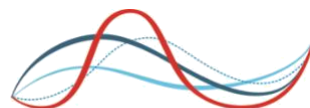




REPUBLIC OF CROATIA



CROATIAN BUREAU OF STATISTICS

QUALITY REPORT FOR STATISTICAL SURVEY
Development of the Geographical Information System (GIS)
For 2014

Organisational unit: Quality, Statistical Standards and Geoinformation System Development
Department

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0. Basic information

- Purpose, goal, and subject of the survey

The general objective of this project is to geographically reference statistics to a system of grid cells using Cartesian coordinates. Population grids are a powerful tool to describe our society and to study the interrelationships between human activities and the environment. They are particularly useful for analysing phenomena, and their causes, which are independent of administrative boundaries, such as flooding, commuting and urban sprawl.

- Reference period

Several calendar years

- Legal acts and other agreements

The Census was carried out on the basis of the Act on the Census of Population, Households and Dwellings in the Republic of Croatia in 2011 (OG, No. 92/10).

In order to achieve the international comparability of data, the methodology used in the 2011 Census is in line with the Conference of European Statisticians Recommendations for the 2010 Censuses of Population and Housing as well as with the Regulations (EC) Nos 763/2008 and 1201/2009 of the European Parliament and the Council, which regulate censuses of population and housing in the European Union.

- Classification system

There was no need to use any classification for producing grids for total population. The classification was used for producing grids according to sex and age.

- Concepts and definitions

The GeoSTAT activity is focused on developing guidelines for producing harmonised grid statistics and promoting national grid initiatives in national statistical institutes. Reasoning for this action comes from two major political definitions of EU: European Statistical System (ESS) strategic goal to integrate spatial information and statistics and INSPIRE initiative's goal to develop interoperable spatial datasets. In order to achieve final goal Eurostat has made available a harmonised grid net of the whole Europe.

In addition to the European wide grid net, there are country clips of the grid net covering only one country at a time. The grid net provides reference grid cells for the harmonised grid data in Europe. The Croatian Bureau of Statistics uses the grids prepared by Eurostat for the purposes of the project.

The variables that were used for the purposes of merging statistics with geospatial information are:

- a) total population of the Republic of Croatia
- b) ETRS 89 LAEA GRID
- c) spatial units from the level of the state down to the level of addresses.

- Statistical units

The basic statistical unit of observation is the population living at a certain address.

- Statistical population

The target refers to the total population living at certain address converted to the 1 x 1 km.

1. Relevance

1.1. Data users

External users of data:

DG Regio

Ministry of Regional Development and EU Funds

Others (state and public institutions, private companies).

Internal users:

Demography statistics

1.1.1. User needs

It is expected that DG Regio and the Ministry of Regional Development and EU Funds will be the major users of the prepared data. Within the project of the merging statistics with geospatial information, the following datasets were produced:

total population

number of population by sex

number of population by age

number of population by activity

number of population by educational attainment.

1.1.2. User satisfaction

The user satisfaction survey was carried out once, in 2013. It is planned to be carried out more frequently, at least once a year.

1.2. Completeness

Data are published in accordance with the EU legislation.

1.2.1. Data completeness rate

Data completeness rate is: 100%

2. Accuracy and reliability

2.1. Sampling error

Although the 2011 Census was not carried out as a sample survey in sense of producing population grids, the fact is that it did not cover diplomatic personnel of foreign diplomatic and consular missions in the Republic of Croatia. Also, neither representatives of international organisations nor members of their families who live with them in the Republic of Croatia in

dwellings owned by diplomatic or military personnel were not covered in the Census. Enumerators did not enter objects of the Ministry of Defence, the Ministry of the Interior and the Ministry of Justice.

2.1.1. Sampling error indicators

Indicator for this survey is not applicable.

2.1.2. Bias due to sample selection process

Indicator for this survey is not applicable.

2.2. Non-sampling error

Indicator for this survey is not applicable.

2.2.1. Coverage error

All units are included in the frame, since all addresses on the territory of the Republic of Croatia and all levels of spatial units are observation targets.

