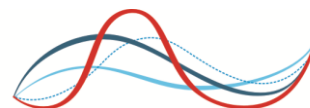REPUBLIC OF CROATIA

CROATIAN BUREAU OF STATISTICS

QUALITY REPORT FOR STATISTICAL SURVEY

Annual Report on Completed Buildings and Dwellings (GRAĐ-10) for year 2013

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0. Basic information

- Purpose, goal, and subject of the survey

The aim of the statistical survey is to obtain data on completed buildings by types of buildings, building size, location, type of investor, equipment with installations as well as on the number and floor area of completed dwellings.

The object of the survey is every building and dwelling completed during the reporting year.

- Reference period

Calendar year

- Legal acts and other agreements

Legal basis:
- Official Statistics Act (OG, Nos 103/03, 75/09 and 59/12)
- Programme of Statistical Activities of the Republic of Croatia
- Annual Implementation Plan of Statistical Activities of the Republic of Croatia
- Programme of Current Housing and Building Statistics for Countries in the UN/ECE Region
- Conference of European Statisticians Recommendations for the 2010 Censuses of Population and Housing, UNECE/Eurostat, UN, New York and Geneva, 2006.

The obligation of reporting units to submit data is based on Article 38 of the Official Statistics Act (OG, Nos 103/03, 75/09 and 59/12).
In case of the refusal to provide data, the provision of incomplete or incorrect data or the provision of data out of the time schedule, penalty provisions defined in Articles 69 and 70 of the Act shall apply.

- Classification system

National Classification of Types of Constructions

- Concepts and definitions

The observed variables are the following:
1) Buildings are permanent constructions covered with roof and closed with outer walls. They are built as separate useful units that protect from weather and other conditions, intended for dwelling, performing a certain activity or for accommodation and protection of animals, goods, equipment used in various industrial activities and for services etc.

   Buildings are also constructions covered with roof but without (some of the) walls, e.g. porches, as well as constructions located partly or completely under the ground, e.g. underground shelters, garages, shopping centres and other business spaces (e.g. in subways) etc.

2) Residential buildings are constructions in which 50% or more of the total useful floor area is used for dwelling purposes (dwellings and other premises used jointly by owners, for example: halls and staircases, repositories, garages etc.).

3) Non-residential buildings are constructions without dwelling areas, or in which less than 50% of the overall useful floor area is used for dwelling purposes.

4) Floor area of buildings is a sum total of area of all floors of the building placed inside the outer walls.

5) Dwelling is a residential construction unit consisting of one or more rooms with accessory spaces, such as a kitchen, pantry, bathroom, toilet, etc., or without accessory spaces, and it can also have one or more separate entrances from the staircase or directly from the street or yard.
A completed dwelling is a dwelling in which all planned construction works are done. Included are dwellings in new buildings and dwellings added to existing buildings if constructed as entirely new residential units and new dwellings created by conversion of a non-residential into a residential area.
Dwellings under reconstruction due to the war damages are considered new dwellings only in case they were rebuilt from the foundations.
Data on completed dwellings refer to dwellings that were completed in the course of the reporting period (year), irrespective of when the construction works had begun.

6) Useful floor area of a dwelling is a floor area of a dwelling, measured inside the walls of the dwelling.

- Statistical units

Reporting units are administrative bodies in counties, major cities and county seats as well as the City of Zagreb authorised for issuing documents by which the construction is approved. Observation units are all completed buildings and dwellings.

- Statistical population

Completed buildings and dwellings; number and floor area of completed buildings by their purpose; number and useful floor area of completed dwellings.
In 2013, there were 5 739 buildings and 10 090 dwellings completed.

1. Relevance

1.1. Data users

Collected data are necessary:
- In the Croatian Bureau of Statistics:
  - as inputs in the Economy Statistics Directorate for indicators, in line with the EU recommendations (for the estimation of investments, the estimation of the regional GDP)
  - data for the Rent Questionnaire – European Comparison Programme (ECP)
  - for computing the dwelling stock in the intercensus period

- for national users, as a basis for situation analysis and for undertaking measures in the area of residential construction, as a basis for the planning of the production of construction material and ready-made components as well as other industrial products to be used in equipping buildings and dwellings, for making decisions on the development of the construction entrepreneurship and various housing-related services etc.

- for fulfilling commitments towards international statistical and other organisations related to housing indicators (number, useful floor area and equipment of constructed dwellings and of the entire dwelling stock)

- for other users abroad: data on the construction of dwellings and other constructions and the total dwelling stock are the basis for the situation analysis and the estimation of the market size in the Republic of Croatia in relation to making investment and other business decisions.

1.1.1   User needs

Collected data are necessary:

- In the Croatian Bureau of Statistics:
  - as inputs in the Economy Statistics Directorate for indicators, in line with the EU recommendations (for the estimation of investments, the estimation of the regional GDP)
  - data for the Rent Questionnaire – European Comparison Programme (ECP)
  - for computing the dwelling stock in the intercensus period

- for national users, as a basis for situation analysis and for undertaking measures in the area of residential construction, as a basis for the planning of the production of construction material and ready-made components as well as other industrial products to be used in equipping buildings and dwellings, for making decisions on the development of the construction entrepreneurship and various housing-related services etc.

