

12 – 14 June 2023

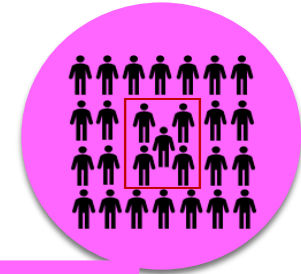
UNECE Expert Meeting on Statistical Data Collection

# Evaluating computer-assisted questionnaire usability: the case of Permanent Census of Population and Housing

# The case study: the Permanent census of population and housing

## SAMPLE

Since 2018 the Census no longer involves all the Italian households, but only a sample every year: about 1,400,000 resident households in 2,800 Italian municipalities



## DATA COLLECTION DESIGN



A sequential mixed-mode data collection design, starting with CAWI and including CAPI after a month. CAWI remains available until the end

## CA QUESTIONNAIRE

The questionnaire consists of:

- the list of the household members
- individual forms to collect information on each member
- a familiar section to collect the characteristics of the dwelling

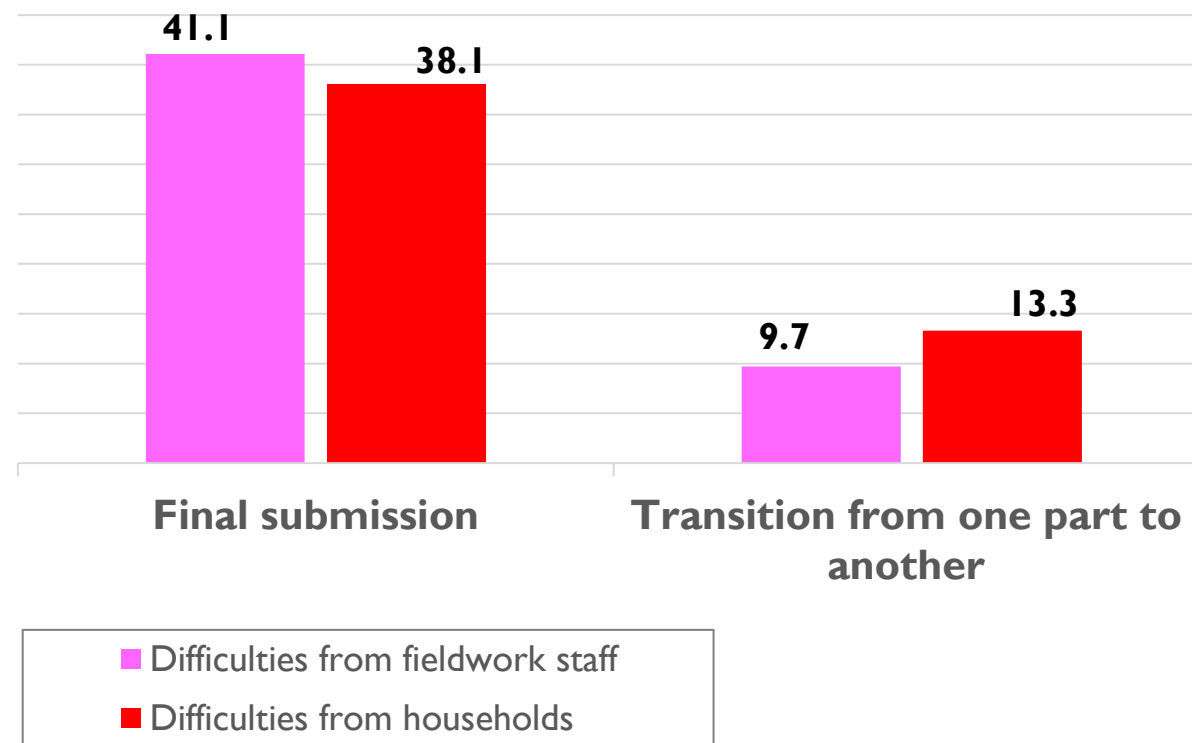


# Heads of the municipal census offices debriefing (year 2018)

2503 Heads of the Municipal Census Offices (HMCO) reported at least one difficulty on questionnaire usability from fieldwork staff (88.9%) and from households (79.5%)

Almost 40% of the difficulties were related to the final submission of the questionnaire, and around 10% were about the transition from one part to another

HMCO feedback (% value)



