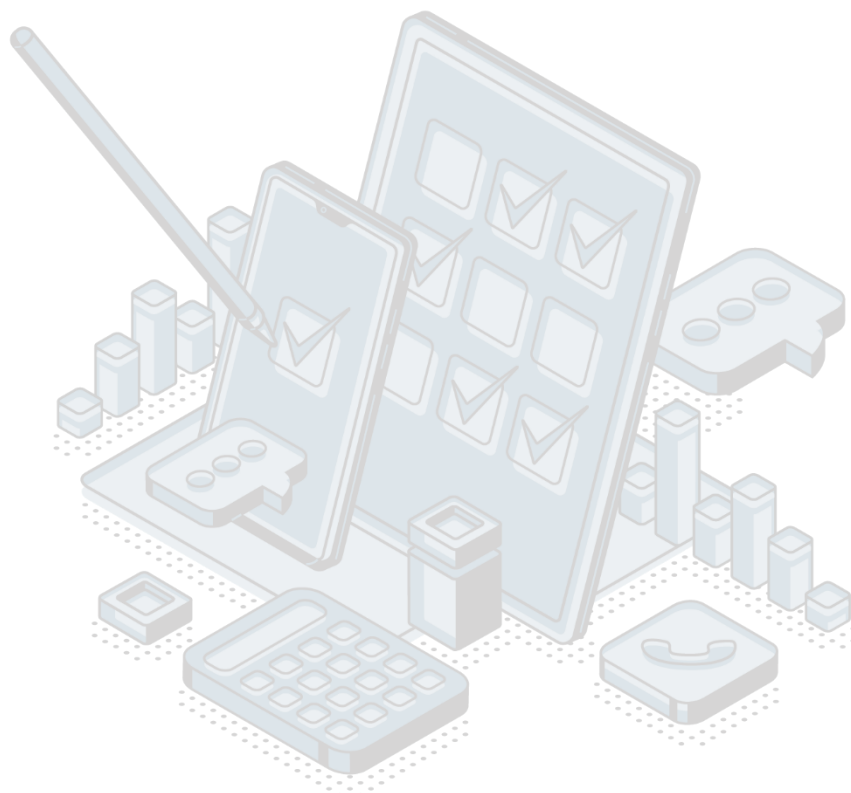


QUALITY REPORT

Construction work and consumption of construction materials – business companies 2023



Odgovorno lice: Suzana GOJCAJ and Jelena PRELEVIC

Naziv odsjeka: Department for short-term indicators

Content:

1. Introduction – Basic information about the survey	3
1.1 Purpose, goal and subject of the survey	3
1.2 Legal basics.....	3
1.3 Statistical units	3
1.4 Coverage and scope of survey	3
1.4.1 Sectors.....	3
1.4.2 Statistical population	3
1.5 Referent geographical area.....	3
1.6 Concepts and definitions	3
1.7 Classifications	4
1.8 Frequency of data collection.....	4
1.9 Frequency of data dissemination.....	4
1.10 Methodology	4
1.11 Base period	4
1.12 Unit of measure	4
1.13 Source of data	4
1.14 Method of data collection	4
2. Relevance – Data users	5
2.1 User needs	5
2.2 User satisfaction	5
3. Accuracy and reliability	5
3.1 Accuracy – Overall remark.....	5
3.2 Sampling error	5
<i>Indicators of sampling error.....</i>	<i>5</i>
3.3 Non-sampling error	6
3.3.1 Coverage error	6
Indicator of coverage error	6
3.3.2 Error of measurement.....	6
3.3.3 Non response error.....	7
Item non-response	7
3.3.4 Data processing error.....	7
Imputation rate.....	7
3.4 Seasonal adjustments.....	7
3.5 Data revision.....	7
3.5.1 Data revision policy.....	7
3.5.2 Data revision practice	7
3.5.3 Data revision - average size.....	7
4. Timeliness and punctuality	8
4.1 Timeliness.....	8
4.2 Punctuality	8
5. Availability and clarity	8
5.1 Statistical Release Calendar.....	8
5.2 Access the data Release Calendar	8
5.3 Releases.....	8
5.4 Publication	9
5.5 On-line databases.....	9
5.6 Access to micro data.....	9
5.7 Metadata occupancy.....	9
6. Comparability	9
6.1 Comparability - geographical.....	9
6.2 Time comparability.....	9

1. Introduction – Basic information about the survey

1.1 Purpose, goal and subject of the survey

The aim of the survey is to collect the data necessary for the calculation of values of construction works and consumption of construction materials by business companies, number and area of finished and unfinished dwellings. The data will be available by type of construction in accordance with the Classification of Types of Construction – CC 1997.