- for fulfilling commitments towards international statistical and other organisations related to housing indicators (number, useful floor area and equipment of constructed dwellings and of the entire dwelling stock)

- for other users abroad: data on the construction of dwellings and other constructions and the total dwelling stock are the basis for the situation analysis and the estimation of the market size in the Republic of Croatia in relation to making investment and other business decisions.

1.1.2   User satisfaction

Not available.

1.2.   Completeness

Data are complete and consistent with:

- Programme of Current Housing and Building Statistics for Countries in the UN/ECE Region (No.43, ISBN 92-1-116584-9)
- Conference of European Statisticians Recommendations for the 2010 Censuses of Population and Housing, UNECE/Eurostat, UN, New York and Geneva, 2006.

1.2.1 Data completeness rate

Data completeness rate is: 100%

2. Accuracy and reliability

2.1. Sampling error

Not applicable. CBS uses census as a data collection method (not sampling).

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

Non-sampling errors are other errors that are not connected with the sample selection – coverage, measurement, processing, non-response. They are regularly calculated and checked.

2.2.1 Coverage error

The coverage of completed buildings and dwellings is determined by the National Classification of Types of Constructions (NKVG) and covers section 1 (Buildings). In this particular statistical survey, constructions are broken down at the lowest level, which means that a five-digit code number (subclass) from the National Classification of Types of Constructions is entered into the corresponding fields in the GRAĐ-10 form. No subclass (unit) is excluded from the coverage, so the share of coverage errors is 0.

2.2.2 Over-coverage rate

Indicator for this survey is not applicable.

2.2.3 Measurement errors

Errors in measurements while collecting data occur due to ignorance, negligence, lack of appreciation of importance of statistics, not knowing how to respond and conscious/unconscious presenting inaccurate data by respondents. Problems connected with the presentation of inaccurate data by respondents due to unclear questions in the questionnaire, measurement units or instructions for filling in the forms are minor owing to the fact that the availability of data was taken into consideration while defining their contents. In addition, reporting units are welcome to contact branch units of the Croatian Bureau of Statistics and the Administrative Body of the City of Zagreb competent for official statistics issues (who help reporting units in filling in reports and check the completeness and accuracy of data before they are submitted to the Croatian Bureau of Statistics), or directly the Croatian Bureau of Statistics.
These measurement errors do not represent a major issue, since they are revealed during the visual and calculation checks of data before they are entered in the computer as well as by the default computerised logical and calculation checks during data processing. When such illogicalities or errors are spotted, reporting units are contacted for the check-up of inaccurate and incomplete data and for the correction of inaccurate data.

2.2.4 Non-response errors

Unit non-response

The survey is exhaustive. Response rate is 100%. All data are available according to deadlines. For late or missing data, units are contacted by phone or via urging letters and asked to provide the missing data.

Item non-response rates

There is no case of item non-response in the survey since, in the data processing phase, the reporting units that have not fully completed the questionnaire are contacted by phone and asked to provide corrected or missing data. Response rate is 100%.

2.2.5 Unit non-response rate

Unweighted non-response rate is: 0%

Weighted non-response rate is: -

2.2.6 Unweighted item non-response rate:

Variable	Domain	Domain value	Value
Non-response rate for all variables	Croatia		0%

2.2.7 Processing errors

The Croatian Bureau of Statistics controls whether data are accurate, fully covered and logical, codes identification and other data, enters data and performs computer processing.
Source data validation is performed before and after they are entered into the data processing system. The incorrect, incomplete and missing data are corrected.

Statisticians enter and code the data manually. Data validation is performed according to the specified conditions.
Respondents' errors, coding errors and data entry errors are corrected manually and electronically as follows:

- manual data validation is performed before entering source data into the computer. The reporting units that have not fully completed the questionnaire (incorrect, incomplete or missing data) are contacted by telephone and asked to provide corrected and complete data.

- electronic data validation is performed after entering data into the computer. Reports that fail to meet the quality standards are subject to verification and corrections as required. The correction procedures are implemented by priority: severe errors are generally corrected manually and more effort is spent on these, while less attention is paid to minor errors that are mostly corrected automatically through computerised input.

2.2.8   Imputation rate

Unweighted imputation rate:

Variable	Domain	Domain value	Value
All variables	Croatia		0%

2.2.9   Editing rate

Indicator for this survey is not computed.

2.2.10 Hit rate

Indicator for this survey is not computed.

2.2.11 Model assumption error

Not available.

2.3.   Data revision

2.3.1   Data revision – policy

The users of statistical data are informed about revisions (preliminary, final data) on the website of the Croatian Bureau of Statistics.
Revisions are done for correcting errors or major changes in classifications or methodology.
Routine revisions are not carried out since all data are available according to deadlines.
Notices about minor changes are announced in the First Release at the time the change has been introduced.

