'Guidelines for Harmonizing Time-Use Surveys', a handbook published by UNECE.

In both Guides an exhaustive TUS with diary and description of activities is exposed as the best for valuing of unpaid household work. However its weak side is high complexity and large costs. So other less expensive and demanding versions that do not produce such quality results are also acceptable.

Recommended interval for recording of activities within diary is set to 10 minutes. Possible secondary (parallel) activities of respondents should also be recorded besides main activity. Data on time-use should also be broken down by socio-economic characteristics like gender, age (by class), income and also type of household. The information on which day the survey was carried out (working day, Saturday or Sunday) would also be useful.

For measuring unpaid household service work, activities by international classification (e.g. HETUS or ICATUS) can be used. By HETUS these activities are included within areas 3, 4 and in part also 9 (Travel and transport).

Therefore the survey results should include data on average time spent on:

- dwelling care (decoration, cleaning, upkeep, work in the garden, small repairs);
- food management (preparation and serving of meals, washing dishes);
- care for textiles (laundry, ironing, repairs);
- care for other members of household (children, adults, pets);
- voluntary work (directly and through organizations);
- shopping;
- travel and transport (for shopping, transport of children);
- household management (planning and organization of activities within household).

The above 8 activities represent the minimum for national accounts. It would also be desirable that activity 'Care for other members of household' is broken down to care for children and care for adults.

It would be also possible to use HETUS classification activities (on the 2 digit level), and include activities for 'Household and family care' (3), 'Voluntary work and meetings' (4) and in part 'Travel and unspecified time use' (9).

The handbook recommends use of ICATUS 2016 classification when it is implemented; however other classifications like HETUS are also suitable. For volunteering distinction

between direct volunteering for other households and through NPISH and other organizations should be made.

2.1.3 Measurement and evaluation of the time spent by an individual for non-formal education, learning and training in the framework of leisure and work

In the future SURS is planning to develop experimental satellite accounts on measuring human capital. Time use survey is supposed to be a source of data to estimate the unpaid activities within households and leisure time for non-formal education and training.

In some research areas attempts have been made to value human capital using an extended income definition including for example unpaid activities within households and leisure time (e.g. Mincer, 1962, Jorgenson and Fraumeni, 1989, 1992a, 1992). Time spent on learning and studying at home is treated as an input into the production process of human capital. The cost estimate of the time spent on learning and studying at home can also be included in the intermediate inputs of the production of human capital through the attribution of a certain shadow prices to one hour spent. The cost-based estimation as an alternative method to the lifetime income approach estimate the investment cost for creating human capital as a sum of cost related to the formal education, training and courses provided by employers, time spent on learning and studying at home and other expenditures. In this way we could implicitly extend the production boundary defined in SNA 2008 and also the value added levels, with the unpaid activities related to studying.

The Time use survey results should include data on average time spent on non-formal education:

- foreign language courses and computer courses,
- workshops and seminars,
- instructions,
- on-the-job training,
- studying and doing homework at home.

The time spent on non-formal education should include time intended for learning at home, at the library, in the community groups, during the week, and also Saturday, Sunday and holidays. It is a free time that one devotes for learning, writing homework, reading, as well as the spare time one spends when attending a course, workshop or seminar intended for the purpose of work or for personal growth. The time needed for travelling to the course and back does not count.

Data on time-use should also be broken down by socio-economic characteristics like gender, age and attained education. The information about which day the survey was carried out on (working day, Saturday or Sunday) would also be useful.

As the Time use survey will probably be carried out as a light version a limited number of questions are taken into account. Therefore, we estimate that data from the individual diary will be enough for making rough estimates on leisure time spent for studying and learning at home. Data on time spent on training and courses, either provided by employers or attended by employees on their own initiative, would be used from the Adult education survey. The above mentioned statistical survey is carried out every five years – the latest one was finished in 2017 for the reference year 2016.

References:

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- Jorgenson, Dale W. and Barbara M. Fraumeni (1992a). Investment in Education and U.S. Economic Growth. *Scandinavian Journal of Economics*, vol. 94, Supplement, pp. 51-70.
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- Mincer, Jacob A. (1958) (1962). On the Job Training: Costs, Returns, and Some Implications. *Journal of Political Economy*, vol. 70, No. 5, pp. 50-79.

2.2 External users

Our external users are researchers and professors. They are using TUS data especially for national transfer accounts and for valuation of unpaid work in households. Unpaid work is defined as work that could be done by another person in return for payment.

The National Transfer Accounts have been developed to measure economic flows across age groups. Age is a key characteristic that shapes economic behaviour. Future changes in the population age structure will therefore have a profound impact on economic activity. On the one hand, young people consume more than they produce through their labour. On the other hand, old people produce less than they consume. Our external users extended the National Transfer Accounts by including the value of unpaid household production. Based on time-use data, they discovered that people in Slovenia spent even more time on household production than on paid work, which emphasises the necessity of including household production in the National Transfer Accounts analysis and also in the Time Use Survey. The gender differences in productive work hours can look very different once household production time is added to time spent at paid jobs. Harmonised European Time Use Surveys conducted in EU countries show that on average in Europe women and men provide the same total amount of productive work hours once unpaid household work is added. There exists specialisation and division of labour between couples, but both provide about the same total amount of productive work hours when time spent in paid market work and unpaid household production are added

together. Our external users analysed¹ time use for unpaid work. The aim of the analysis is first to identify the time spent on household production activities by distinguishing it from other types of activities. Secondly, they impute a value to these activities by asking what wage would a person be paid to perform each task if it was purchased in the market. Then, by using the information on individuals' age, they calculate age profiles of household production, i.e. the average value produced at each age. Finally, by assuming rules about how the services of household production are consumed by household members, they calculate an imputed age profile of consumption, and the differences between consumption and production by age represent the age profile of net transfers. They have classified activities on which people spend their time into five categories: (a) paid work; (b) education; (c) household production; (d) personal care, including sleeping; and (e) leisure. The shape and level of the 'Personal care' and 'Education' age profiles are fairly similar for both genders. In contrast, there are clear differences between the age profiles of the other three categories. Females devote about one hour per day less to paid work than males, though females in Slovenia at that time more than compensated for this difference by working almost two hours per day more in the form of household production. Between about 30 and 50 years of age, individuals face a pronounced 'rush hour of life' when heavy involvement in market and household production leaves them with little leisure time. This situation is considerably more acute for women than men. The huge amount of production represented by unpaid work demonstrates the importance of its measurement. This is only possible if we measure how people use their time outside paid employment. Thus, resources need to be devoted to innovation in the measurement of time use and for repeated, high-quality, rigorous time-use surveys in many different countries.

External users are interested mostly in data from persons of age 15 and more; children are not interestingly for an economy. They are interested in data from all household members because relations between members are important, especially in the context of unpaid work in households. External users think that it is important to include questions about rare activities, that can't be measured with TUS diary. For example long term care for the sick, elderly and children, voluntary work, unpaid work, help between neighbours. They think that it is important to collect also secondary activity, especially if there are two equivalent activities, such as two activities of unpaid work, for example, cooking and childcare.

¹ Incorporating household production into the National Transfer Accounts for Slovenia (Samt, Donehower, Verbič; 2016), <http://www.tandfonline.com/doi/full/10.1080/14631377.2016.1164962>.

