

*Study visit for the representatives of
the statistical office of Israel*

CORstat as a system for managing surveys and interviewers

with special regard to GIS

Piotr Gradzik

Statistical Computing Centre

p.gradzik@stat.gov.pl



CORstat as a system for managing surveys and interviewers

Scope of presentation

- *the context of the system for managing surveys and interviewers (CORstat)*
- *live demonstration of the CORstat system*
- *GIS functions, we are working on, which will be implemented in the near future*
- *development of e-questionnaires applicable to all survey modes (CAPI, CATI, CAII)*

the context of the system

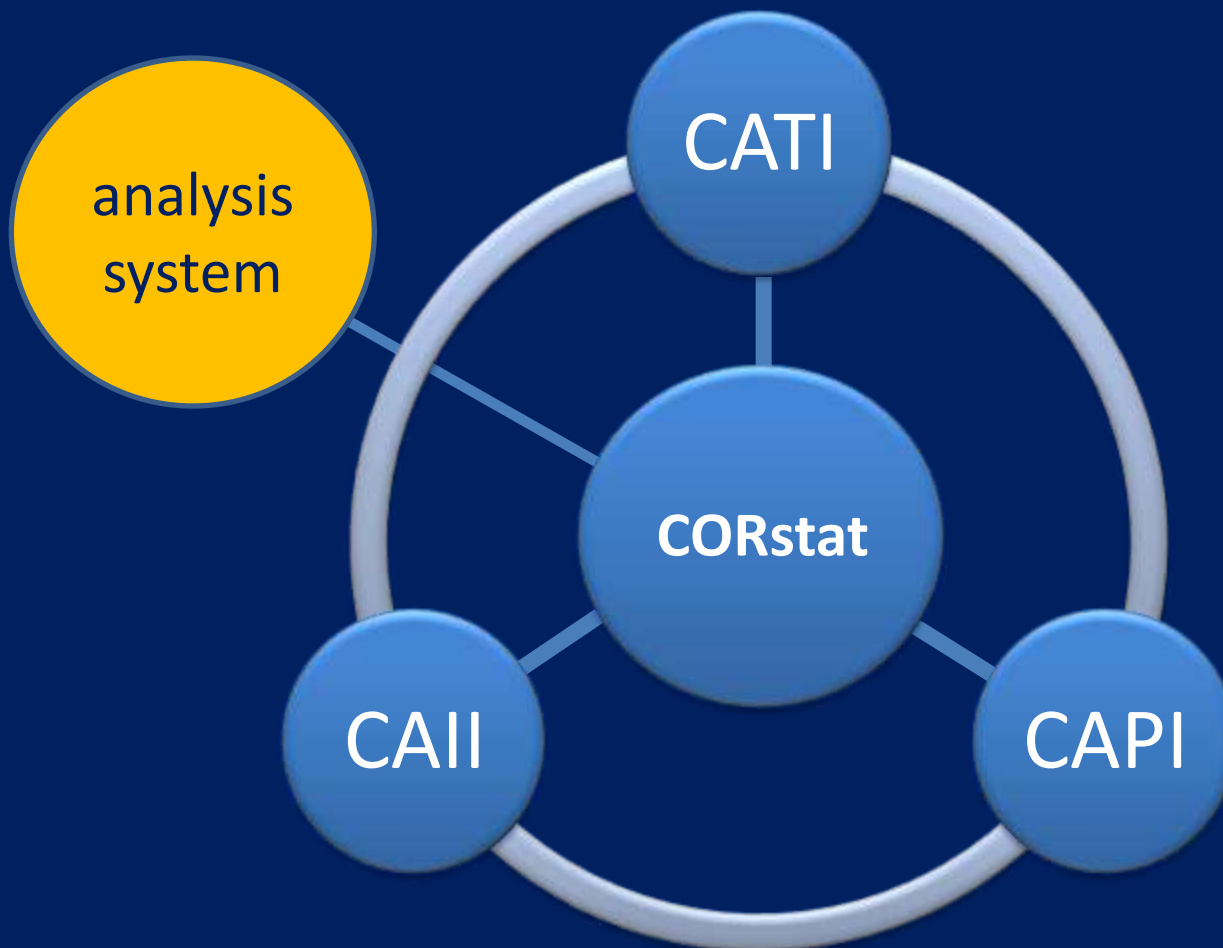
- 1) Several types of surveys and respondents (surveys are conducted in households, on farms or in retail points)
- 2) Substantive and organizational procedures are prepared by Central Statistical Office
- 3) Surveys are coordinated by the regional statistical offices (16) in its area of operation using the local network statistical interviewers
- 4) Data are collected by the interviewers visiting the respondents or by telephone or sent directly by the respondent via Internet

