

UNSD - EG-TUS Virtual Meeting

30 January - 1 February 2024

ISTAT innovation plan for TUS *initiatives and plans to improve time-use data collection in Italy*

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The Italian Time Use Survey: a long European history...and beyond!

- **1ST IT edition 1988-1989:** Multipurpose Survey on Time Use (3,729 households, 38,110 day diaries)

- In **EU**: in the **90's** Eurostat **pilot surveys project**

- Eurostat Harmonises European Time Use Survey

Guidelines: HETUS 2000

→ **EU Wave 2000**

- **IT 2002-2003 edition** (21,075 households, 51,206 day diaries)

Updated Guidelines: HETUS 2008

→ **EU Wave 2010**

- **IT 2008-2009 edition** (18,250 households, 40,945 day diaries)

- **IT 2013-2014 edition** (19,093 households, 41,229 day diaries)

Updated Guidelines: HETUS 2019

→ **EU Wave 2020**

- **IT 2022-2023 edition**

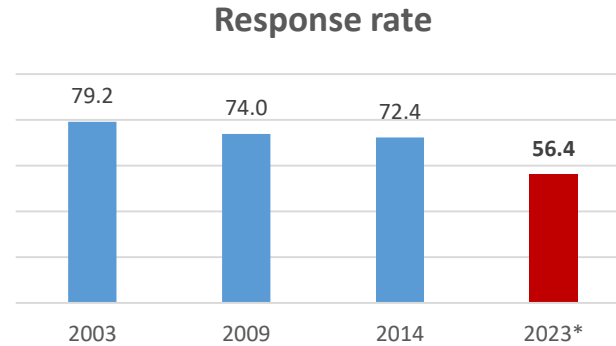
December **2022** - November **2023** ($\approx 15,000$ households, $\approx 30,000$ day diaries)

*In **Italy TUS**: is mandatory every **5 years** **by the National Law** No. 53 of 2000 to monitor gender differences in unpaid work*

*2018 - today
UNSD - Expert Group on Innovative and Effective Ways to Collect Time-Use Statistics - MHI*

Increasing problems with the 'traditional' Time Use Survey

○ Decreasing in response rate



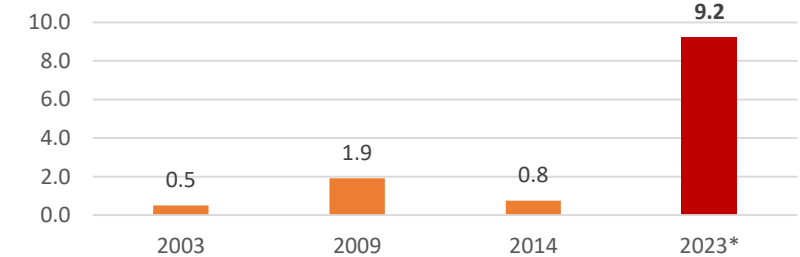
- *increased presence of one-person households, hard to find at home*
- *growing wariness of respondents to meet strangers for a face-to-face interview*
- ...

○ Increasing problems with the survey network

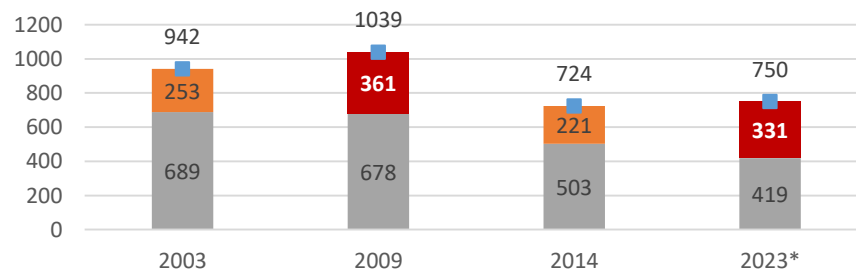
(1st stage units – Municipalities): The municipal survey network is grappling with increasing statistical burden and decreasing public budget