Summary of Chapter 2

Our internal and external users have similar needs. They need information about unpaid work in households, voluntary work and unpaid work outside of households and data about education and training. Users are interested mostly in data from persons of age 15 and more. They are interested in data from all household members because relations between members are important, especially in the context of unpaid work in households. Internal users would like to start estimating the level of voluntary work in Slovenia – number of volunteers, number of hours volunteered, type of work performed, institutional setting of the work and field of work. They would like to measure an annual number of hours for voluntary work by ISCO activities; that means a lot of questions in the individual questionnaire and we are afraid that voluntary work would get too much attention in a questionnaire. Our external users think that it is important to include questions in the individual questionnaire about rare activities, that can't be measured with TUS diary. For example long term care for the sick, elderly and children, voluntary work, unpaid work, help between neighbours. For more information see also Chapter 9 (Japan, 2016, Questionnaire A, volunteer activities).

3 Study visit

Standard grant application form 2016: Study visit to one of the advanced TUS country to get deep insight on the 2010 wave with main objective to get the best practise experience in conducting survey with the stress on critical points for getting quality outputs as we didn't conduct the survey in 2010. From that point of view the possible destination is Finland. By our knowledge also Serbia could be appropriate destination as they carried out also light version of TUS.

In preparations for TUS in 2020, it seems reasonable to have study visit to one of the advanced TUS country. We chose between Finland and Serbia, however, we decided for Finland as the most experienced country with the longest tradition in conducting TUS. Statistics Finland has carried out four Time Use Surveys – in 1979, 1987/1988, 1999/2000 and 2009/2010. In 2010 they carried out also a pilot survey with a light version of a diary.

Study visit was carried out in the end of May 2017 in the Statistics Finland by Brigita Vrabič Kek and Martina Lozej. Duration of this study visit was two days and a half. Topics of study visit were as follows:

First day (29 May 2017):

- Introduction to Statistics Finland
- Plans for the next Time Use Survey in Slovenia
- **Theme 1: Questionnaire design**
 - The content of different types of questionnaires – individual vs. household
- **Theme 2: Diary**
 - Designing the diary
 - Guidelines for diary keeping
 - The need for additional information besides the main activity (secondary activity, location, etc.)
 - Postponement of the diary days
 - Light diary vs. Full diary
 - Minimizing the response burden

Second day (30 May 2017):

- **Theme 3: Sample design**
 - Specific of sampling design, sampling unit, target population
 - Selection of diary days and coverage of the year
- **Theme 4: Data collection**
 - Future plans for survey data collection at Statistics Finland
 - What are the specifics of recruiting the interviewers and their training
 - What are the interviewers' tasks
 - Methods of supervising the fieldwork
 - Methods of motivation for participation in the survey

Third day (31 May 2017):

- **Theme 5: Activity classification**
 - Main characteristics of the coding system
 - Coding process and its supervision
- **Theme 6: Time Use Survey database**
 - Main characteristics of the database organization
 - Any administrative data used
- **Theme 7: Data processing**
 - Main particularity in the process
- Concluding remarks

Main information is presented below.

Questionnaire design

- The sample size was approximately the same in Slovenia (TUS 2000/2001) and in Finland (TUS 2009/2010), but Finland population (age 10 or more) is around 5 million while Slovenian population is less than 2 million.
- Time use survey in Finland always begins in spring (March, April) because of three reasons: 1) a lot of other surveys in the beginning of the year, 2) the end of the year is not the most appropriate time for training for interviewers (Christmas, New Year), 3) Easter should be included in survey period only once.
- Time use survey is co-financing by sponsors (Ministry of education, Ministry of transport and communication, etc.); sponsors participate in expert group and they could also suggest some survey questions.

Diary

- The most important secondary activities were: childcare, watching TV and reading.
- Location was important for information if they worked at the office or at home, ate at home or at a restaurant.
- Use of computer/internet was combined with activity: reading paper newspaper or e-version.
- Questions about a time when the first activity started and about a time when the last activity finished: these were important questions, but respondents had problems with understanding.
- Question about a usual/unusual day: important for the respondent so they could explain about their day.
- When errors in database were found, paper diaries were checked first, before any corrections were made.
- Light diary:
 - only general trends of the time use survey were obtained with light diary;
 - respondents had difficulties with some activities: resting/hanging around/socialising with family; services; socialising using technology; travels; child care/playing with children;
 - respondents need a possibility to mark secondary activity.

Sample design

- Central population register is a base for sample design;
- the weekend was selected first (before/after selected working day), then the weekend day was selected (Saturday/Sunday);
- respondents were asked for phone numbers in notice letter – they informed Statistics themselves.

Data collection

- mix mode data collection is important (more choices for respondents and less burden for interviewers) – phone diary (app), web diary;
- data collection is a survey process, where are the greatest differences between Slovenia and Finland:
 - interviewers in Finland are employed, while in Slovenia interviewers working through working contract, student working contract, etc.;
 - interviewers in Finland are motivated by financial stimulation for quality;
 - longer recruitment process and also training for interviewers in Finland;
 - online forum (on intranet) is available for interviewers' debates about a survey, they can ask questions, other interviewers and survey experts answer to this questions, etc.;
 - small presents (pen, book) or draw of a lottery were given to respondents sometimes; in the future, every respondent will get a discount code for some shops.

Activity classification

- Blaise was used for coding activity (Blaise was used in Slovenia also);
- they used letter codes (5 letters) instead of number codes – fewer errors because coders think that they know number codes, but then they write down the wrong number code. Blaise converted letters codes to the 3 digit number codes automatically;
- difficult cases were added in special document (available for all coders on the intranet) – coder wrote down activity and then survey expert marked appropriate activity classification.

Time Use Survey database and Data processing

- administrative data were used: age, sex, marital status, citizenship, country of birth, region, education, income, driving licence and registered in the unemployment database;
- they checked diaries with too little activities (for less than 1,440 minutes);
- weight in person data file was the same for all household members;
- household database contained only households in which all members had filled in at least one diary for the same day. Respondent could be in personal data file but not in household data file if other household members did not fill in the diary for the same day;

- original paper diaries were checked if some errors were detected, for example, a lot of activities, long activities, etc.;
- for every minute there were data about main and secondary activity, location, transport, with whom time was spent and about using a computer for main and/or secondary activity;
- data were weighted by sex, age, unemployment, region, education and municipality group;
- diary weight – one weight for week days and one weight for weekend days;
- it is important to calculate design effect;
- they used regression model for imputation of sleeping.

Study visit was very interesting for us and gave us a lot of useful information. We got a deep insight on data collection in one of the advanced TUS country.

On this occasion we would like to take the opportunity to express our thankfulness to Statistics Finland for realization of our study visit in May 2017. Special thanks goes to Mr. Hannu Pääkkönen for his effort put in organization of this event. We are really grateful for given opportunity to acquire a lot of knowledge about time use survey and for sharing their experiences with us.

Summary of Chapter 3

Study visit was carried out in the Statistics Finland. The main topics of study visit were: questionnaire design, diary, sample design, data collection, activity classification, time use survey database and data processing. Study visit was very interesting and useful for us and for our further work.

4 Data collection methods

Standard grant application form 2016: The starting point for evaluation of data collection methods will be the comparison of the current praxis of countries that carried out the 2010 wave with national data collection methods used in other household surveys with respect to the cost-effectiveness and theoretical study of use of modern technologies (web, apps) in 2020 round.

We are aware that we need new types of collecting data for TUS in 2020, however, the survey should also include a paper version of the diary - in Slovenia (in 2016), only 29% of people aged 65 to 74 were regular users of the internet; in EU this share was 49%. Diary is the main part of the survey to discuss using new data sources – questionnaire is likewise a burden for respondent regardless of type (CAPI, CAWI), but diary could maybe be less of a burden for respondent with using new tools. An interviewer is needed in any case, as respondents need a detailed explanation for filling in the diary. CAPI is probably the most appropriate mode of data collection for questionnaires (household, individual). A questionnaire is the usual part of the survey process and respondents are familiar with it; on the other hand time use diary is an additional burden for respondents. With time use diary we demand from respondents something more, we demand more efforts; therefore it would be reasonable to modernize time use diary and ease survey process for the respondent.