We have 930 interviewers CAPI and approx. 300 interviewers conducting telephone interviews, and several hundreds of thousands of respondents

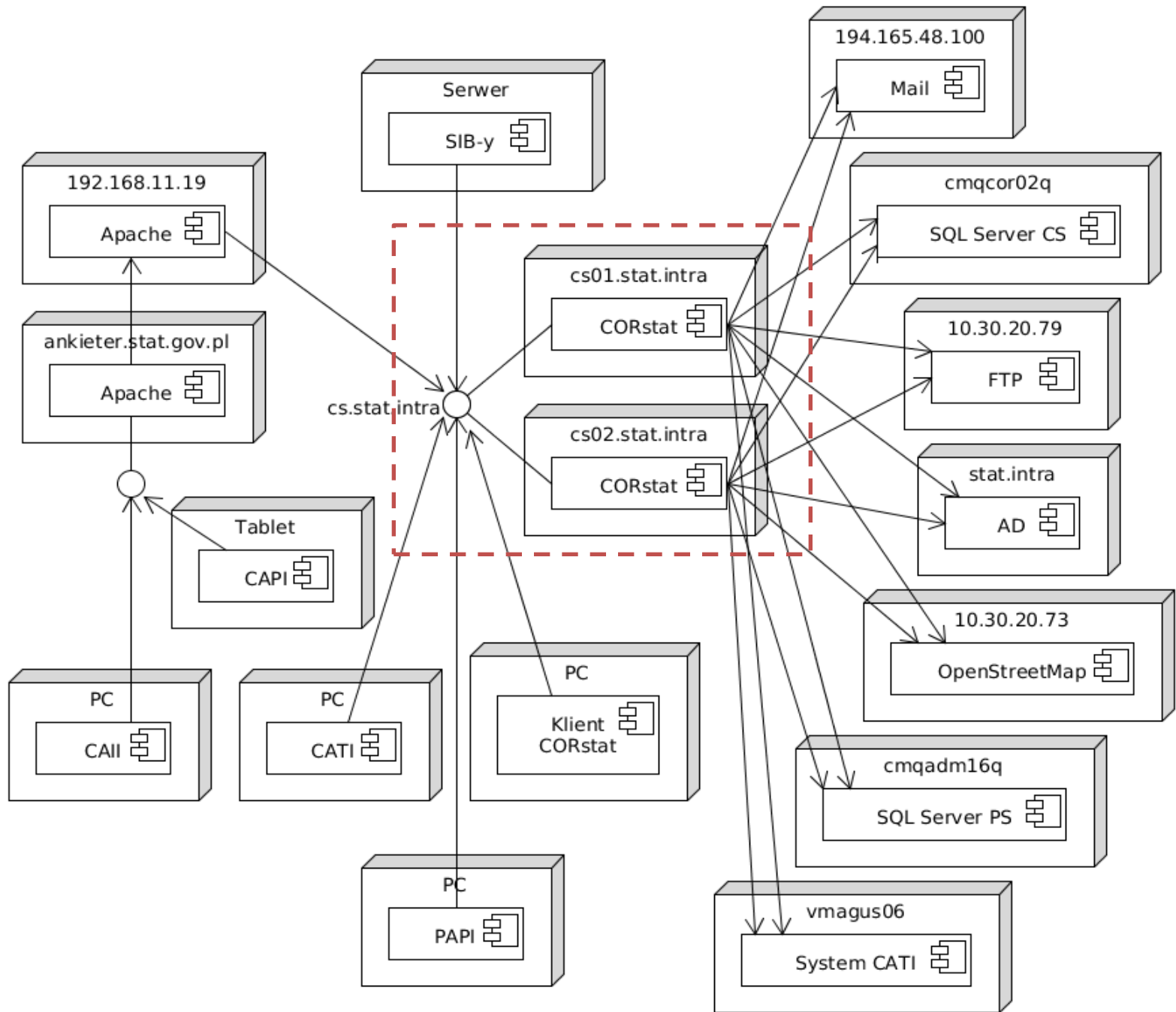
the main requirements for the system

- 1) Integration of all information about all the surveys, the participants and the activities performed by them
- 2) Separate data areas for surveys participants from different regions (provinces) - autonomously, ie. without the ability to use the system functions for data outside the region
- 3) Adaptation for cooperation and data exchange with other systems (eg. System Call Center-CATI, CAPI)
- 4) Flexibility in creating user roles, interchangeability of user roles in different surveys and the possibility of combining different roles in the same survey

general scheme of the environment



details →



data collection methods

Mixed mode approach:

- first approach by Internet (CAII/CAWI),
- followed by telephone (CATI) in case we have a telephone number available,
- otherwise face-to-face (CAPI)

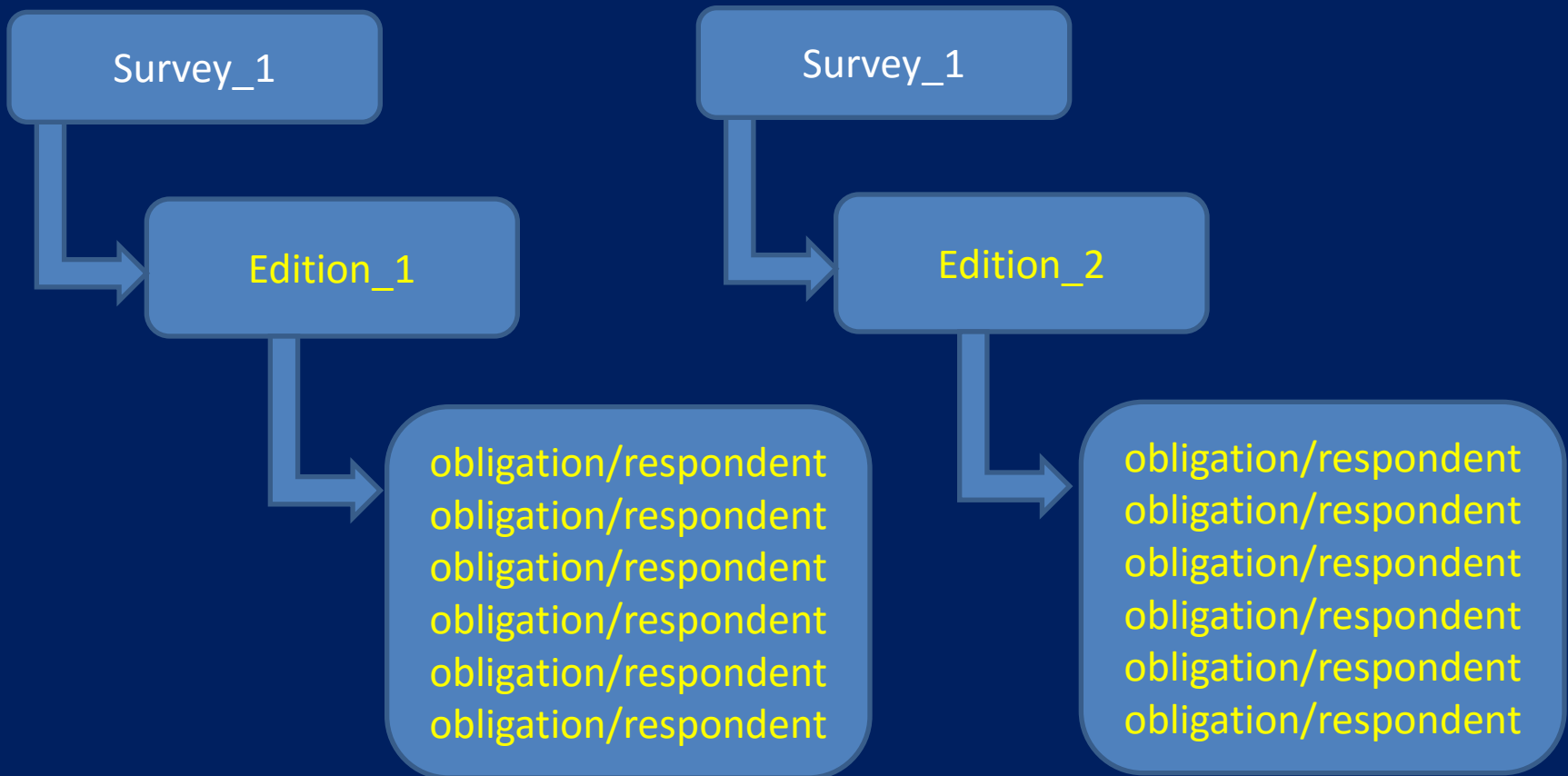
.. and paper questionnaires (PAPI) – if there is no other option