1.2 Legal basics

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 18/12, 47/19) defines provisions for the collection, processing, and dissemination of data. The Law provides to the Statistical Office legal powers to collect and access the data necessary for the implementation of Programme and Annual Plan. The Law gives a priority to the use of administrative data and right of access to individual data that are a result of survey of other official statistical producers. As an annex to legal provisions, the Statistical Office has signed several memoranda on cooperation with administrative data providers.

1.3 Statistical units

Reporting units are enterprises whose main activity is construction and who are in the Statistical Business Register registered in sector F of NACE Rev.2 Classification and enterprises (KAU) that are not registered in sector F, but whose local units perform the construction works.

1.4 Coverage and scope of survey

1.4.1 Sectors

Reporting units of survey on construction works are enterprises with 5 and more employees which are registered in sector F – construction (area 41, 42, 43) according to the classification NACE Rev.2 and enterprises (KAU) which are not registered in sector F, but whose local units perform the construction works.

1.4.2 Statistical population

The 2023 sample comprised 139 reporting units with primary and secondary activity in the construction.

1.5 Referent geographical area

Montenegro

1.6 Concepts and definitions

The value of construction work is shown at current prices and it comprises all construction materials built and work spent regardless of whether such work and materials are paid or not. Data on the value of construction works related to works performed in the reporting year on finished and unfinished buildings. A dwelling is any residential construction unit intended for habitation, consisting of one or more rooms with ancillary rooms.

Floor area (m²) is a useful floor area of the dwelling, measured inside the walls of the dwelling.

The amount of installed or used material is expressed in the units of measure shown in the table itself. If a unit of measure in the table differs from the unit of measure with which these materials are kept in the bookkeeping, a recalculation should be made based on the norms that are usually established in practice. The value of the installed or used material is stated in actual prices based on the invoice. If the company records the purchased and used material in plan prices, it is obliged to express it in actual prices. The cost of external transport is also included in the value of the material.

1.7 Classifications

- ✚ Statistical classification of economic activities in the European Union - NACE Rev. 2.
- ✚ Classification of Types of Construction - CC 1997.

1.8 Frequency of data collection

Data are collected annually.

1.9 Frequency of data dissemination

Data are published annually, by the Statistical Release Calendar.

1.10 Methodology

The methodology of Construction work survey is available on the website: [Methodology](#)

1.11 Base period

The reference year.

1.12 Unit of measure

Data are expressed in thousand euros and thousand-floor area.

1.13 Source of data

The source of data for this survey is a questionnaire, and reporting units are companies, or performers of works that are direct signatories of the contract with the investor. Survey on buildings built under the direction of individual owners includes all buildings of new construction and upgrading, regardless of whether the competent authority has issued a building permit. Data on buildings constructed by individual owners are calculated by the estimation method.

1.14 Method of data collection

Data are collected by questionnaires (by e-mail, post).

2. Relevance – Data users

2.1 User needs

International users:

- ✚ Eurostat
- ✚ World Bank,
- ✚ UN organizations,
- ✚ International Monetary Fund.

National users:

- ✚ Ministries and other public administration bodies;
- ✚ Local government and other local government bodies;
- ✚ Central bank;
- ✚ Non-governmental organizations;
- ✚ Students;
- ✚ Researchers;
- ✚ Media.

2.2 User satisfaction

The Statistical Office has adopted the Quality Management Strategy, the Guidebook to the Implementation of the Quality Management Strategy, as well as the Plan for the Implementation of the Quality Policy. In order to measure the degree to which fulfills obligations towards users and within the new quality policy, the Statistical Office conducted User satisfaction survey. The results of the survey are available on the Statistical Office website, link: [User satisfaction report](#)

3. Accuracy and reliability

3.1 Accuracy – Overall remark

The results of survey of construction work are based on a sample of reporting units and are subject to the usual types of errors associated with sampling techniques as well as non-sampling errors, measurement errors, processing errors, and non-response.

3.2 Sampling error

Survey of construction work is done on a sample basis. Included are all enterprises and KAU with 5 and more employees who are registered in sector F according to the classification NACE Rev.2. The sample includes all reporting units from classes 2 and 3 (50 and more employees), while reporting units from class 1 is selected by random sample.

Indicators of sampling error

Sample error is regularly calculated and on average it was 0.01 during 2023. The coefficient of variation was also the same.

3.3 Non-sampling error

There are four types of non-sampling errors:

- 1) Coverage errors - errors that occur between the target population and the sample frame;
- 2) Measurement errors - errors that occur during data collection. The source of these errors may be the information system, the interviewer or the data collection method;
- 3) Processing errors - errors that occurred after data collection, e.g. errors during input, editing and weighting;
- 4) Non-response errors - errors that occurred as a result of an unsuccessful attempt to obtain the desired information from the reporting unit.

There can be two main types of non-response errors:

- 1) non-response of the unit - absence of information of the entire sample unit and
- 2) non-response to the item - the sampling unit was successfully contacted, but not all the necessary information was obtained.