Time use diary could be modernized in two different ways – with new data collection method (web/app) or/and with new version of diary (light).

We think that web diary is a better alternative than an app. Evolution of technology is fast and if we develop an app today, in few years (maybe after 10 years, for next wave of the survey) this app will probably be outdated already – therefore this will be a very expensive tool for using only 2 days. We think that web diary is also a more appropriate tool for older people – who mainly use internet on computers rather than on smart phones. On the other hand, we could use an app as a tool in ‘new’ statistical approaches – big data, non-probability sampling, continuously collection of data (not only every 10 years) ... However, this would represent a completely new way of official statistics.

A light diary has many advantages (of course, also weaknesses) in comparison to a full diary. Hereinafter advantages and weaknesses of both versions (full and light) are presented.

FULL DIARY:

Advantages:

- comparability: with previous waves; with other countries;
- users get all data (at the most detailed level);
- HETUS classification could be used;
- for some respondents would be easier to describe activities (with own words) than select appropriate activities in the list;

- it is easier for respondents to fill in secondary activity;
- it is easier for respondents to find out if all activities are entered;
- it is easier for respondents to enter activities; they have to find just the right time interval, not the right combination of time and activity (as in light diary);
- respondents write activities themselves, then researchers cannot select wrong activities (as in light diary).

Weaknesses:

- it is not so easy to make full diary as an app or as a responsive web design diary (full diary would not be possible to use on mobile devices);
- the coding process is difficult, expensive and long-lasting;
- errors in the coding process are possible (misunderstanding; wrong selection of code);
- for some respondents would be difficult to describe activities (to find the right words; to describe activities shortly);
- a burden for respondents – extensive ‘book’ for a diary (2 x approximately 30 pages – for two days).

LIGHT DIARY:

Advantages:

- could be developed for any device (as an app or responsive web design diary);
- it is easier to use mix mode approach (paper, web, app);
- there is no need for coding;
- it is cheaper and faster (there is no coding);
- easier data entry (scan – in case of a paper diary);
- perception of respondent instead of perception of coder; for example walking the dog - full diary: coder has to decide if this is ‘caring for pets’ or ‘walking and hiking’; on the other hand light diary: respondent decides if this walk was ‘caring for pet’ (because he has to walk the dog) or sport activity (because he wants to go for a walk and the dog was very sad so he takes the dog with him – but primary goal for the respondent was sport activity).

Weaknesses:

- researchers could select/include ‘wrong’ activities in the diary → unsuitably, unrealistically results;
- there is no comparability with other countries;
- some users maybe not get all necessary data;
- a limited number of activities (also limited space for activities that respondents could write as ‘other’);
- socially desirable answers (for example sports activities);
- limited space in case of a paper diary (all activities should be on one page) – problem of legibility (especially for elderly).

The light diary could include around 20 activities, max 30 – respondents have to remember all activities, not read them every time; we do not agree with United Nations Guidelines, where

30 to 35 categories was mentioned. The light diary should have category 'other activities', however the design of the diary should enable to write down more than one 'other' activity. It would be reasonable to harmonize light version of a diary; a harmonized version of a light diary should be comparable with a harmonized version of a full diary.

A primary goal of a time use survey is measuring time, not well-being, positive and negative emotions, stress etc., therefore using new data sources to get some additional information are not reasonable. It will be very costly to use new data sources in order to get additional information, which is insignificant for this survey.

In the scope of cost-effectiveness, we should have in mind that it is not certain that introduction of cheaper data collections will improve response rate. Our main goal should be improving response rate and not cost reduction; the most important factor is quality, not price. However survey with the light diary is cheaper, faster and easier than a survey with a full diary, therefore more countries could conduct time use survey and perhaps more frequently as well.

In HETUS guidelines it is recommended that all members of the household are included in the sample. However, this would be more expensive, time-consuming and difficult. If only one member of the household is included in the sample, there will be (probably) lower response rate and a bigger burden for respondent (why me?), but on the other hand, a smaller burden for a household. However, if we include all household members, we would get much more information (relations among members). In case of all household members, it is useful to take into account recommendations which we got on a study visit. In Slovenia (in 2000) we excluded from personal data file all persons, which household members did not fill in the diary. In Finland, the household database contained only households in which all members had filled in at least one diary for the same day. However respondent could be in personal data file but not in household data file if other household members did not fill in the diary for the same day.

HETUS guidelines recommend data collection (diary) for the current day. It would be reasonable to think also about data collection for a previous day, as this would reduce the price of the survey and also reduce respondent burden.

Summary of Chapter 4

Time use diary could be modernized in two different ways. One option is new data collection method. If we compare web and app data collection method we think, that web diary is a better alternative than an app. Web diary will be cheaper than an app and also a more appropriate tool for elderly. The second option for modernization of TUS is a light version of a diary. We think that a light diary has many advantages in comparison to a full diary. Light diary could be developed for any device (we think that full diary would not be possible to use on mobile devices); it is faster and cheaper (there is no coding); easier data entry (scan – in case of paper diary); last but not least: perception of respondent instead of perception of coder. With our users (internal and external) we found out that a light diary is a preferred type of a diary for TUS in Slovenia in 2020.

5 Cognitive testing

Standard grant application form 2016: In connection with the previous study and when identifying the concepts (either variables from questionnaire or from the code list) which are difficult for respondents we plan to carry out the cognitive testing of subjective well-being variables and other difficult to answer topics using different approaches.

As we already mentioned, we think that a primary goal of a time use survey is measuring time, not well-being, positive and negative emotions, stress etc. Measuring of well-being by activity is not reasonable as well-being depends on many things (good/bad day, weather, health status, relationship with other people etc.). The same activity could cause different feeling every time. Measuring of well-being is an additional burden for a respondent as it is a subjective assessment (respondent has to think about his feelings), while time use is objective data (respondent just write down his activities, without thinking too much). If a light diary is used, measuring of well-being is not possible as space is limited especially in case of a paper diary. Despite of limited space in a light diary, we recommend to include a secondary activity.

We think that testing of subjective well-being variables is not meaningful; more important is testing of different data collection modes: diaries describing yesterday or tomorrow (today); full or light version; selection of activities in the case of a light diary; presence or absence of interviewer etc. We are planning to conduct a pilot survey in 2019 and actual survey around 2020, 2021; therefore we could test some of these ideas in 2019.

However, we participated in cognitive testing for EU-SILC, where some well-being variables were tested (ad-hoc module for 2018) – overall life satisfaction, social exclusion, satisfaction with financial situation, satisfaction with job, satisfaction with time use (amount of leisure time), satisfaction with personal relationships, trust in others. These variables had values from 0 to 10. We found out that scale 0–10 is not clear to respondents. Respondents said that scale with so many values is difficult for them as there is a slight shade of difference between the two values. It is easier for respondents to choose among values in scale 1–5.

Summary of Chapter 5

We think that a primary goal of a time use survey is measuring time and not well-being, positive and negative emotions, stress etc. Measuring of these additional variables is an additional burden for a respondent. We think that testing of different data collection modes is more important than testing of subjective well-being variables. However, in cognitive testing for EU-SILC we found out that scale 0–10 for well-being variables is not clear for respondents; it is easier for respondents to choose among values in scale 1–5.

6 Core social variables

Standard grant application form 2016: Considering the new Eurostat proposal of core social variables the intention is the implementation of social variables in the questionnaire.