development of the CORstat system

- 1) CORstat system was developed by Statistical Computing Centre (CIS) and is still developed and adapted to the needs of users
- 2) We collect users comments and suggestions on user interface and application functionality.
- 3) We have a discussion forum for users and a special system, where they can watch the progress of work

organization of data in the CORstat system

Survey ⇒ Edition ⇒ obligations



GIS functions in CORstat system

List of respondents (obligations) + list of available functions

The screenshot displays the CORstat (TEST) 1.4.4 application window. The interface includes a menu bar (Plik, Narzędzia, Raporty, Pomoc), a left sidebar with navigation options (Badania, Edycje, Zgłoszenia, Aplikacje, Użytkownicy, Wiadomości, Logi), and a main data table. The table lists respondents with columns for Nrd, Nrm, Kanal, Info, Etap, RA, ST, Ankieter, Data zmiany, Woj, Urząd, and Pow. A context menu is open over the table, listing various actions such as 'Przydziel...', 'Skopiuj przydział...', 'Odbierz...', 'Przenieś...', 'Wyślij do kanału...', 'Zgłoszenia...', 'Mapa...', 'Zamknij', 'Otwórz', 'Szczegóły...', 'Podgląd kartoteki...', 'Podgląd formularza...', 'Telefony...', 'Notatki...', 'Eksport do pliku...', 'Historia...', 'Edytuj...', 'Usuń...', 'Importuj obowiązki...', 'Importuj pliki...', and 'Importuj telefony...'. Three callout boxes highlight specific elements: 'selected respondent' points to the row for respondent 000546578; 'list of respondents' points to the main data table; and 'list of functions' points to the context menu.

selected respondent

list of respondents

list of functions

Nazwa	Miejscowość	Nrd	Nrm	Kanal	Info	Etap	RA	ST	Ankieter	Data zmiany	Woj	Urząd	Pow
000531505	PIONKI	8	10	CAPI		WY	01	an1		2017-03-21 13:37	14	05	25
000546578	PIONKI	7	33	CAPI		WY	12	an1		2017-03-21 13:37	14	05	25
000620229	PIONKI	13	24	CAPI		WY	01	an1		2017-03-21 13:37	14	05	25
000893533	PIONKI	22	24	CAPI		WY	01	an1		2017-03-21 13:37	14	05	25
001059455	PIONKI					WY	01	an1		2017-03-21 13:37	14	05	25
001179616	PIONKI					WY	01	an1		2017-03-21 13:37	14	05	25
001302349	PIONKI					WY	01	an1		2017-03-21 13:37	14	05	25
001544571	PIONKI					WY	01	an1		2017-03-21 13:37	14	05	25
001695488	PIONKI					WY	01	an1		2017-03-21 13:37	14	05	25
001875225	PIONKI					WY	01	an1		2017-03-21 13:37	14	05	25
000132868	KŁONÓWEK-WIEŚ					WY	01	an2		2017-03-21 13:39	14	05	25
000132881	WOJŚLAWICE	48		CAPI		WY	11	an2		2017-03-21 13:39	14	05	25
000132982	GÓZD	41		CATI		RO	01			2017-03-21 13:41	14	05	25
000421524	LIPINY	1		CAPI		RO	01	an2		2017-03-21 13:41	14	05	25
000428218	KUCZKI-KOLONIA	2		CAPI		WY	01	an2		2017-03-21 13:39	14	05	25
000428472	KLWATKA KRÓLEWSK	128		CAPI		WY	12	an2		2017-03-21 13:39	14	05	25
000428475	GÓZD	29		CAPI		WY	01	an2		2017-03-21 13:39	14	05	25
000429027	DRDZANKI	73		CATI		RO	11			2017-03-21 13:41	14	05	25
000429025	MAŁĘCZYN	53		CAPI		WY	01	an2		2017-03-21 13:39	14	05	25

CORstat system - assigning tasks to interviewers

Manual assignment

The screenshot displays the CORstat system interface for manual assignment of tasks to interviewers. A dialog box titled "Przydzielanie obowiązków" (Assigning tasks) is open, showing a list of interviewers and a table of their current workload.

