

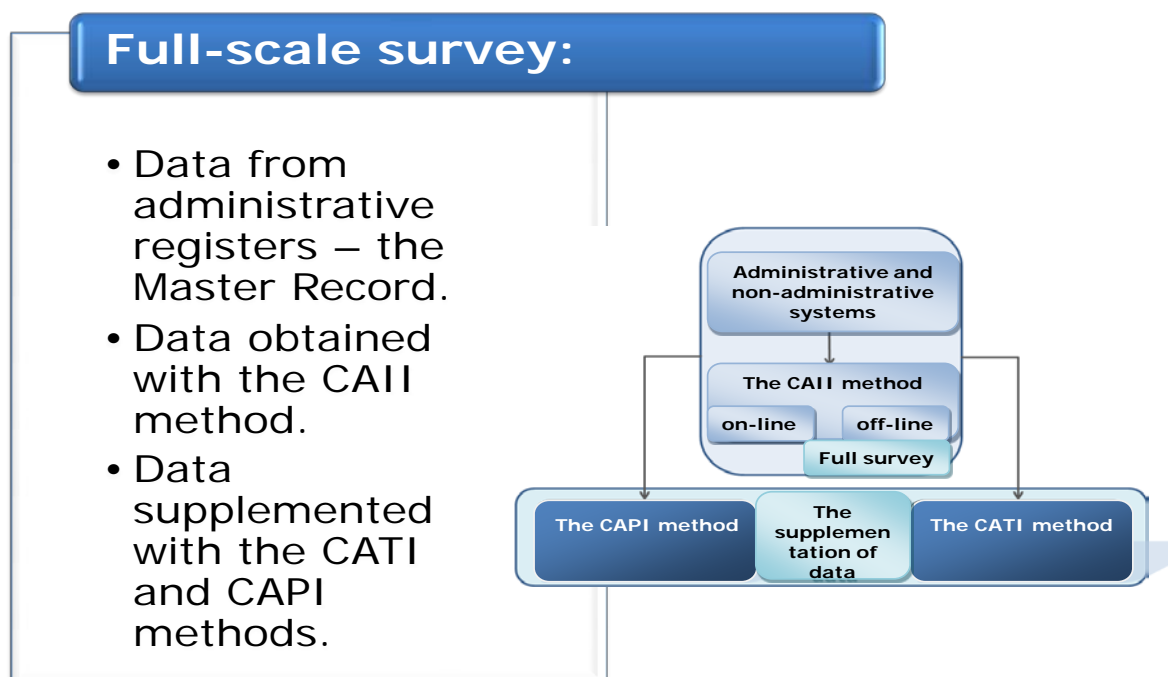
HOW ARE CENSUSES MADE?

THE NATIONAL CENSUS (NSP) 2011 METHODOLOGY

NSP 2011 is carried out as a full-scale survey and as a sample survey.

Full-scale survey

- The full-scale survey involves population and housing, and is conducted with the use of administrative registers supplemented with a brief questionnaire to be filled in by each respondent.
- The supplementation of data is made using CATI and CAPI methods. They are used as supplementary channels, rather than the main channel for the acquisition of data. The basic method of obtaining data in the full-scale survey involves the "Master" record and the CAII method.
- Two records serve as the basis for monitoring the completeness of the census: a population record and a housing record.
- The Master record, being a set of variables derived from the registers, is the fourth channel supporting the collection of data, apart from Internet self-enumeration, phone interviews (with an interviewer) and direct interviews run by a census enumerator.
- The starting point for a brief survey is the Master record. In the OBM (Operational Microdata Basis), the coverage of the survey with data from the Master record will have been calculated.
- Surveys fully covered with data obtained from registers are automatically secured in the OBM and will not be directed to other channels.