We think that implementation of core social variables in the questionnaire will not be a problem, as a lot of core social variables are also core TUS variables. There are also the same core social variables for TUS than for some other social surveys (for example EU-SILC, HBS), with which we have a lot of experiences. Administrative sources could be used to get some of this data (detailed description in chapter 8 'Administrative sources').

The main problem we see is a variable 'limitation in activities because of health problems'. Two main problems appeared in the cognitive testing regarding topic 'limitation' taking into account proposed wording of the question from the Eurostat EU-SILC recommendations which is in the line with the proposed EHIS question about that topic. Firstly, question is not correctly understood by respondents as the question is too long and secondly, there are several methodological background behind of which the most problematic was the time period being limited. Beside that we found out that it is very difficult to adequately translate the question into Slovene which could be even proper in English. So we decided on the basis of cognitive testing to split (remodelled) proposed question (wording) into three parts with the main aim that we would like to measure what we expect to be the reliable outcomes of the question – measuring long-standing and not short-standing (current) limitations.

The basic problem with the existing version of the limitation variable is that the used model question is very complex. One question includes several different contents (time component, qualitative subjectivity). Respondents could also misunderstand the question because of the length and form of the question, the order of the words and the mode of interviewing (CATI, CAPI - the interviewer reads the question that the respondents do not see). The respondents also take into account short-standing limitation or they often 'hear' in the question - 'in the last 6 months'. In addition, in cognitive testing and by the control of telephone interviewing in the survey studio, we found out that interviewers are often to be mistaken when reading the question. The purpose of this variable is to measure only the presence of long-standing limitations, as the consequences of such long-standing limitations (e.g. care, dependency) are more serious. The limitation must have started at least six months ago and still exist at the moment of the interview. This means that a positive answer ('severely limited' or 'limited but not severely') should be recorded only if the person is currently limited and has been limited in activities for at least the past 6 months. The correct answer can be obtained only with three questions.

Version 1 – Eurostat recommendation for EU-SILC 2017

1. For at least the past six months, to what extent have you been limited because of a health problem in activities people usually do?
 - a) Severely limited
 - b) Limited but not severely
 - c) Not at all limited

Version 2 – suggested model questions by Slovenia

1. Are you currently limited because of health problem in activities people usually do?
 - a) Yes
 - b) No
2. Have you been limited for at least the past 6 months?
 - a) Yes
 - b) No
3. To what extent are you limited because of health problem in activities people usually do?
 - a) Severely limited
 - b) Limited but not severely

Both versions of questions about limitation have been tested on the whole sample in the implementation of EU-SILC 2017 irrespective of data collection modes which are in our case face-to-face interview (CAPI) and telephone data collection (CATI). For better understanding of results we have to point out that respondents usually just hear the questions without being able to see the text on the screen also when using CAPI mode.

The entire set of health questions is ordinarily placed in the last part of the SILC questionnaire. All respondents had to answer to both versions of the question about limitation - the first model question (original one) was placed at the beginning of the Health part and the second version (testing model questions) at the end of the Health part, meaning at the same time at the end of the whole questionnaire.

We found out that the share of limited persons (severely limited; limited but not severely) with the first version was 39%, on the other hand, share of limited persons with the second version was 20%. This variable ('limitation in activities because of health problems') is used also for computing The Healthy Life Years (HLY) indicator, therefore, our findings should not be ignored. Statistical Office of the Republic of Slovenia will recommend modification of this variable to the Eurostat. We think that modification of this variable is necessary also for the Time Use Survey.

We have also doubts about core social variable 'household grid'. If we do not take into account HETUS recommendations about inclusion of all household members in the sample, afterwards core social variable 'household grid' is not relevant. In case of household survey we are going

to use the methodology of relations to the reference person of the household and after that from this matrix we are going to derive household grid. We found out that direct collecting of data on household structure is too complicated and time-consuming, resulting also with many errors.

Summary of Chapter 6

The main problem for implementation of core social variables in the TUS questionnaire would be a variable 'limitation in activities because of health problems'. We found out that recommended variable by Eurostat was wrongly understood by respondents. In the scope of EU-SILC in 2017, we tested two versions of this variable – Eurostat proposal (first version) and proposal of SURS (second version). We found out that the share of limited persons with the first version was 39%, on the other hand, the share of limited persons with the second version was 20%.

7 Invitation letter, promotional material

Standard grant application form 2016: On the basis of our experience in the field of household surveys and taking into account the special characteristic of TUS (very demanding and time consuming survey for respondents) the aim is also to explore the methods for improving motivation for participation in the survey (invitation letter, promotional material, the role and effect of incentives).

An invitation letter is an introductory part of a survey and is obligatory for all households' surveys.

The advance letter in Slovenia is designed in a standardised way.

By national statistical law there are some obligatory elements that should be included in the letter:

- title of the survey and its purpose;
- legal basis for data collection;
- the voluntary and official nature of the survey;
- confidentiality of the information we gather;
- participation of children and adolescents in the survey with the consent of parents (if that's the case);
- the usage of the administrative and other sources of data and combining these data with collected data.

The advance letter should also inform selected persons regarding their selection in the survey and why it is important that they cooperate. It should also contain information regarding the course and timing of the interviewing. In the beginning of the letter there is contact information, and at the end of the letter there is thank you note and official stamp and signature of director general of SURS.

Example of invitation letter for EU-SILC

REPUBLICA SLOVENIJA
STATISTIČNI URAD

SURS Litostrajska cesta 54, 1000 Ljubljana

T: 080 21 23, vsak delovnik od 9. do 15. ure
E: anketni-studio.surs@gov.si
@StatSlovenija
www.stat.si

Številka: 9614-1/2017/21
Datum: 8. 5. 2017

Spoštovani,

Statistični urad RS v raziskovanju **Življenjski pogoji** ugotavlja, v kakšnih razmerah živimo prebivalci Slovenije. Vljudno vas prosimo, da znova sodelujete v tem pomembnem statističnem raziskovanju.

Zakaj je pomembno, da znova sodelujete?

- ker je eden glavnih ciljev tega raziskovanja spremljanje sprememb v življenjskih pogojih oseb in gospodinjstev v Sloveniji in ker te spremembe lahko zaznavamo le tako, da iste osebe in gospodinjstva sodelujete več let zaporedoma;
- ker bodo zbrani podatki osnova za odločanje o pomembnih gospodarskih in socialnih vprašanjih, ki vplivajo na življenje vseh prebivalcev Slovenije;
- ker je postopek izbora sodelujočih gospodinjstev tak, da vašega gospodinjstva ne moremo nadomestiti z drugim; s svojimi odgovori boste namreč zastopali številna druga gospodinjstva v Sloveniji;
- ker potrebujemo te podatke tudi za mednarodne primerjave.

Sodelovanje je enostavno in zaupno

- v obdobju **od 9. maja do 15. junija 2017** bo vaše gospodinjstvo osebno obiskal naš anketar;
- prosil vas bo, da odgovorite na vprašanja o dejavnikih, ki vplivajo na življenjske pogoje; pomembno pa tudi vaše osebno mnenje o tem kako živite; - ponovno anketiranje je krajše, ker številne podatke iz prejšnjega leta le preverimo;
- naj vas ne skrbi, da bi vas bilo mogoče iz podatkov prepoznati, ker objavimo vedno le združene podatke (v obliki deležev, povprečij, vsot), na primer za osebe po starostnih skupinah, po spolu ipd., za gospodinjstva pa glede na tip gospodinjstva ipd.