*staff reduction in the face of increasing statistical demands: **Permanent Census of the Population**, annual social survey on EU-ICT module and well-being indicators, mandatory reporting from population registers, etc.*

Non response rate due to non-participation of the municipality



Timeliness (n. of days)



- N. of days for outsourced service work
- No. days from for internal data editing and checking and validation phase
- Total: no. of days between the end of the survey and data dissemination

○ Timeliness too poor and costs too high

the “paper cycle” is obsolete & out of time

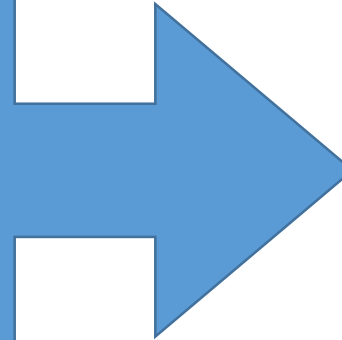
*“printing and sending questionnaires & diaries to the survey network”/“returning questionnaires & diaries to central office”/“registration and coding **full post-coded paper diaries outsourced** to external services”*

We have to change, *but we can't take a leap of faith*



○ INNOVATION PLAN

- improve ways of contacting the population;
 - reduce the workload of the municipal survey network;
 - simplify the survey;
 - reduce costs;
 - increase timeliness;
- but*
- ***maintain high data quality;***
 - ***maintain comparability in time series.***



The innovation strategy for Time use survey

Three strands of innovation:

- 1. SIMPLIFY** the survey to provide estimates on time use at reduced intervals (every five years according to Italian Law No. 53/2000) → **March-May 2023: pilot on a “LIGHT SURVEY”**

Same survey mode - different tool



- 2. TEST** new tools & technique to innovate the current full survey (ESSnet Smart Survey Implementation project) → **Q3 2024: large test (~2000 sample units) to study mode effect**

- geolocation vs self-reporting location
- paper diary vs MOTUS app
- use of interviewers “on demand”



- 3. STUDY** the use of AI techniques applied to coding textual descriptions of activities and locations, to improve timeliness and reduce costs in coding residual paper diaries in a **mixed-mode survey strategy** → **2024 onwards**





Pilot “light” survey in 2nd Quarter of TUS 22-23: a simplified diary

To **simplify** the Time Use Diary for respondents (**no textual descriptions**)

To **simplify data processing** (**no coding** of textual descriptions)

To **enable an easy transition to online filling out** of “light” diaries



— **Burden on respondents** — **Costs** + **Timeliness**

A sample of **about 4,000 households** was surveyed **from March to May 2023**

Objective:

To assess whether the *Light* diary can estimate the main indicators on daily life time as accurately as the *Full* diary, **using the same survey mode: paper diary left-behind by an interviewer.**