2.2.2. Over-coverage rate

Indicator for this survey is not applicable.

2.2.3. Measurement errors

Indicator for this survey is not applicable.

2.2.4. Non-response errors

Indicator for this survey is not applicable.

2.2.5. Unit non-response rate

Indicator for this survey is not applicable.

2.2.6. Item non-response-rate

Indicator for this survey is not applicable.

2.2.7. Processing errors

Once the data are collected in a sample survey they go through a series of processes before the calculation of the final results: coding, linking, adding, weighting, etc.

In case of merging statistics with the geospatial information, the following errors can occur in data processing:

- addresses having incorrect house numbers
- technical documentation for the 2011 Census is not applicable in all situations registered during the Census
- shapefiles do not correspond to the field situation.

2.2.8. Imputation rate

Indicator for this survey is not applicable.

2.2.9. Editing rate

Indicator for this survey is not applicable.

2.2.10. Hit rate

Indicator for this survey is not applicable.

2.2.11. Model assumption error

Indicator for this survey is not applicable.

2.3. Data revision

2.3.1. Data revision – policy

The users of statistical data are informed about revision (preliminary, final data) on CBS web site.

2.3.2. Data revision – practice

Provisional figures are not published in this survey and therefore regular revisions are not planned.

2.3.3. Data revision – average size

Indicator for this survey is not applicable.

2.4. Seasonal adjustment

Indicator for this survey is not applicable.

3. Timeliness and Punctuality

3.1. Timeliness

3.1.1. Timeliness – first results

Indicator for this survey is not applicable.

3.1.2. Timeliness – final results:

Indicator for this survey is not applicable.

3.2. Punctuality

3.2.1. Punctuality – delivery and publication

Indicator for this survey is not applicable.

4. Accessibility and clarity

First results of the project are disseminated to Eurostat, DG Regio, the Ministry of Regional Development and European Funds and on the GeoSTAT portal of the Croatian Bureau of Statistics.

The draft version of the Methodological Guidelines was prepared together with the first data delivery on the total population and the population by sex. The current version of the Methodological Guidelines will be revised if new moments appear during the production of other data sets, i.e. population according to age, activity and education attainment. The Methodological Guidelines explain the whole procedure of producing population grids.

4.1. News release

Indicator for this survey is not applicable

4.2.. Other publications

Methodological Guidelines 74/2015 “Merging Statistical Data of the Census of Population, Households and Dwellings in 2011 and Geospatial Information in the Republic of Croatia (https://www.dzs.hr/Hrv/publication/metodologije/metod_74.pdf)

4.3. On-line database

GeoSTAT portal of the Croatian bureau of statistics (<https://geostat.dzs.hr/>)

4.4. Micro-data access

The conditions under which certain users can access micro data are regulated by the Ordinance on the Conditions and Manner of Use of Statistical Data for Scientific Purposes.

4.5. Documentation on methodology

The draft version of the Methodological Guidelines under the name Merging Statistical Data of the Census of Population, Households and Dwellings in 2011 and Geospatial Information in the Republic of Croatia is bilingual. The Methodological Guidelines explain all levels of preparing and producing statistical data in grids as well as references to other documents that were used in the project.

The first results of the project (total population and population by sex and age, by educational attainment and by activity) were produced in CSV format and used for producing maps related to relevant subjects.

For the purposes of producing grid statistics and based on the instructions received from the European Forum for Geostatistics, the bilingual Handbook was also prepared, in English and Croatian.

5. Comparability

5.1. Asymmetry for mirror flows statistics

Indicator for this survey is not applicable.

5.2. Comparability over time

5.2.1. Length of comparable time series

Indicator for this survey is not applicable.

5.2.2. Reasons for break in time series

Indicator for this survey is not applicable.

6. Coherence

6.1. Coherence – short-term and structural data

Indicator for this survey is not applicable.

6.2. Coherence – national accounts

Indicator for this survey is not applicable.

6.3. Coherence – administrative sources

Indicator for this survey is not computed.

7. Cost and burden

7.1. Cost

The project was financed by the European Commission – Eurostat

7.2. Burden

Indicator for this survey is not applicable.