The data publishing revision policy of the Croatian Bureau of Statistics includes the following:

1) updating the Calendar of Statistical Data Issues
2) publishing corrections of published data

1) Updating the Calendar of Statistical Data Issues.

The data publishing revision policy of the Croatian Bureau of Statistics, which is carried out according to the defined deadlines, is carried out by updating the Calendar of Statistical Data Issues. According to the Official Statistics Act, changes in publishing deadlines for publications/data are announced in advance. The Croatian Bureau of Statistics is obliged to announce each change in the publishing deadlines (the Calendar update) at least three days prior to the date originally announced in the Calendar on the website of the Croatian Bureau of Statistics.
The update of publishing deadlines for data or publications (the Calendar update) is announced without delay on the website of the Croatian Bureau of Statistics by updating the date in the Calendar and putting a notice next to the Calendar, which says: updated, and specifying the accurate new date. Therefore, the Calendar that contains the original publishing deadline for a particular publication/statistical information is replaced with the new Calendar, which includes the updated publishing deadline. The original Calendar is kept in the Publishing Department, which registers every change in publishing deadlines for publications in the Calendar Update Base.

2) Issuing corrections of published data:

When an error is observed in the published data, the Croatian Bureau of Statistics issues a correction as soon as possible and as simple as possible in order to help users to clearly see what has been changed in comparison to the originally published data. The correction is done by marking the incorrect data with an asterisk and creating the correction.

2.3.2 Data revision – practice

Data are disseminated as final and are not subject to any revision. For this reason, numeric information on the size of typical revision and regular sources of revisions are not applicable. However, if an error occurs, corrected data are published in the next issue of the First Release. Data changed in relation to the previously released ones are disseminated with a comment. Major changes in the methodology are published in the First Release at the time the change has been introduced. The general practice is to explain all changes in the methodology when the data based on the new methodology are published for the first time. Information on methodological changes are provided in the Notes on Methodology that are a part of all related paper or electronic publications.

2.3.3 Data revision – average size

Indicator for this survey is not applicable.

2.4. Seasonal adjustment

Not applicable. There is no need for seasonal or working-day adjustment of statistical data, because data are presented only as absolute values.

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:

Timeliness of final results is: T + 9 months

3.2. Punctuality

3.2.1 Punctuality – delivery and publication

Punctuality: 1

4. Accessibility and clarity

The results of the statistical survey are published in the following statistical publications: annual First Releases, the Statistical Report "Construction" and the Statistical Yearbook (in Croatian and English). These publications also contain brief methodological explanations. Detailed notes on methodology are published in the Methodological Guidelines No. 65 entitled

"Annual Report on Completed Buildings and Dwellings (2010 Revision)", Croatian Bureau of Statistics, Zagreb, 2011 (only in Croatian).

All publications are available to users in paper and electronic format on the website of the Croatian Bureau of Statistics http://www.dzs.hr, under the heading "Released Data".

All statistical publications are released simultaneously to all users at 11:00 am. No one has advantage in accessing the data.

4.1. News release

Data for a particular reporting year are published regularly in the First Release entitled "Completed Buildings and Dwellings" at the end of September the following year (in Croatian and English).

The released data are available on the website http://www.dzs.hr/default_e.htm.

4.2. Other publications

Data are published regularly in the following publications: Statistical Report entitled "Construction" and Statistical Yearbook.

4.3. Online database

Not available.

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

Data are published regularly in the following publications: The Statistical Report entitled "Construction" and Statistical Yearbook (in Croatian and English).

These publications also contain brief methodological explanations.

All publications are available to users in paper and electronic format on the website of the Croatian Bureau of Statistics http://www.dzs.hr under the heading "Released Data".

National documents:

- Brief notes on methodology are available in annual publications.
- Detailed notes on methodology are published in the Methodological Guidelines No. 65 entitled "Annual Report on Completed Buildings and Dwellings (2010 Revision)", Croatian Bureau of Statistics, Zagreb, 2011 (only in Croatian).

5. Comparability

5.1. Asymmetry for mirror flows statistics

Not applicable.

5.2. Comparability over time

5.1.1 Length of comparable time series

Length of comparable time series is: 12

5.1.2   Reasons for break in time series

Changes in the methodology of data collection and methodology of breaking down of constructions.

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 applicable.

7. Cost and burden

7.1.   Cost

Total costs of the Croatian Bureau of Statistics: 8 108 hours annually.

7.2.   Burden

This survey is conducted by using the census method. Data on building permits issued are a starting point of this research. According to the building permits issued (over the last few years and in the reporting year), enumerators establish, during their field visits, which of these buildings were completed during the reporting year and fill in the GRAĐ-10 forms for these buildings.
Direct participants in this census are paid on the basis of a contractual agreement depending on the volume of the work done, that is, on accurately filled GRAĐ-10 forms.