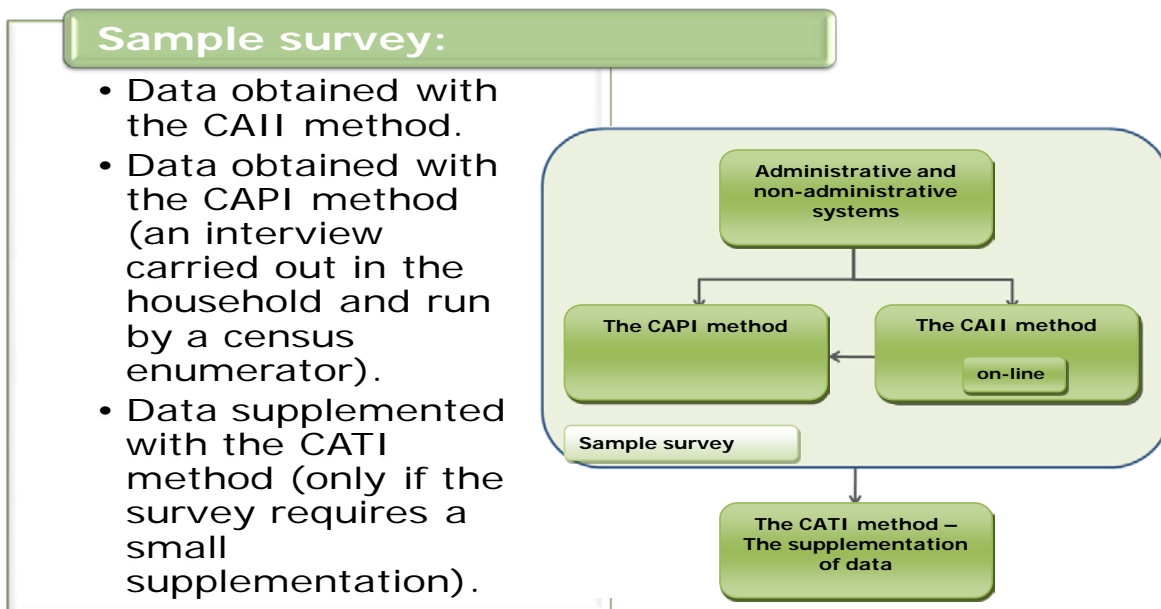


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Sample survey

- A sample survey is carried out on persons who permanently or temporarily reside in the territory of the Republic of Poland, and whose households have been sampled.

- A sample survey is carried out using the CAII and CAPI methods. Data will be supplemented with the CATI method.
- A sample survey is carried out on a sample of 20% of dwellings.
- Managing the completeness of the survey is carried out based on a sampled frame. A census enumerator is directed to a dwelling.