Selected respondent: 00000087, KOLBUSZOWA GÓRNA

Current workload of the selected interviewer: Ciekawski Zenon [ank14]

Selected interviewer: Ciekawski Zenon [ank14]

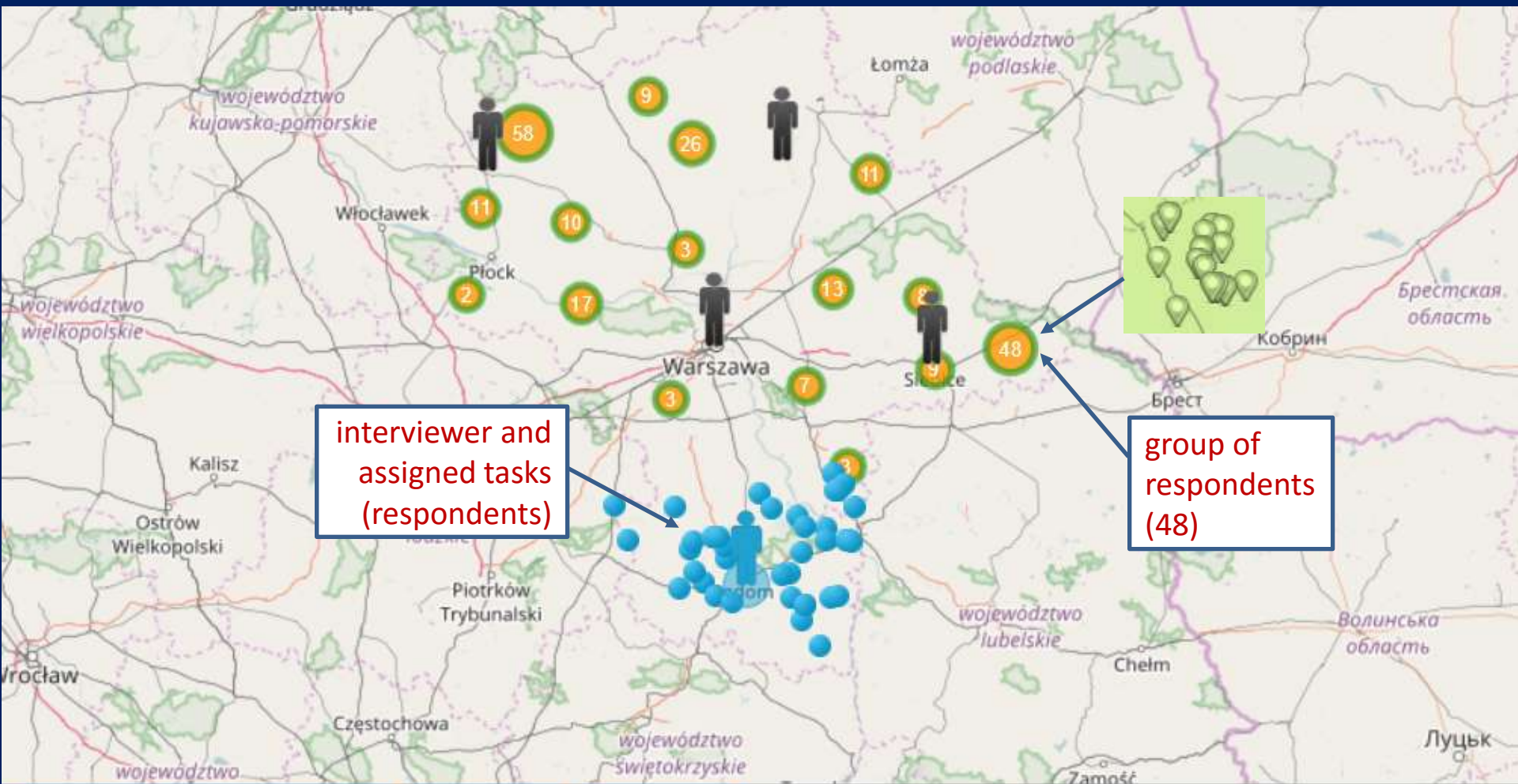
Symbol	Nazwa	Ulica	Nrd	Nrm	Kanał	Info	Etap
00000062			15		CAPI		RO
00000087	KOLBUSZOWA GÓRNA						RO
00000119	ŁOWCE						NI
00000197							NI
00000727							NI
00001671							NI
00002416							NI
00003115							NI
00003131							NI
00003148							NI
00003155							NI
00003181							NI
00003234							NI
00003428							NI
00003501							NI
00004076							NI
00004966							NI
00005994	ALEKSANDRÓW		51		CAPI		NI
00006923	KOMORZE PRZYBYSŁAWSKIE		4		CAPI		NI
00007354	GODZISZÓW		61		CAPI		NI