Pravna podlaga za zbiranje podatkov in druga potrebna pojasnila

- Raziskovanje se izvaja v skladu z Zakonom o državni statistiki (Uradni list RS, št. 45/95 in št. 9/01) in na podlagi Letnega programa statističnih raziskovanj (Uradni list RS, št. 75/2016) ter Uredbe Evropskega parlamenta in Sveta (ES) št. 1177/2003;
- Raziskovanje je obvezno za vse države članice Evropske unije, vaše sodelovanje v njem pa je prostovoljno;
- Vse v tem raziskovanju pridobljene podatke obravnavamo kot zaupne in jih skrbno varujemo.

Za sodelovanje se vam najlepše zahvaljujemo in vas lepo pozdravljamo.

Priloga: zgibanka

Genovefa Ružič,
generalna direktorica

TER4

Contact information

Title, purpose

Why it is important to cooperate

Timing

Other sources

Legal basis

Thank you note

Official stamp, signature

Design of invitation letter: white paper, black text, blue logo of SURS and blue curved line at the end of the letter

As the design and the contents of the invitation letter are defined, including obligatory elements, there is not a lot of space for improvement and modernization. Improving motivation for participation in the survey with invitation letter is not simple; there is only an option to motivate respondent with information why it is important that they cooperate.

A promotional brochure is also a possible tool for improving motivation of respondents. At the beginning of the Grant we thought that promotional brochure with the latest TUS data is a good idea. However, in the scope of study visit, we found out that latest data in promotional brochure could impact on results (socially desirable answers). The question is also if out-of-date data (10 years) could improve motivation of respondents. Promotional brochure could be designed as a statistical story; we have a lot of data, we know how many people were born and how many people died, we know how many men and women are in the country, how old are they, what are the difference between men and women, between young and old people ... however, we need the last small stone in the mosaic – time-use data.

The effect of incentives was tested in the scope of Grant for EU-SILC in 2016. USB (with a promotional video of SURS) or promotional cards (with some interesting information about the Slovenian population) were given to selected respondents. With the invitation letter, an initiative was sent to people who were gathered in the subsample.

Frequency and rates of response and nonresponse by groups in EU-SILC

Mode	Incentive	Freq	%	Response	%	Nonresponse	%
CAPI	USB	978	14.9%	628	64.2%	350	35.8%
	CARDS	983	15.0%	519	52.8%	464	47.2%
	Without	4,594	70.1%	2,680	58.3%	1,914	41.7%
Total		6,555	100.0%	3,827	58.4%	2,728	41.6%
CATI	USB	870	17.0%	769	88.4%	101	11.6%
	Without	4,248	83.0%	3,429	80.7%	819	19.3%
	Total	5,118	100.0%	4,198	82.0%	920	18.0%
Total		11,673		8,025	68.7%	3,648	31.3%

We can see that there is a difference between the rates of response in each group. The response rate was the largest in the group that received a USB key (64%); in the group that received promotional cards the rate was almost 12 percentage points lower compared to the group with a USB key, while in the group that did not receive initiatives the rate was 58%. The overall response rate in the CAPI was 58%. In the CATI group the response rate for those who received a USB key was 88%, while for those without a USB key it was 81%. The overall response rate in the CATI was 82%. If we measure the response rates in CATI and CAPI together it was 69%.

From the analysis, we observed the effect of the pre-sent initiatives on the increased response rate. Especially in the group that received a USB key, higher response rates can be seen in both CAPI and CATI groups. We were somehow surprised by the leverage effect of gifts on telephone respondents, since the response rate there increased by almost 8 percentage points.

In the scope of Time Use Survey, we were thinking also about a lottery for respondents. However, we are not sure if this is feasible because of Slovenian laws. Testing the effect in the next execution of Household Budget Survey is feasible.

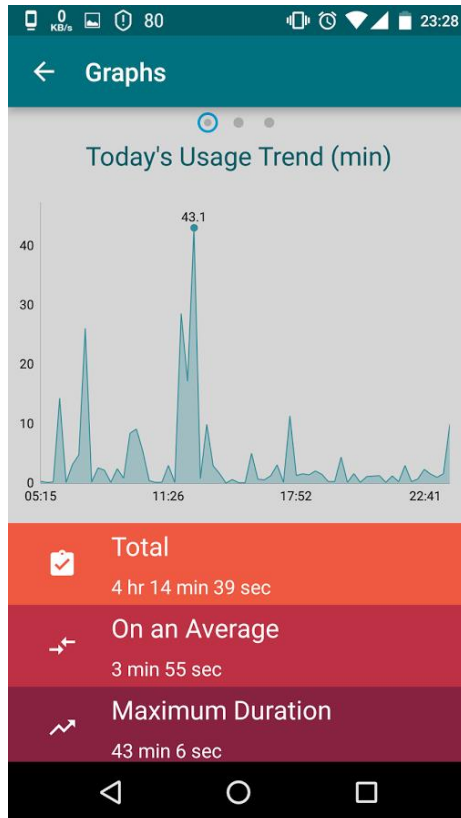
If an app for mobile phones will be used for measuring time use, it should be useful and interesting for users (respondents) but on the other hand, the app should not have an impact on the time use of respondents. Mobile phones are already 'part' of our body, we are not aware of how much time we spend on texting, e-mails, social media, games on mobile phone ... Maybe it would be interesting for users (respondents) to find out how much time they spent on the mobile phone. The app for measuring time use could enable measuring calls (number and minutes), sent text messages, amount of time that phone was in use etc. Perhaps it would be possible to have a prize competition – at the end of the second diary day, a user will answer to the question about the amount of time he used for a mobile phone; if he answers correctly, he gets a reward.

On Google Play we can find some (free) useful apps, for example, MyAddictometer² and AppTym³. MyAddictometer measures daily usage time and number of unlocks. On the other hand, app AppTym measures daily usage time and app usage. We can measure daily usage time only if respondents have smart phones; however if respondents do not have smart phones we could ask them few questions about a number of calls, sent text messages. Phone daily usage is a problem only for smart phones users as they could use a mobile phone for many different things (apps, internet, games etc.) and they do not have a feeling about time usage; respondents who do not have smart phones probably use a mobile phone only for calls and text messages and they know how much time they spent for a mobile phone.

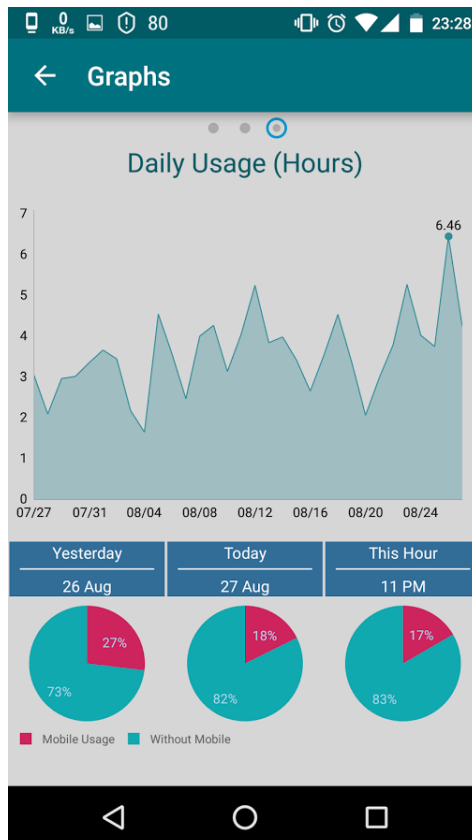
² <https://play.google.com/store/apps/details?id=com.wordpress.amarpreetblog.addictometer>