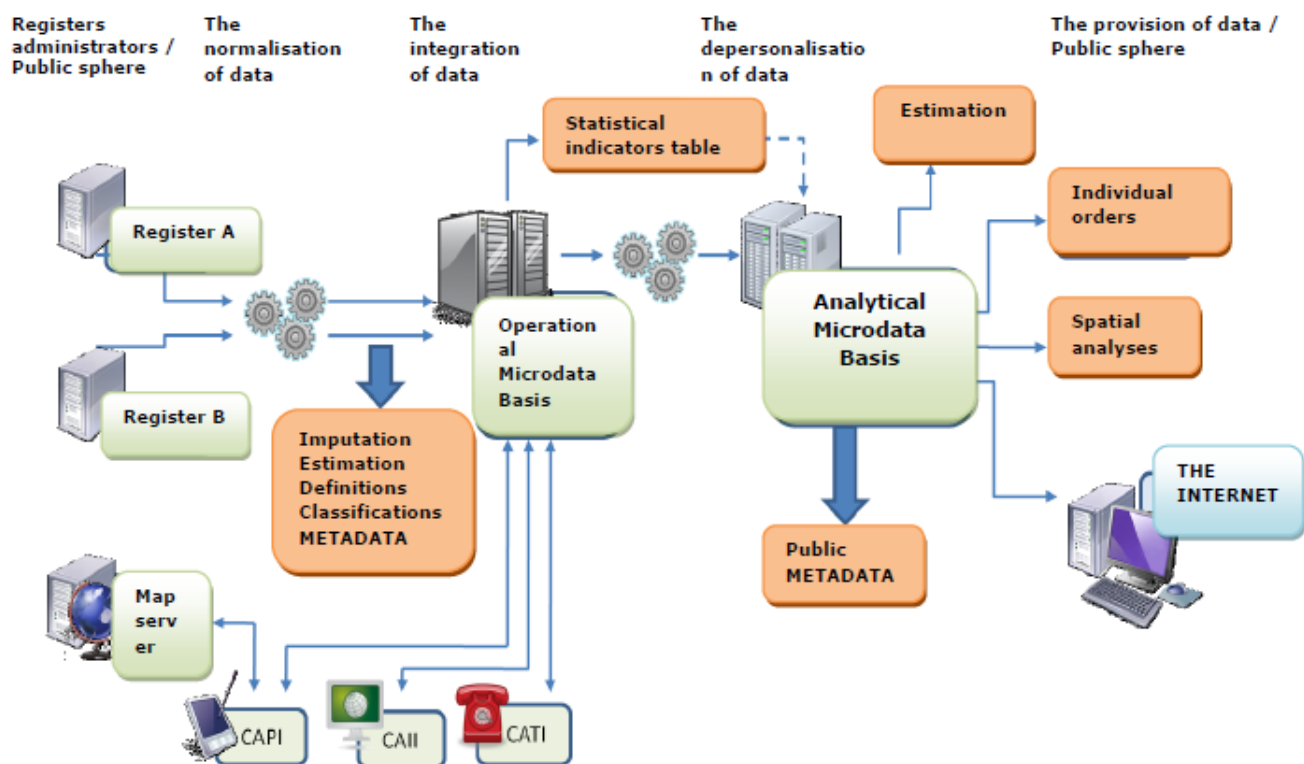


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THE METHODS OF DATA COLLECTION IN CENSUSES

Commencing the work on the 2010 Agricultural Census (PSR) and the 2011 Census (NSP), a decision was made to introduce modern and relatively less expensive solutions than those used previously. They mainly consist of the collection of data which come from administrative sources, and the employment of electronic communication tools. Census data for PSR 2010 and the current NSP 2011 were/are also collected by statistical interviewers and census enumerators equipped with mobile terminals.

The implementation of Censuses is illustrated on the following task diagram:

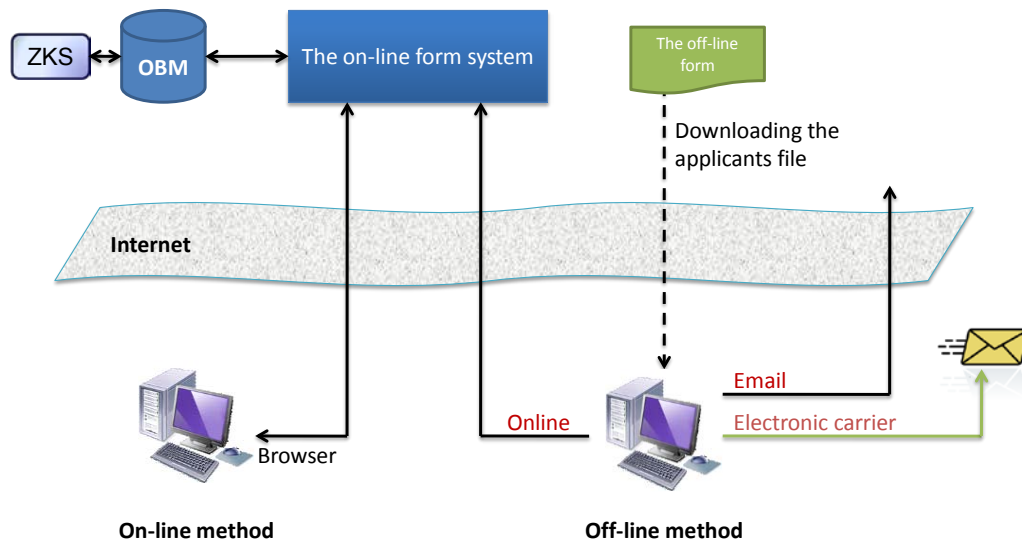


As shown in the above diagram, **administrative sources** are the basis for the implementation of censuses. Data for censuses are collected from administrative sources (information systems in the public administration), from economic entities conducting business activities in the area of the sale of electric power, and from providers of publicly-available telecommunications services (as defined in the regulations of the Act of 16 July 2004 – Telecommunications law (Journal of Laws No. 171, item 1800, as amended)).