Ex. Daily Time spent on unpaid domestic and care work

The current Time schedule: post-coded textual information



Main activity
Free text

Parallel activity
Free text

ICT use

Location
Free text

With whom
Pre-coded

Enjoyment
Pre-coded

6	Che cosa sta facendo? Indichi le attività che svolge ad intervalli di tempo di 10 minuti! Descriva separatamente lo spostamento dall'attività che lo ha determinato, indicando il mezzo di trasporto utilizzato!	Che cos'altro sta facendo? Indichi l'attività contemporanea più importante	Sta usando Internet, un PC, uno smartphone, o altri dispositivi per queste attività?	Dove si trova o come si sta spostando? Indichi il luogo in cui si trova o il mezzo di trasporto che sta usando	È da solo o con persone che conosce? Non risponda se sta a letto o sta dormendo. Indicare almeno una risposta per riga. Da solo: Madre, Padre, Coniuge/partner, Figliola/sorella, Fratello/familiari conosciuti, Con altre persone che conosco	Per le persone di 11 anni e più Questo momento è piacevole? (da -3: per niente piacevole, a +3: molto piacevole)	7
DALLE 07.00 ALLE 10.00							
07.00 — 07.10	Dormo		<input type="checkbox"/>	A casa	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	-3 -2 -1 0 +1 +2 +3	
07.10 — 07.20	Mi sto lavando		<input type="checkbox"/>		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	-3 -2 -1 0 +1 +2 +3	
07.20 — 07.30	Ho svegliato mio figlio	Parlo con mio figlio	<input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	-3 -2 -1 0 +1 +2 +3	
07.30 — 07.40	Ho preparato la colazione	Ho ascoltato la radio	<input type="checkbox"/>		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	-3 -2 -1 0 +1 +2 +3	
07.40 — 07.50	Ho fatto colazione	Ho letto il quotidiano	<input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	-3 -2 -1 0 +1 +2 +3	
07.50 — 08.00	Lavo i piatti	Ascolto la radio	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	-3 -2 -1 0 +1 +2 +3	
08.00 — 08.10	Ho rifatto i letti	" "	<input type="checkbox"/>		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	-3 -2 -1 0 +1 +2 +3	
08.10 — 08.20	Sono andata a scuola per accompagnare mio figlio	Ho parlato con mio figlio	<input type="checkbox"/>	A piedi	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	-3 -2 -1 0 +1 +2 +3	
08.20 — 08.30	Sono andata al lavoro		<input type="checkbox"/>	In autobus	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	-3 -2 -1 0 +1 +2 +3	
08.30 — 08.40	Lavoro (prima o unica occupazione)		<input type="checkbox"/>	In ufficio	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	-3 -2 -1 0 +1 +2 +3	
08.40 — 08.50			<input type="checkbox"/>	" "	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	-3 -2 -1 0 +1 +2 +3	

TRACCIARE UNA RIGA IN VERTICALE O USARE LE VIRGOLETTE PER INDICARE CHE LA PERMANENZA IN UN LUOGO

People are required to fill out the diary describing, mainly in free text, how they spent time during the day