³ <https://play.google.com/store/apps/details?id=com.incubasys.apptym>

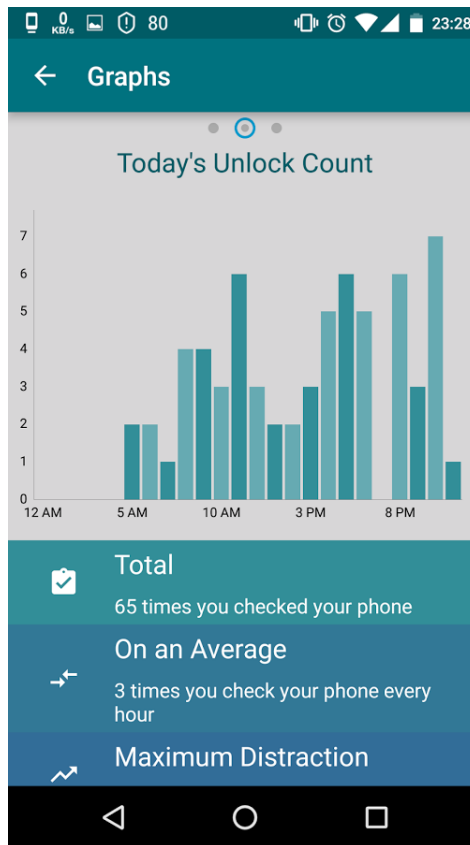
App MyAddictometer (available on Google Play) – today's usage trend



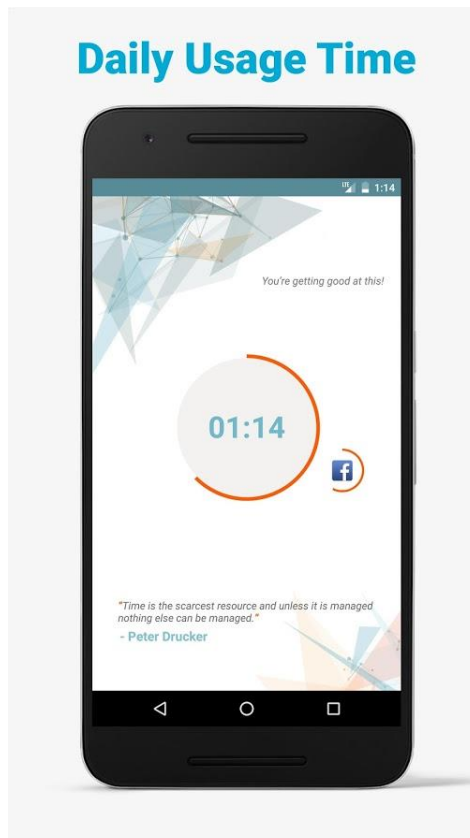
App MyAddictometer (available on Google Play) – daily usage



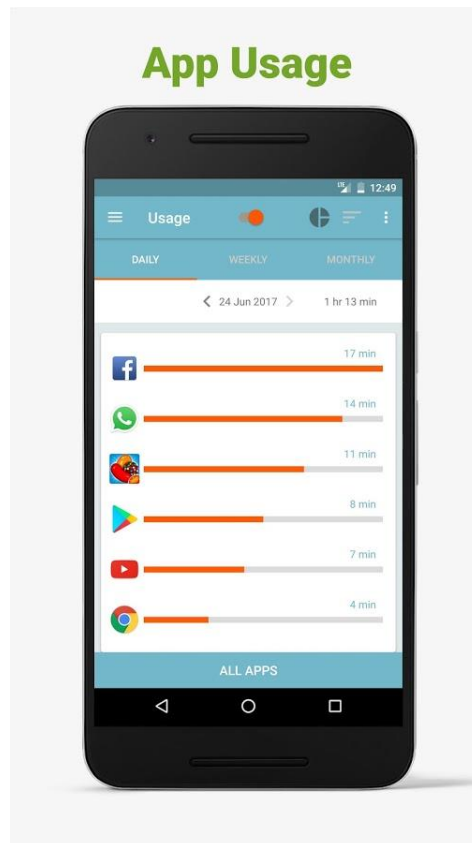
App MyAddictometer (available on Google Play) – today's unlock count



App AppTym (available on Google Play) – daily usage time



App *AppTym* (available on Google Play) – app usage



Summary of Chapter 7

We found out that there is not a lot of space for improvement and modernizations of the invitation letter as the design and the contents of the letter are defined. A promotional brochure is also a possible tool for improving motivation of respondents, however, we have to be careful as TUS data in promotional brochure could impact on results (socially desirable answers). If an app for mobile phones will be used for measuring time use, it should be useful and interesting for users (respondents).

8 Administrative sources

Standard grant application form 2016: In recent years there is a great emphasis laid on reducing the respondent burden. One of the ways to achieve this is the implementation of the use of administrative sources for some data which are obligatory (income, accommodation, education attainment level etc.) for the register-based countries.

8.1 Register-based orientation of statistics

Slovenian statistics is register-based oriented, therefore use of administrative sources for replacing field collected data with already existing statistical/administrative data is logical. By such approach the main objectives of Eurostat's initiative on standardization of social variables could be applied with the main goal to have harmonized data among all social surveys. The second important reasons is reducing respondent burden with main reason why respondents ask questions for which quality, reliable and relevant data are already available mostly in administrative records. We can divide data available in administrative/statistical sources into at least five categories:

- data that could be derived directly from administrative identifier PIN (age, sex) in the statistical process;
- unchangeable data which generally do not need any update (e.g. place of birth – but the country of birth could be changed anyway in case of forming new states what happened in the territory of former Yugoslavia);
- data that should be updated regularly due to changes in life circle of person (e.g. marital status, educational attainment, activity status);
- data that are difficult to collect and difficult to code using a lot of human resources for processing and subject to subjectivity of coding in case of not enough defined answers collected in the field (e.g. data on occupation and industry);
- data that are by our knowledge and experience from different previous households' survey unreliable and mostly underestimated (data on income in general). As an example we can quote the received interests – almost no positive answer from the field survey but later the interests become a part of annual taxation database and the almost two third of population receive some income and for around 5% of population the amount of received interests is not negligible.

Administrative data are already used in other social surveys in Slovenia; introduction of administrative data in TUS should therefore not be difficult for us. The most important fact in case of Slovenia which allows us to use administrative data is the existence of unique identifiers (PIN, household ID, dwelling ID, business ID) so the linkage of data is performed in individual level. It is important to stress that we do not collect PIN directly in the field but we determine the PIN in the statistical process using data on name, surname, date of birth and sex for other members of household while PIN of selected (sampled) person of the household is available directly from Central Population Register.

8.2 Implementation of HETUS core questions

We could use administrative data for following HETUS core questions:

- **I5:** What does the business/organisation mainly make or do at the place where you work (e.g. chemical, fishing, hotel/restaurant, health and social work, etc.)?
 - Statistical Register on Employment contains also the information on Business ID of every person employed in the territory of Slovenia so the linkage to the Business Register (also in the local unit level) is simple.

- **I6:** What is your occupation in this business/organisation?
 - Data on occupation are part of regular data transmission from employers to the Statistical Office. Data are of adequate quality to be used in unspecialized social surveys such as TUS is. Occupation is not the primary target variable for TUS.

- **I9:** Do you have a permanent job or an open-ended work contract?
 - Data on job permanency are part of regular data transmission from employers to the Statistical Office. Data are of adequate quality to be used in unspecialized social surveys such as TUS is. Job permanency is not the primary target variable for TUS.

- **I29:** Which is the highest level of education or training you have successfully completed?
 - Data are part of our regular annual production of socio-economic variables. The main principle here is the update of data from the previous year with data from different sources for all levels of education (from primary to tertiary education) attained in the country.

- **I37:** In which country were you born?
 - Data on country of birth are available in the Central Population Register taking into account the territorial changes of states. Coverage is complete.