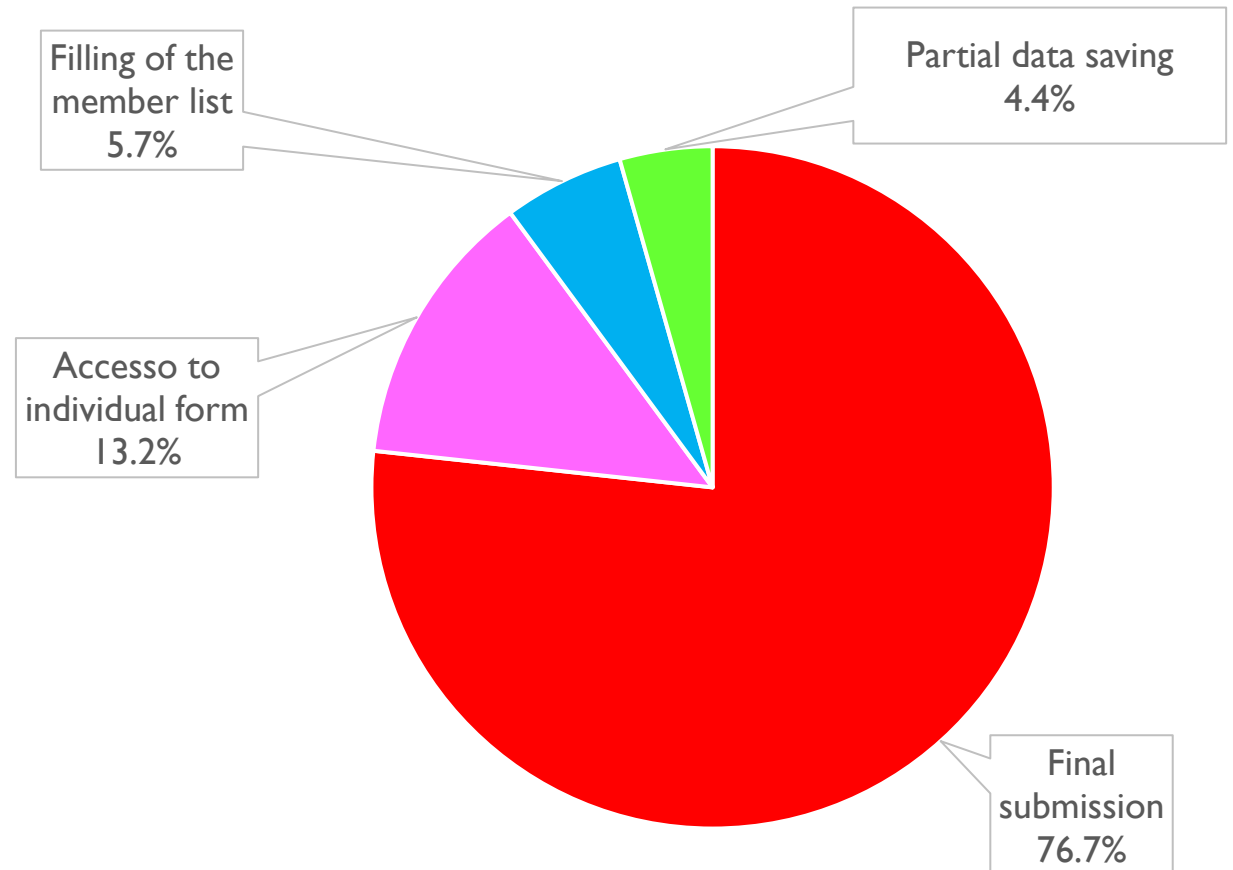
# Help Desk Tickets (year 2019)

2,276 out of approximately 48,000 tickets, were about the functionality and usability of the CA questionnaire:

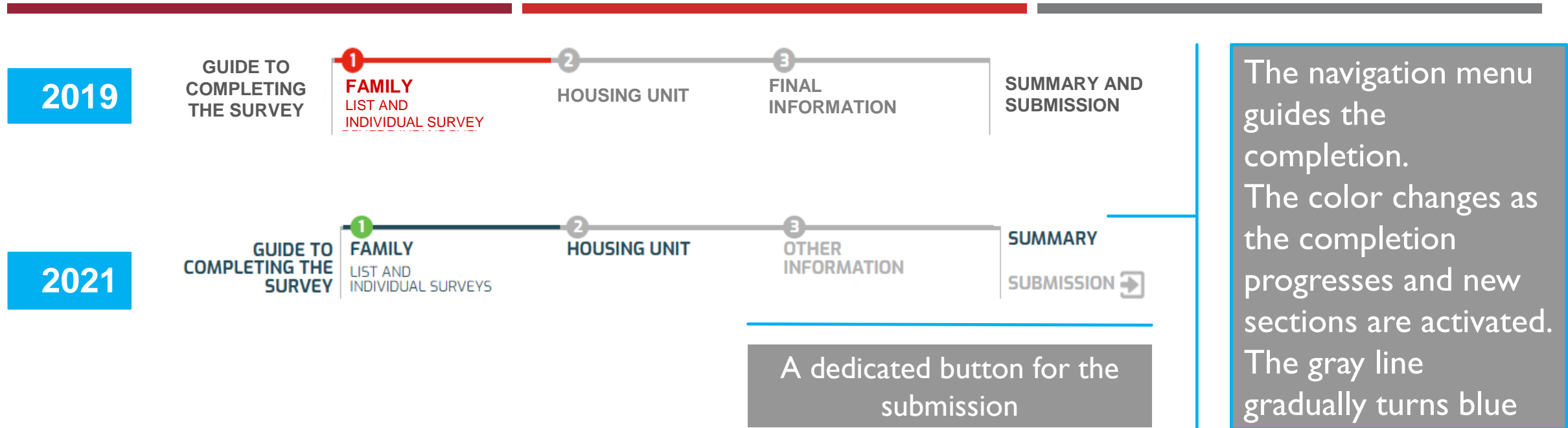
3/4 were about the final submission

1/4 concerned other issues:

- access to individual forms
- filling in the members list
- partial data saving



# Usability improvements: simplified questionnaire navigation



# Usability improvements: guided completion (final submission)

2019

## LISTA E SCHEDE INDIVIDUALI

ROMEO ROSSI

PAOLO ROSSI

SARA VERDI

REBECCA ROSSI

## ALLOGGIO

## INFORMAZIONI FINALI



- Dopo aver completato tutte le sezioni, è **NECESSARIO INVIARE IL QUESTIONARIO**
- Dopo aver inviato il questionario sarà possibile scaricare una copia e stampare la ricevuta
- Andando avanti, prima dell'invio definitivo sarà possibile controllare le risposte fornite.



CONTINUE

2021

## SUMMARY OF SECTIONS

### FAMILY - LIST AND INDIVIDUAL FORMS

ROMEO ROSSI

PAOLO ROSSI

SARA VERDI

REBECCA ROSSI

### HOUSING UNIT

### OTHER INFORMATION



- After completing all sections, you **MUST SEND THE QUESTIONNAIRE..**
- Once the questionnaire has been sent, you can download a copy and print the receipt.
- Send the questionnaire from the browsing menu at the top or from the CONTINUE button

CONTINUE



Lighter graphic

Standardized button

Optimization of redundant text

# Usability improvements: guided completion (access to individual forms)

2019

**FAMIGLIA - LISTA DEI COMPONENTI**

Romeo	Persona di riferimento della famiglia	Non è più in famiglia perché: <input checked="" type="radio"/> Trasferito <input checked="" type="radio"/> Stesso comune <input type="radio"/> Altro comune <input type="radio"/> Estero <input type="radio"/> Non so <input type="radio"/> Deceduto	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rossi	<input type="radio"/>		CONFERMA	MODIFICA
R5SRM039B14L736D				
Nome	Persona di riferimento della famiglia		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cognome	<input type="radio"/>		CONFERMA	MODIFICA
Codice Fiscale				

Elimina componente

AGGIUNGI COMPONENTE

**SCHEDA INDIVIDUALE**

**COMPILA**

2021

**FAMILY - LIST OF MEMBERS**

ROMEO	ROSSI	Family reference person	Is no longer in the family because
R5SRM040B14L736W		X	Relocated Deceased
PAOLO	ROSSI	Family reference person	Is no longer in the family because
R5SPLA69L12L736H			X Relocated in the same municipality Deceased