Badanie	Edycja	Czas	Przypisanych	Obsłużonych	Pozostało
BR	2017_01	2016-12-20 - 2017-04-15	82	0	82
R-ZW-S	2017_1	2017-02-28 - 2017-03-31	77	0	77

Buttons: Obciążenie, Zapisz, Anuluj

CORstat system - assigning tasks to interviewers

Automatic assignment – visualization on map



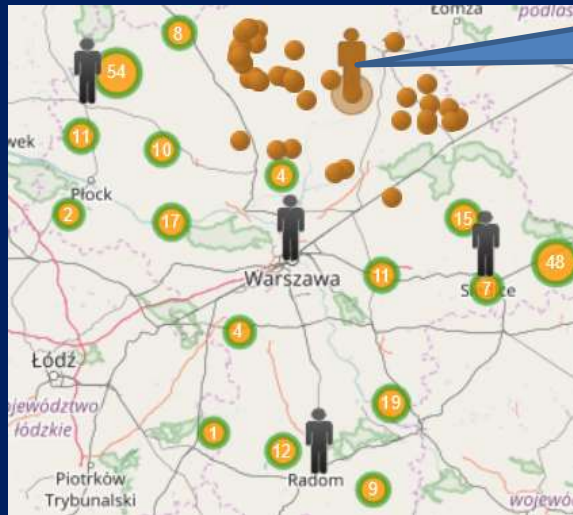
Przydziel automatycznie

Resetuj

Zamknij

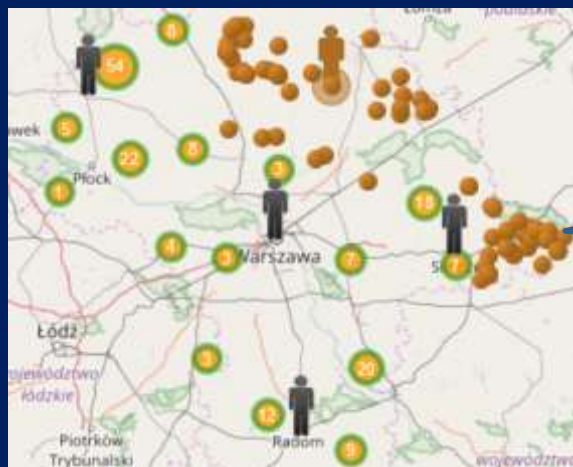
CORstat system - assigning tasks to interviewers

How to correct automatic assignment on the map ?



(1) click on the symbol of interviewer

(2) click on the symbol of group of respondents



done...
the same color means
the same interviewer

GIS functions in CORstat system

The screenshot displays the CORstat 1.3.5 application window. The left sidebar shows a navigation menu with options: Badania, Edycje, Obowiązki (selected), Aplikacje, Użytkownicy, Wiadomości, and Logi. The main area shows a table titled 'Obowiązki (120000)'. The table has columns: n, Kanał, Info, Etap, RA, and ST. The 'Info' column contains various icons, including a green checkmark, a yellow warning triangle, a blue location pin, and a blue document icon. A red arrow points to the blue document icon in the 'Info' column of the first row, which is also enclosed in a blue box. A red text box at the bottom of the image provides the following information:

Information - whether the interviewer conducted a survey at the destination
If distance is lesser than 100 meters from the location of the respondent then yes (✓)

The table data is as follows:

n	Kanał	Info	Etap	RA	ST
	CAPI	✓	WY	01	71
	CAPI	✓	WY	15	
	CAPI	✓	WY	01	71
	CAPI	✓	WY	01	71
	CAPI	✓	WY	01	71
	CAPI	✓	WY	01	71
	CAPI	✓	WY	01	71
	CAPI	✓	WY	01	71
	CAPI	✓	WY	01	71
	CAPI	✓	WY	01	71

At the bottom of the window, there is a pagination control showing 'Strona 1 z 4000'.