3.3.1 Coverage error

Coverage errors can be:

- 1) overcoverage;
- 2) undercoverage.

Overcoverage represents the proportion of units from the sample frame that do not belong to the target population.

Undercoverage is a problem that arises due to insufficient coverage, i.e. failure to update the framework used to select the sample. The undercoverage rate is difficult to estimate because it is not possible to know which units are not included in the target population.

Indicator of coverage error

Overcoverage appears when a company which is registered in sector F (area which is the subject of observation) and delivers information to deal with some other activity, not construction, which means it should not have been found in the frame of the sample.

3.3.2 Error of measurement

For the data collection of the survey on construction activity, there is used a questionnaire. Errors of measurement that can be generated using the questionnaire are minimized. Measurement errors are errors that occur during data collection and cause recorded values of variables to be different from the true ones. Indirect analysis based on the results of the editing phase is implemented for correction.

3.3.3 Non-response error

Non-response errors are errors due to an unsuccessful attempt to obtain the desired information from the reporting unit. Two main types of non-response errors are considered:

- 1) Unit non-response, which refers to the absence of information on entire units (enterprises) selected in the sample;
- 2) Non-response of the item that refers to the situation in which the sampled unit was successfully surveyed, but not all the necessary information was obtained.

Non-responding unit rate

The unit non response rate is calculated as the ratio of the number of units which did not responded to the questionnaire. The rate of unresponsive units in 2023 was around 25%.

Item non-response

The item non response rate is calculated as the ratio of the eligible units that have not responded to a particular item and the in-scope units that are required to respond to that particular item. The average item non response rate was about 8%.

3.3.4 Data processing error

The collected data goes through a series of processes before the final grade: encryption, input, editing, imputation, weighting, tabulation, etc. Errors arising in these phases are called processing errors.

Imputation rate

Not relevant.

3.4 Seasonal adjustments

Not relevant.

3.5 Data revision

3.5.1 Data revision policy

Statistical office of Montenegro has adopted revision policy and it is available on the website: [Revision policy](#)

3.5.2 Data revision practice

Typical revision is minimal. Significant revisions have only been made to reflect changes in methodology.

3.5.3 Data revision - average size

Not available.

4. Timeliness and punctuality

4.1 Timeliness

Preliminary data are published 6 months after the end of the reference period. The final data are published 10 months after the completed reference period.

Time lag of the first results

The time lag of the preliminary results indicator represents the time between the date of the last day of reference period and the date of publication of preliminary data. The preliminary data are published 6 months after the completed reference period. The deadlines for the publication of preliminary data on construction works in 2023 have been met in accordance with the Statistical Release Calendar.

Time lag of the final results

The timeliness indicator of publication of final data represents the time between the date of the last day of the reference period and the date of publication of final data. The final data are published 10 months after the completed reference period. The deadlines for the publication of final data on construction works in 2023 have been met in accordance with the Statistical Release Calendar.

4.2 Punctuality

The punctuality indicator represents the time difference between the actual publication of the data and the planned publication of the data. Deadlines of dissemination of the construction works data are defined in the Statistical Release Calendar and these deadlines are respected.

Indicator TP3 (punctuality) is 0, i.e. no difference between the actual publication of the data and the planned publication of the data, that means that the Releases are published according to the deadlines which are defined in the Statistical Release Calendar.

5. Availability and clarity

5.1 Statistical Release Calendar

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 18/12 and 47/19.) stipulates that official statistical producers prepare, update, and publish Statistical Release Calendar. It is published on the website of Statistical Office not later than 20 December for the next year, for all official statistical producers that includes date of releasing statistical data. Any change in the date of release in the Calendar is published in advance by the Procedure on Unplanned Revisions.

5.2 Access the data Release Calendar

The calendar of data publication is available on the following link: [Release Calendar](#)

5.3 Releases

Construction work releases are available on the link: [Release](#)

5.4 Publication

All publications published by the Statistical office of Montenegro are available at the link: [Publication](#)

5.5 On-line databases

[Database](#)

5.6 Access to micro data

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 18/12 and 47/19) regulates rules under which external users can obtain an access to individual data for needs of research. Article 58 defines types of scientific and research organizations that can obtain such data. Providing individual data without identifier is possible only upon a written request of scientific and research institutions, with purpose of performing scientific and research activities as well as international statistical organizations and statistical producers from other countries. Research entity signs the agreement with Statistical Office, and it signs the statement on respecting the confidentiality principle. Official statistical producers keeps a separate records on users and purpose of using the statistical data given to these users.

5.7 Metadata occupancy

The ratio of the number of metadata elements provided to the total number of metadata elements applicable. For this survey, the metadata fill rate is 100%.

6. Comparability

6.1 Comparability - geographical

Not relevant.

6.2 Time comparability

Data on construction activity are comparable over time and they have been available since 2010 on the MONSTAT website, within the section [Data](#).

Time comparability indicator

Not relevant.