**CONFIRM LIST**

**FAMILY - INDIVIDUAL QUESTIONNAIRES**

INDIVIDUAL SURVEY OF  
ROMEO ROSSI

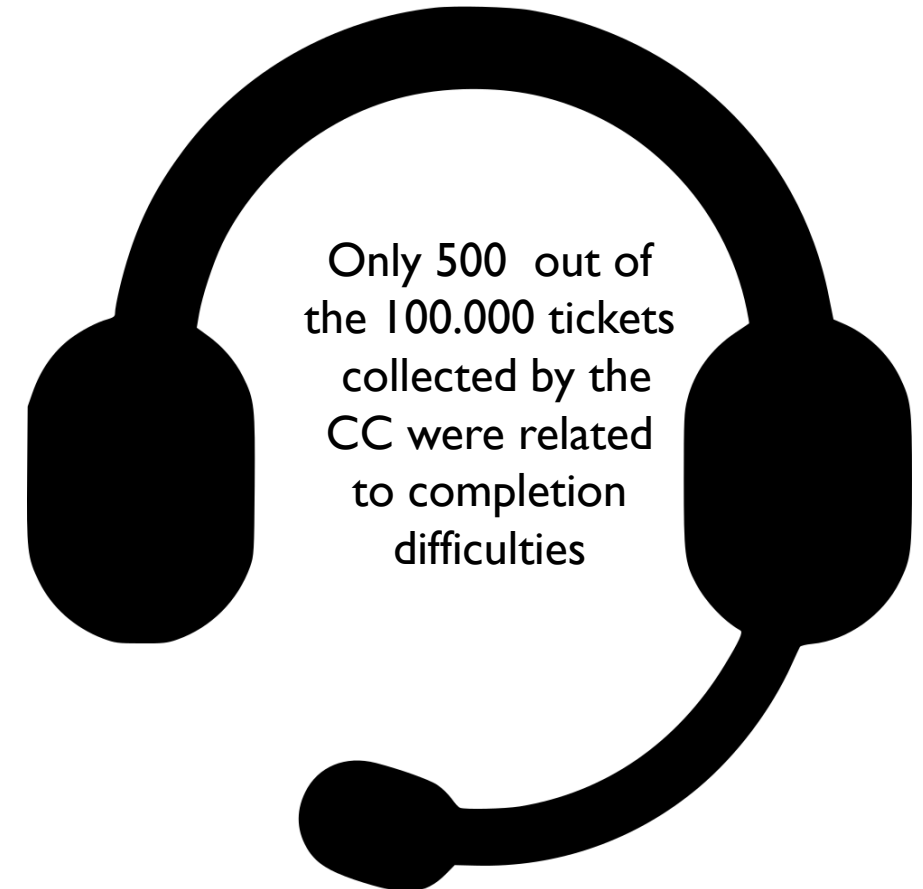
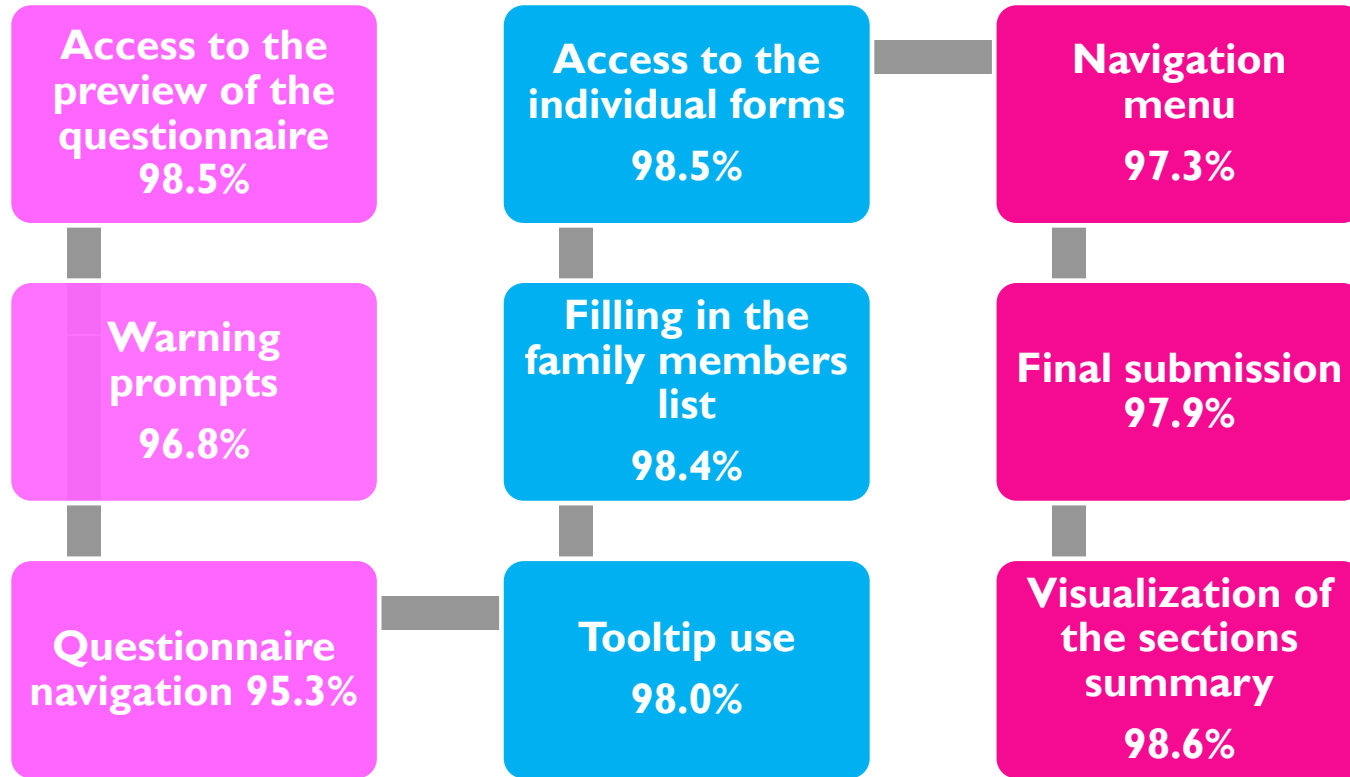
**FILL IN**