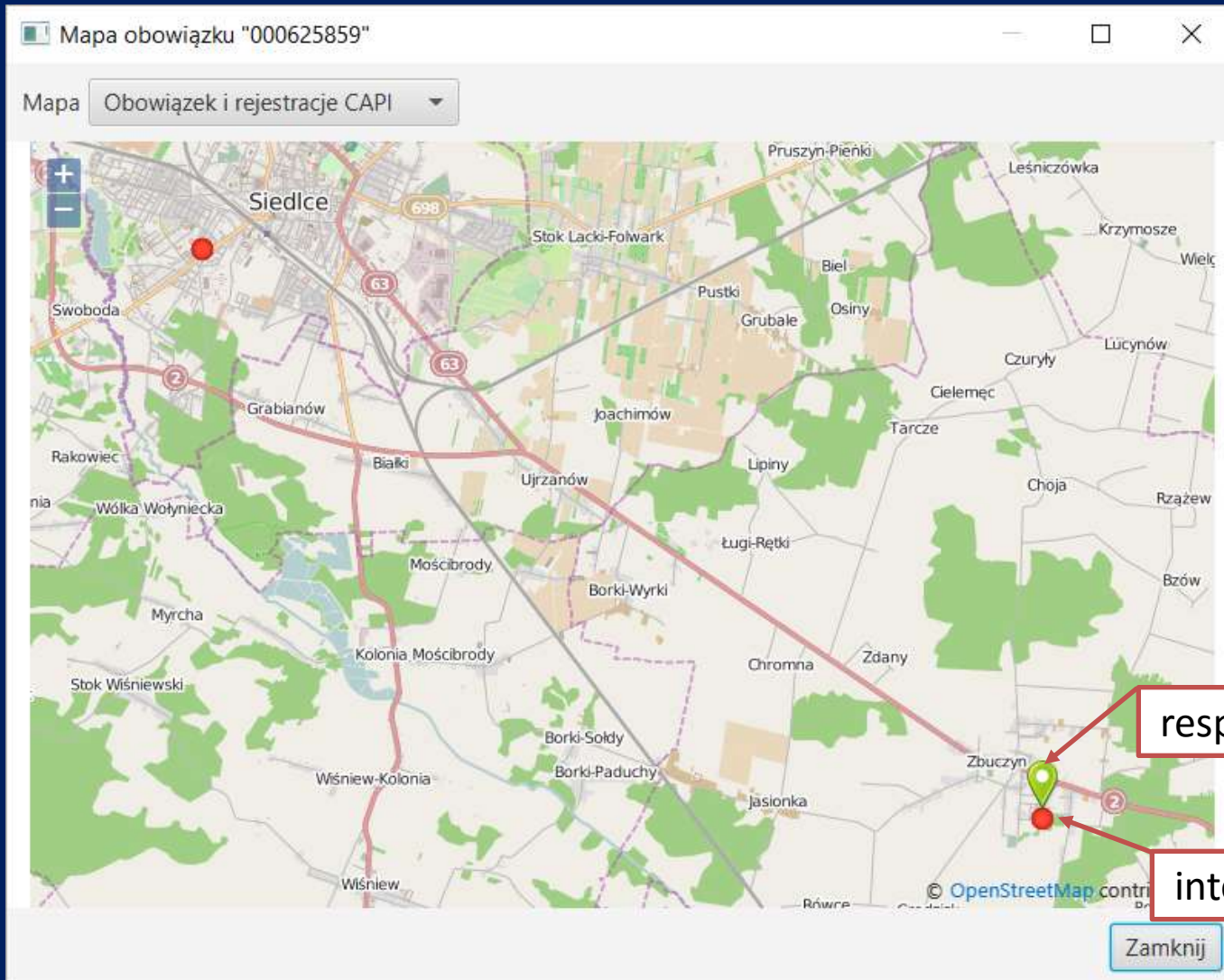
GIS functions in CORstat system

Information - how far from the location of the respondent, the interviewer entered the data:

CAPI	🔒	↑	✓	📦	🛡️	📱	€	📄	WY	01	71
CAPI	🔒	↑	✓	📦	🛡️	📱	€		Nie rejestrowany na miejscu Odległość 4.8 km		
CAPI	🔒	↓		📦	🛡️		€				
CAPI	🔒	↑	✓	📦	🛡️	📱	€		WY	01	71