- **I38:** What citizenship do you hold?
 - Data on country of citizenship are available in the Central Population Register. As there is information on first and also second citizenship, statistical editing has been developed to determine the citizenship based on international recommendations for demography and census statistics.

- **I39:** What is your present marital status?
 - Data on formal marital status are available in the Central Population Register. Data are updated by all demographic events having impact on change of marital status (marriages, divorces, deaths of spouse). Data do not include information on consensual unions for which data are extracted from household grid or relation to the reference person of the household.

- **H16:** The following question concerns the income of all household members and any other income received by the household as a whole. If you add up all forms of income of all household members and any other income received by the household as a whole, could you please provide the net monthly amount, that is, the amount after tax and social insurance contributions?
 - Taxation data are used for net income as data on both (gross and net) income are available but for the previous year only. For statistical correction and verification of reliability of income data we can use simple question about the comparability of current income with the income in the previous year.

8.3 Implementation of other standardized Eurostat social variables

According to the Eurostat document on standardization of social variables we could also use administrative data for following core social variables (P1 and P2 list):

(1) Sex

- For sampled person only, data for household members has to be collected in the field.

(2) Age in completed years

- For sampled person only, data for household members (date of birth) has to be collected in the field.

(16) Country of birth of the father

- Data derived in the processing stage on the basis of links between children and their parents recorded in the Central Population Register, for around 90% persons aged 0–49 years data on the country of birth of father are available.

(17) Country of birth of the mother

- Data derived in the processing stage on the basis of links between children and their parents, for more than 92% persons aged 0–49 years data on the country of birth of mother are available.

(20) Region of residence

- Data extracted automatically from address of sampled person.

(21) Degree of urbanisation

- Data extracted automatically from address of sampled person according to the pre-defined municipality table.

Summary of Chapter 8

Inclusion of all standardized Eurostat social variables (P1 and P2 list) is foreseen to be collected in next TUS operation in Slovenia. Where feasible the data for core and standardized social variables will be taken from administrative/statistical databases without any field collection. Two important tasks will be achieved by this means: reducing the respondent burden and harmonization of data which will allow macro linkage of data among different social surveys.

9 Review of activities

Standard grant application form 2016: Review of activities which are important for the society but could be under-estimated when collecting data with diaries only and that should be included in the core questionnaire.

Information about unpaid work in households, voluntary work and unpaid work outside of households could be underestimated in diaries. We think that especially variables about voluntary work should be included in the core questionnaire as these variables are important for a department for national accounts. We reviewed questionnaires from Japan and United Kingdom, where questions about voluntary activities were included.

United Kingdom, Individual Questionnaire, voluntary work⁵

VOLUNTARY WORK																					
ALL																					
26a	We are interested in voluntary work people may do, that is work for which they are not paid, except perhaps for expenses.																				
We only want you to include any unpaid work you may do through a <u>group</u> or an <u>organisation</u> of some kind. Here are some examples of the kinds of groups and organisations we mean.																					
SHOW CARD IN																					
Have you done any voluntary work through a group or on behalf of an organisation at any time during the last 4 weeks?																					
SP. ALLOW DK/REF	<table border="1"> <tr> <td>Yes</td> <td>1</td> <td>ASK b</td> </tr> <tr> <td>No</td> <td>2</td> <td>GO TO Q27</td> </tr> </table>	Yes	1	ASK b	No	2	GO TO Q27														
Yes	1	ASK b																			
No	2	GO TO Q27																			
ASK IF HAS DONE VOLUNTARY WORK (Q26a/1)																					
RECORD ALL VOLUNTARY WORK DONE IN THE LAST 4 WEEKS.																					
WHEN ALL VOLUNTARY WORK HAS BEEN RECORDED CODE NULL AT Q26b																					
AND ASK Q26c TO Q26e FOR EACH GROUP/ORGANSATION MENTIONED.																					
ALLOW A MAXIMUM OF 6 GROUPS/ORGANSATIONS TO BE RECORDED																					
b	Which organisation(s) or group(s) have you worked with?																				
INTERVIEWER NOTE: LIST ACTIVITIES IN DECREASING ORDER OF TIME SPENT ON THEM OVER THE LAST 4 WEEKS																					
WRITE IN NAME(S) OR DESCRIPTION(S)																					
OPEN ENDED ALLOW NULL (BUT NOT FOR FIRST MENTION). DO NOT ALLOW DK/REF																					
SHOW CARD IO																					
c	Thinking of the work you do for (GROUP/ORGANISATION) which of the types of voluntary work shown on this card have you done during the last 4 weeks?																				
MP. ALLOW DK/REF																					
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">Raising or handling money</td> <td style="text-align: right;">1</td> </tr> <tr> <td style="text-align: right;">Member of a committee</td> <td style="text-align: right;">2</td> </tr> <tr> <td style="text-align: right;">Organising or helping to run an activity or event</td> <td style="text-align: right;">3</td> </tr> <tr> <td style="text-align: right;">Visiting people</td> <td style="text-align: right;">4</td> </tr> <tr> <td style="text-align: right;">Giving advice, information or counselling</td> <td style="text-align: right;">5</td> </tr> <tr> <td style="text-align: right;">Secretarial, administration, or clerical work</td> <td style="text-align: right;">6</td> </tr> <tr> <td style="text-align: right;">Providing transport</td> <td style="text-align: right;">7</td> </tr> <tr> <td style="text-align: right;">Other direct services</td> <td style="text-align: right;">8</td> </tr> <tr> <td style="text-align: right;">Representing</td> <td style="text-align: right;">9</td> </tr> <tr> <td style="text-align: right;">Anything else (specify) _____</td> <td style="text-align: right;">10</td> </tr> </table>		Raising or handling money	1	Member of a committee	2	Organising or helping to run an activity or event	3	Visiting people	4	Giving advice, information or counselling	5	Secretarial, administration, or clerical work	6	Providing transport	7	Other direct services	8	Representing	9	Anything else (specify) _____	10
Raising or handling money	1																				
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Other direct services	8																				
Representing	9																				
Anything else (specify) _____	10																				
d	How many different times did you do this work for (GROUP/ORGANISATION) during the last 4 weeks? ALLOW RANGE 1-99. ALLOW DK/REF																				
e	How long did you work for, <u>the last time</u> you did this work for (GROUP/ORGANISATION)? RECORD HOURS AND MINUTES. CAN RECORD IN DAYS IF ACTIVITY WAS ON-GOING OVER A NUMBER OF DAYS. E.G. LOOKING AFTER A CHILD																				
DAYS: ALLOW RANGE 0-28 ALLOW DK/REF																					
HOURS: ALLOW RANGE 0-24 ALLOW DK/REF																					
MINUTES: ALLOW RANGE 0-59 ALLOW DK/REF																					

Questions, as were used in Japan, were not suitable for us/our internal users. Questions were clear for respondents, however, we could not measure hours for voluntary work by ISCO activities. Questionnaire from the UK could be a better alternative for Slovenia, as they asked

⁵ www.ons.gov.uk/ons/rel/lifestyles/time-use/2000-edition/time-use-survey--adult-individual-questionnaire.pdf

about voluntary work by organisations and by type of voluntary work. However, there is a problem as our internal users need ISCO activities and not the type of voluntary work; although ISCO activities could not be understandable to respondents and to interviewers. An example of questions is in Manual on the measurement of volunteer work⁶. There is also a problem as respondents could do voluntary work frequently (once a week) or rarely (once a year); for one organisation or for more organisations; one type of work (by ISCO activities) or different types of voluntary work. If we would like to measure all voluntary work done in one year, there will be a lot of questions about voluntary work. This is not the best option as voluntary work gets too much attention in the questionnaire, although the survey is about time use.