Furthermore, censuses can be carried out by means of:

- **Internet self-enumeration (CAII)** which involves the verification, within a specified period, of the data collected from administrative sources, and their correction, as well as the addition of missing information. The 2011 Census of Population and Housing, using the CAII method, began on 1 April 2011 and will end on 16 June 2011. Individuals who decide to self-enumerate on the Internet, upon entering a login and a password, will be provided with an electronic form. The login and the password should be entered by the respondent on a special website prepared by the Central Statistical Office for self-enumeration purposes. The respondent's identity is authenticated based on the data obtained from administrative registers. Internet self-enumeration can also be done on a so-called "blank" electronic form to be filled in off-line and sent via a secure channel to the appropriate address of a gmina or voivodship census office.

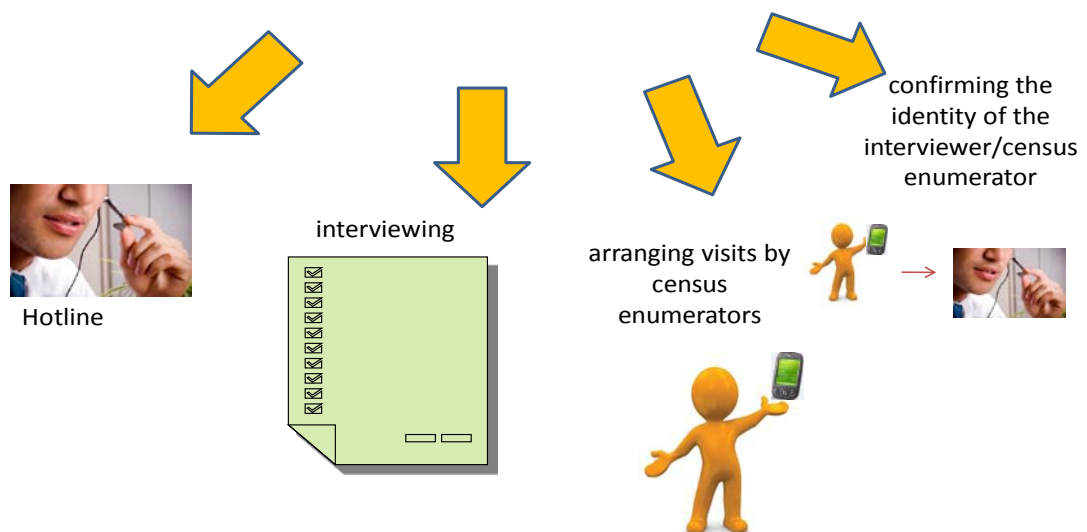
The system of the CAI method



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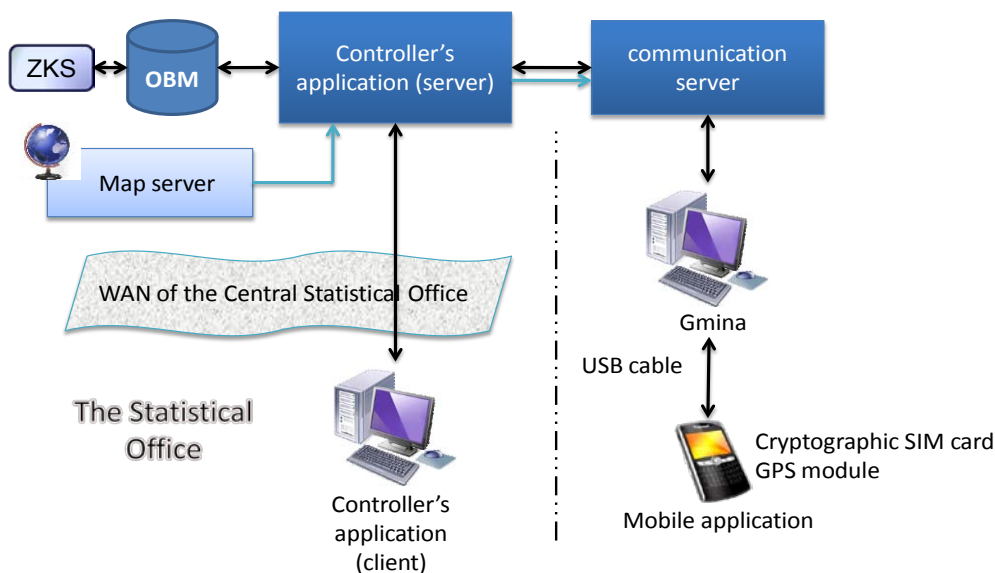
- A **telephone interview** (CATI) is run by a statistical interviewer with the help of a specialist call-centre application. The National Census of Population and Housing 2011, based on the CATI method, commenced on 8 April 2011 and will last until 30 June 2011. The forms selected for interviews with the CATI method are mainly those which have already been partly filled in with data from administrative systems of Internet self-enumeration, and there is relatively little information to be obtained from the respondent. The form will be directed to a census using the CATI method on the condition that a telephone number is available.

The key functions of a Call Centre



- **Direct interview run by a census enumerator (CAPI)** on respondents who permanently/temporarily reside in households sampled for a sample survey or with whom it was not possible to collect data using other methods. The CAPI method will also be employed to conduct the census of the homeless. The National Census of Population and Housing 2011 using the CAPI method will be conducted between 8 April 2011 and 30 June 2011. Census enumerators are equipped with mobile terminals to carry out surveys with the help of an electronic form. The work of enumerators is monitored by voivodship controllers on an ongoing basis.

The system of the CAPI method



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Specific methods of data collection for the National Census of Population and Housing 2011 are successively introduced to enable respondents free use, first of all, of Internet self-enumeration, to avoid a situation whereby they are surveyed twice.