CAPI	🔒	↑	✓	📦	🛡️	📱	€	📄	WY	01	71
CAPI	🔒	↑	✓	📦	🛡️	📱	€		Rejestrowany na miejscu Odległość 5 m		
CAPI	🔒	↓		📦	🛡️	📱	€		RO		

GIS functions in CORstat system

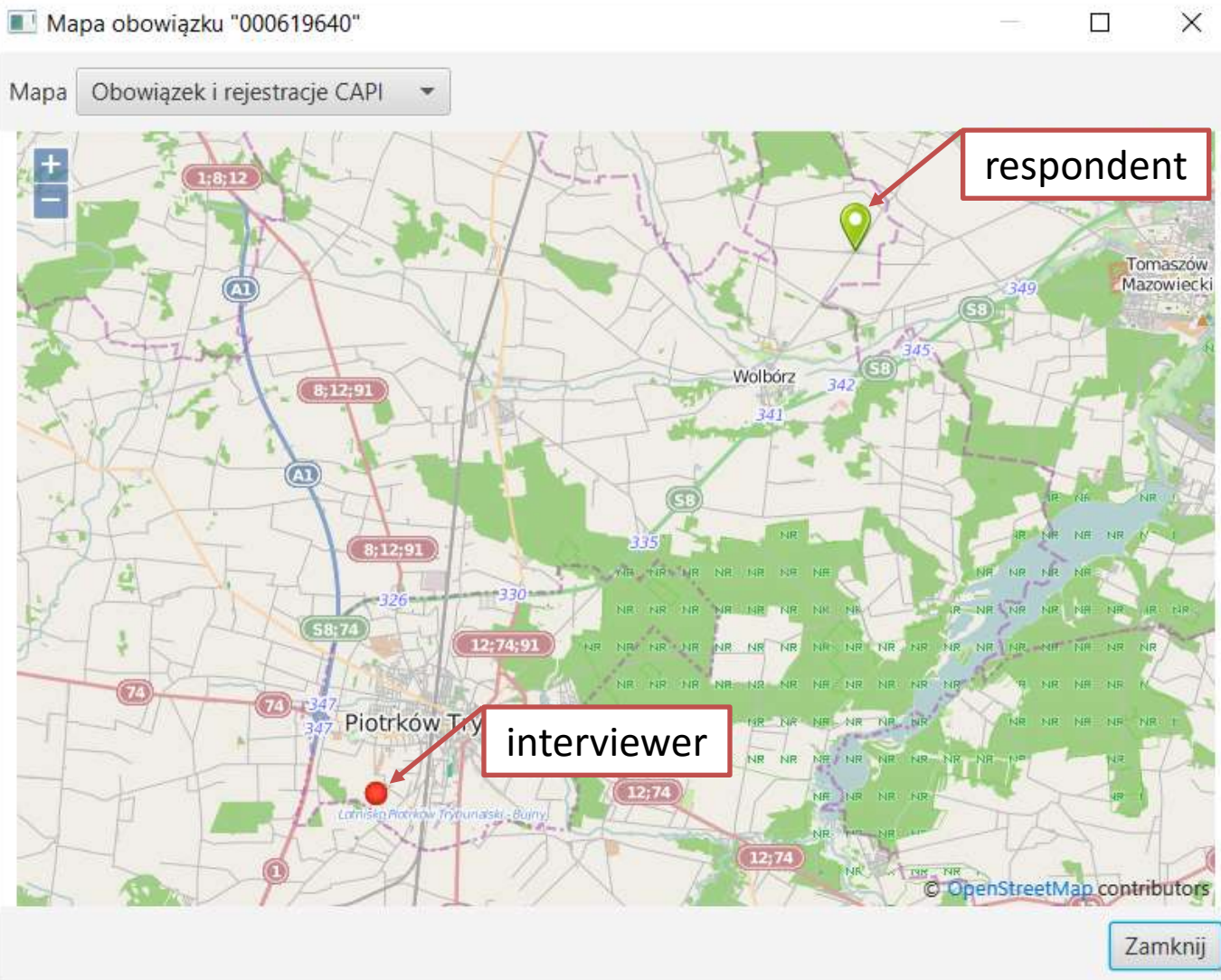


interview at the location of the respondent

respondent

interviewer

GIS functions in CORstat system



interview
outside the
location of the
respondent