In a case of a light diary, it would be difficult as our internal users need also diary data about unpaid work in households. They need eight different categories (chapter 2.1.2 'Measuring of unpaid household service work'): dwelling care, food management, care for textiles, care for other members of household, voluntary work, shopping, travel and transport, household management. However, in these eight categories, they include activities that are not consistent with HETUS classification (they combine activities from different HETUS codes in one category). If we would like to consider their needs, we have to include in a diary following activities:

- **3 Household and family care:**
 - 31 Food management (*preparation and serving of meals, washing dishes*)
 - 32 Household upkeep (*cleaning, upkeep*)
 - 33 Making and care for textiles (*laundry, ironing, repairs*)
 - 34 Gardening and pet care (*work in the garden; care for pets*)
 - 35 Construction and repairs (*small repairs*)
 - 36 Shopping and services (*shopping*)
 - 37 Household management (*planning and organization of activities within household*)
 - 38 Childcare (*care for children*)
 - 39 Help to an adult household member (*care for adults*)
- **4 Voluntary work and meetings:**
 - 41 Organisational work (*voluntary work - through organizations*)
 - 42 Informal help to other households (*voluntary work - directly*)
- **9 Travel and unspecified time use:**
 - 936 Travel related to shopping and services (*transport for shopping*)
 - 938 Travel related to childcare (*transport of children*)

In a case of a light diary, it is not possible to include all these activities as especially category 3 (Household and family care) gets too much attention in comparison with other categories. A number of activities on the second level of HETUS activities should be balanced among categories on the first level of HETUS activities.

6

<http://www.ifrc.org/docs/IDRL/Volunteers/ILO%20Manual%20on%20Measurement%20of%20the%20Volunteer%20Work.pdf>

When we reviewed the HETUS activities list we found out that activity 'blood donation' which is very important in Slovenia, is repeated twice – as an example in activity 411 'Organisational work (work for or through an organisation)' and as an example in activity 439 'Other or unspecified participatory activities'.

We were thinking that activity 012 'Sick in bed' could be classified in category 53 'Resting – time out' instead of in category 01 'Sleep'. In a case of a light diary should be explained to respondents how they could classify 'Lunch break' – as an employment or as eating. We are not sure if it is logical that activity 333 'Handicraft and producing textiles' is classified as 33 'Making and caring for textiles'. For a lot of respondents (majority?) sewing new clothes or crocheting is a hobby, not care for household; it is more expensive and time consuming as buying new clothes. We understand that this activity is important for household satellite accounts (as explained in HETUS guidelines), however, in a case of a light diary this classification would not be logical to respondents. In a case of a light diary it is necessary to explain to respondents how to classify activity 342 'Tending domestic animals' as in Slovenia there are a lot of 'hobby' farmers and they probably would not equalize farming with pet care. It is not logical why activity 713 'Correspondence' is not included in a category 51 'Social life' as an activity 514 'Telephone conversation'; it is the same activity, only a mode of communication is different (phone vs. letter). We were thinking that activity 524 'Library' could be classified as 36 'Shopping and services' instead of 52 'Entertainment and culture'; respondents entertain when they are reading, not when they are borrowing a book.

All activities in category 72 'Computing' should be modified for TUS 2020. It is possible to combine usage of a computer, mobile phone, tablet and other ICT devices. We were thinking that 'listened to music on TV' (example in activity 821 'Watching TV, Video or DVD') could be also classified as 831 'Listening to radio or recordings' as if respondent listened to music on TV, this was probably a secondary activity (listening to the radio is also usually a secondary activity), not a primary activity (watching TV is usually a primary activity).

Summary of Chapter 9

We compared questionnaires from Japan and United Kingdom, where questions about voluntary activities were included as we think that time use for voluntary work could be underestimated in diaries. However, there is a problem as our internal users need an annual number of hours for voluntary work by ISCO activities. Furthermore, we found out some activities that could be classified differently, for example, 'Sick in bed' or 'Lunch break'. We found out that activity 'blood donation' which is very important in Slovenia, is repeated twice as an example in HETUS guidelines.

10 Conclusion

Participating in the preparatory work to revise the harmonized European Time Use survey for the implementation in the round 2020 was an important step for the Statistical Office of the Republic of Slovenia towards execution of field data collection which is by now foreseen for 2020. As there was only one such survey conducted by now in Slovenia almost 20 years ago (2000/2001) we are aware of changing society relations and also users' needs for such data. By our experience from 20 years the TUS is the most demanding statistical survey from organizational, technical also from methodological point of view on which we put the main stress in this exercise.

For this reasons we started almost from zero with studying existing literature with two reference guidelines: UNECE Guidelines for Harmonizing Time-Use Surveys, 2013 and Harmonised European time use surveys guidelines prepared by Eurostat (2008). But the most important broader knowledge has been gained by visiting Statistics Finland to which we would like to give thanks for their willingness to share with us their many years' experiences. Both quoted documents refer mostly to full version of diary as the most desired method of data collection. But when we began to think about simplification of field data collection and reducing response burden as were some of the most expected results of the task and also in the connection to the use of modern methods of time-use data collection (app, web questionnaire) we found out that the full version could be user unfriendly and also demand huge human resource involvement (at the stage of data editing – coding as the main time consuming process) and huge investment. So the important task of operation was comparison of advantages and disadvantages of main data collection methods. After cost-benefit analyses our main outcome which is not in line of HETUS is that the light version is by our opinion more appropriate in time being so we put a lot of efforts on possible aggregation of very detailed list of activities which are the primary goal of TUS. Here we also take into account the dissemination of data having in mind our previous experiences as many collected data for some activities were not published due to too imprecise estimates or were published as less precise estimate (use with caution). We got very similar feedback also from our advanced users who recommend us also on which activities we should put more attention. Unpaid household work, unpaid work for society and intra-household distribution of time are their main scopes of interest. It is interesting that both internal users (National Accounts) and external experts quoted almost the same topics.

The next dilemma (is the TUS survey of individuals or survey of household meaning all household members should fill in also the diary) was solved by importance of intra-household distribution of time from sociological and also from economic point of view. So our proposal is to collect data using dairies for all household members. By such approach we can in the process stage also following Finnish experiences prepare two databases: one of individuals and another one on households (for households with complete dairies for all household members).

We are aware of decreasing rates of participation in all social surveys conducted also by official statistics. People more and more do not feel themselves to be obliged to report their personal

life to institutions. And TUS in fact encroach on in some case intimate life of respondents. There is prescribed procedure in the Office how to invite sampled persons to participate. It is proved that incentives have an effect on increasing participation rate. In the scope of Time Use Survey, we were thinking also about a lottery for respondents with completed diaries.

From the point of view of organization of field survey (interviewers net and their involvement) and being respondents' friendly we also discussed about possible change of method of data collection. HETUS guidelines and existing praxis recommend data collection (diary) for the current day. In theory the respondent should record every 10-minutes interval activity simultaneously - meaning at the time being (except sleeping time). We are aware of fact that not many respondents do that. So it would be reasonable to think also about data collection for a previous day, as this could reduce the price of the survey and also reduce respondent burden without losing on the quality of collected diary data. We believe that recall for just one day before (and beside that the respondents will be informed about that by invitation letter) will not have significant influence on quality of diaries data. Of course the pilot should be carried out to confirm or to reject our presumptions.

As for TUS and also for other social surveys included in the future Framework regulation for the production of European statistics on persons and households (Integrated European Social Statistics - IESS) so called standardized and core variables are foreseen to be collected by using same definition and same categories. Some of variables should be collected directly from respondent but for some of them we are able to take them from administrative and statistical sources. As a consequence there will be a great level of harmonization between social surveys that enable micro- and macro-linkage of data.