Simplified access to the individual forms

Simplified operations to add or delete family members forms

Less buttons and more intuitive labels

# Fieldwork staff debriefing and help desk tickets analysis (year 2021)



Almost all fieldworkers (8207 respondents) reported no difficulties with any of the usability aspects of the CA questionnaire



# Respondent feedback questionnaire (years 2019, 2021)

## Main results 2019 vs 2021



The percentage of households responding in **CAWI** has increased from 51.4 % in 2019 to 53.1% in 2021

**from 44.5% to 45.7% if elderly**



The percentage of households in which the **reference person** or another person belonging to the household completes the questionnaire **has increased** from 86.9% in 2019 to 87.7% in 2021

**from 57.9% to 60.5% if elderly**



The percentage of **households not needing any help at all** (not from friends or relatives, not from help desk, not from Municipal Census Offices, etc.) **has risen** from 78.2% in 2019 to 79.9% in 2021

**from 50.0% to 52.0% if elderly**



## Difficulties reported in 2021



Difficulty with the final submission  
8.6%



Difficulty with the navigation  
21.7%



Difficulty with some of the questions  
24.4%



Difficulty to access the questionnaire  
42.1%

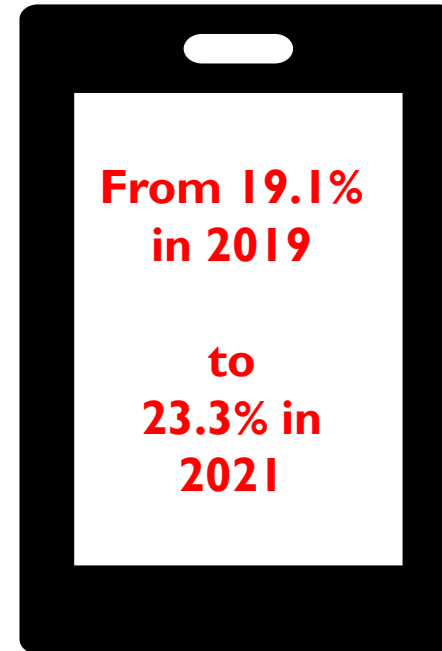
# Next steps

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## In the future...

Questionnaire redesign for  
smartphone completion

Usability testing - mouse tracking



# Thanks for listening!

BARBARA LORÈ | [lore@istat.it](mailto:lore@istat.it)

SABRINA BARCHERINI | [barcheri@istat.it](mailto:barcheri@istat.it)

KATIA BONTEMPI | [katia.bontempi@istat.it](mailto:katia.bontempi@istat.it)

MANUELA BUSSOLA | [bussola@istat.it](mailto:bussola@istat.it)

SIMONA ROSATI | [srosati@istat.it](mailto:srosati@istat.it)