All these methods utilise the same type of census form (an electronic form). Apart from the direct supply of data from administrative registers, electronic forms are the only form of data collection for census purposes. A suitable application monitors the filling in of the form and its correctness (including logic-arithmetic control), and eventually accepts or rejects it.

In both the Agricultural Census 2010 and the National Census of Population and Housing 2011 paper questionnaires were eliminated. In the traditional census of 2002, around 80 million A4 high-quality sheets had to be printed, mainly due to the requirements of the expensive OCR technology.

GIS – A NEW TECHNOLOGY IN CENSUSES

To further reduce the amount of paper, GIS (Geographic Information Systems) tools have been introduced in censuses. This especially involves the generation of digital maps which show census districts and statistical regions or other functionally-equivalent spatial units, along with buildings and address points in which respondents reside.

These maps have been prepared by Statistical Offices on the basis of materials acquired, *inter alia*, from the national geodetic and cartographic repository – ortophotomaps, record of lands and buildings, Topographic Objects Databases, the National Register of Borders, the National Register of

Geographic Names, and data taken from the Agency for the Restructuring and Modernisation of Agriculture, i.e. a vector layer of record parcels. However, the basic source of the creation of digital maps are scanned and vectorised maps of statistical regions and census districts, plus situational site plans which are the graphical component of the National Official Register of the Territorial Division of the Country (TERYT).

The use of GIS technology in the census



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Paper specifications of dwellings' addresses (so-called N-obw forms) are also being replaced with an electronic system which lists facilities to be covered by the census, in combination with a digital map. The introduction of handheld devices will allow the full supervision of census enumerators operating in the field.

Changes have also been introduced to the system of spatial identification – from area assignment (census districts) to point assignment (address points with x/y coordinates). Point assignment allows a more flexible grouping of data for statistical purposes, within areas of any size, and performing highly-complex geostatistical analyses.