The *light* Time schedule: pre-coded information consistent with UN - MHI



ACTIVITIES
26 pre-coded



Che cosa sta facendo?		Indichi una attività o al massimo due per ogni colonna, ad intervalli di tempo di 10 minuti!		07:00	08:00	09:00	10:00	11:00	UNSD MHI-codes	HETUS-MHI-code		HETUS_REV-MHI-code name (= identical to UNSD MHI-codes names)	
				10 20 30 40 50	10 20 30 40 50	10 20 30 40 50	10 20 30 40 50	10 20 30 40 50					
Cura personale	Dormire	01	X X						21	1	Personal care	Sleeping	
	Mangiare, bere	02		X					22	2		Eating and drinking	
	Igiene e cura personale	03	X X						23	3		Personal hygiene and care	
Spostamenti	Spostarsi per svolgere delle attività	04		X X					23	3			
Lavoro	Lavoro	05			X X				23	3			
Scuola	Scuola, università, corsi	06				X X			1	4	Work/ income generating activities	Working in paid job or income generating activities	
	Cucinare, apparecchiare/sparecchiare, lavare i piatti	07		X					2	5		Making goods for own household or family use	
Cura della casa e della famiglia	Pulire, riordinare la casa, giardinaggio	08							13	6	School	Education	
	Lavare, stirare e mettere a posto panni	09							4	7		Preparing and serving food and meals for own household members	
	Cura di animali da compagnia	10							5	8		Cleaning own or family dwelling, gardening	
	Manutenzione, riparazioni (casa, veicoli)	11							7	9		Cleaning and care of clothing and footwear of own household members	
	Spesa, shopping, altri acquisti di beni	12		X					9	10		Taking care of pet of own household or family	
	Acquisto servizi e altra gestione della casa e della famiglia	13							6	11		Maintaining and making small repairs in own or family dwelling	
	Cura di bambini/ragazzi della famiglia	14							10	12		Shopping for own household or family	
	Cura e aiuti ad adulti della famiglia	15							8	13		Managing own household	
	Produzione di beni per la propria famiglia	16							11	14		Taking care of own (household or family) child	
	Parlare, socializzare, uso social media	17							12	15		Taking care of or helping adults (own household or family)	
Tempo libero	Assistere a spettacoli, mostre, musei	18							3	16	Volunteering	Volunteer work	
	Passateggiare, sport	19							15	17		Participation	Community participation, civic/related responsibilities, religious practices
	Leggere	20						14	18	Socializing and communication			
	Guardare/ascoltare TV, video, radio, musica	21		X					16	19			Cultural, entertainment and sports events
Passatempi, giochi e altre attività di tempo libero	22							18	20	Sport participation and exercising			
Volontariato e aiuti	Volontariato in gruppi o associazioni	23							17	21	Leisure time activities	Hobbies, games and other pastime activities	
	Aiuti diretti ad altre famiglie, comunità, ambiente	24							19	22		Reading for leisure	
Partecipazione	Partecipazione religiosa e sociale	25							20	23	Travelling	Travel	
	Altra attività	26							24	24		Watching TV/Listening to radio or streaming	
	Sta usando Internet?								25	25	Other activity	Other (specify)	
	Indichi se sta usando Internet, Smartphone, Pc o altri dispositivi	27		X									
	Dove si trova o come si sta spostando?												
Luogo	A casa	28	X	X					14	18	Leisure time activities	Socializing and communication	
	Luogo di lavoro/Scuola	29			X X				16	19		Cultural, entertainment and sports events	
	Altro luogo	30							18	20		Sport participation and exercising	
Mezzo	A piedi/bici	31		X					17	21	Leisure time activities	Hobbies, games and other pastime activities	
	Mezzo pubblico (treno, autobus, metro...)	32			X X				19	22		Reading for leisure	
	Mezzo privato (auto, moto)	33							20	23		Watching TV/Listening to radio or streaming	
	È da solo o con persone che conosce?												
Con chi sta	Da solo, con sconosciuti	34	X X	X X					20	23	Travelling	Travel	
	Con persone conviventi	35		X X					24	24		Watching TV/Listening to radio or streaming	
	Con persone non conviventi	36			X X				25	25		Other (specify)	

ICT use

LOCATION
6 pre-coded

With whom
3 Pre-coded

No information on Enjoyment

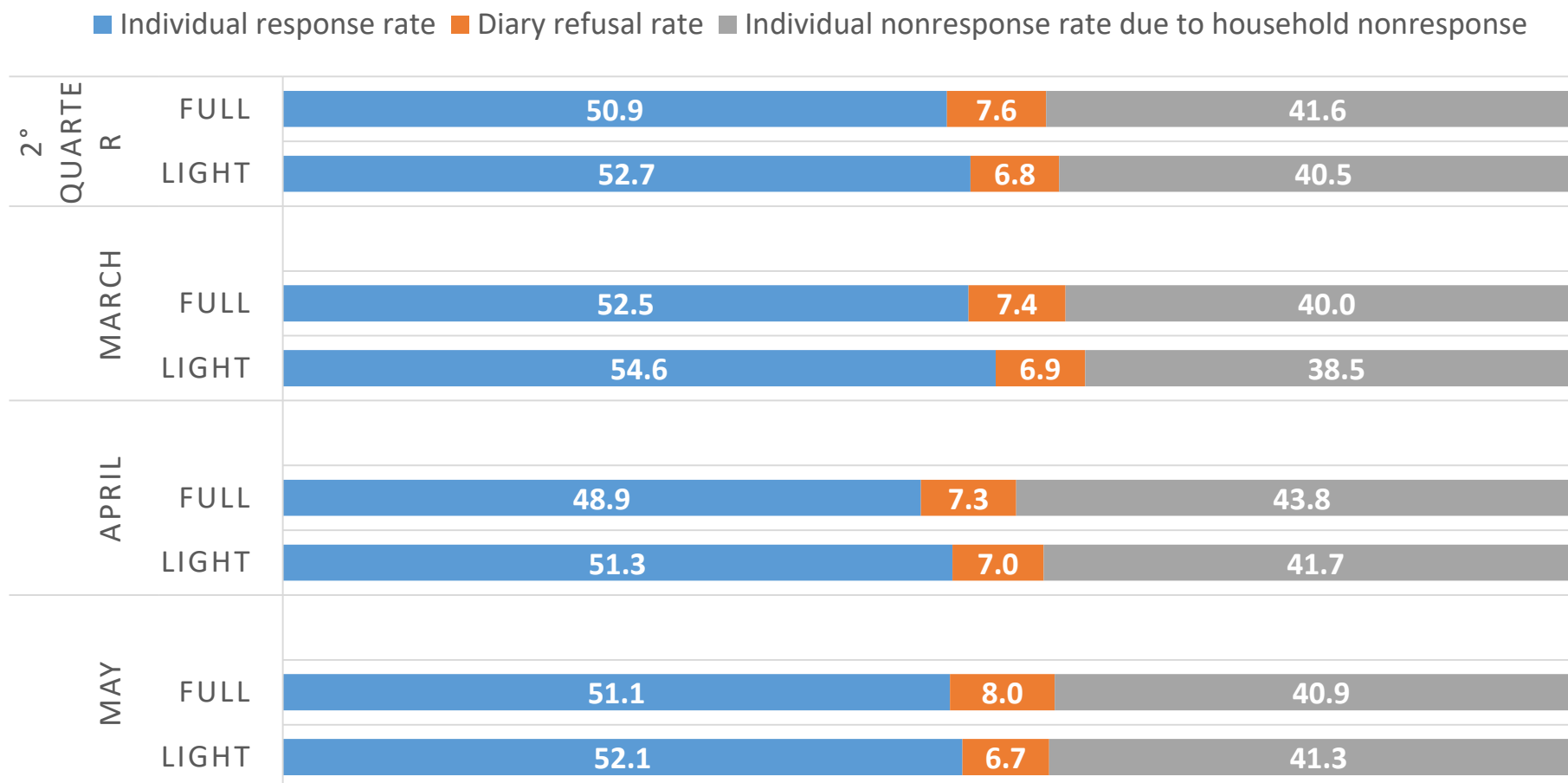
Same activities proposed by UN- MHI:

Italy just differentiates among direct and organization-based volunteering





Full Survey vs Pilot *light* survey - First results: (non) response rates



The *LIGHT* PILOT survey gets slightly better results than the *FULL* SURVEY in terms of response rate, so the pre-coded *light* diary seems to be equivalent to the post-coded *full* diary for respondents.



After the data recording we will also share data on the quality of the information collected

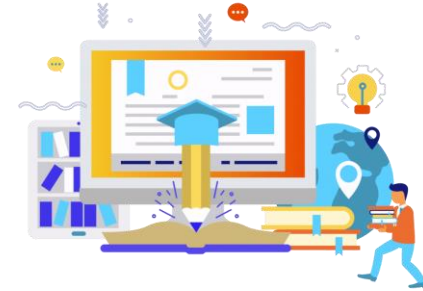
Final goals of the innovation strategy for Time Use Survey



EU-Wave 2020

2023-2024

- **THE LAST TRADITIONAL FULL SURVEY**
PAPI & full post-coded diary
- *Light Pilot survey (National project)*
- *Test mode effect (ESSnet project)*



IT intermediate
light survey

+5 years
~2028

- **Light survey** (CAPI/CAWI & *light diary*)
- Mix mode: Paper & online time use *light diary*



EU-Wave 2030

+10 years
~2033

- **New Full Survey** (CAPI/CAWI & full diary)
- Mix mode: Paper & online time use full diary
- *AI techniques applied to coding paper diary*

