

# **QUALITY REPORT 2017**

# **Construction works**

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## 1. Introduction – Basic information about the survey

### 1.1 Purpose, goal and subject of the survey

The aim of annual survey of construction works is monitoring construction production, understanding the size and structure of investments in buildings and engaged workforce. The data collected are the result of the work of construction enterprises and natural persons in the territory of Montenegro.

### 1.2 Legal basics

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 18/12) defines provisions for 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, Statistical Office has signed several memoranda on cooperation with administrative data providers.

#### 1.3 Statistical units

The survey included all reporting units with 5 and more employees who are involved in construction, regardless of ownership, association form and of the origin of capital as well as reporting units (KAU) whose business units engaged in construction works. The survey on buildings built by individual owners include all buildings, new buildings and extensions, buildings with apartments (exclusively residential, predominantly residential and nonresidential predominantly) and buildings without dwellings, but they are built to perform activities of catering, trade, crafts and agriculture.

#### 1.4 Coverage and scope of survey

#### 1.4.1 Sectors

Reporting units of survey on construction activities 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. Reporting units in the buildings constructed by individual owners are: - buildings that were built by the owners of their own labor, with the help of labor from outside, or engaging in independent private contractors and craftsmen.

#### 1.4.2 Statistical population

The sample frame was formed on the basis of the data from Statistical Business Register, which includes all active business entities from the area of construction as well as KAU with secondary activity in construction sector. The sample includes all reporting units from the class 2 and 3, while reporting units from class 1 is selected by random samle. The survey on buildings built by individual owners include all buildings, new buildings and extensions, regardless of whether the competent authority has issued a permit for construction, namely: buildings with apartments (exclusively residential, predominantly residential and nonresidential predominantly) and buildings without dwellings, but they are built to perform activities of catering, trade, crafts and agriculture. Apart from these, including the garage and if they are built as separate structures, as well as a weekend home. This report shall include the flats that were built by adapting non-residential space.

#### 1.5 Referent geographical area

The whole territory of Montenegro.

### 1.6 Concepts and definitions

The variables of this survey are: data on construction works, type of works on the building, value of completed construction works during the year, value of all works on the completed building from beginning to end of construction, building data, gross area and gross volume of the building, number and area of completed and unfinished apartments. The value of construction works is displayed at current prices and includes all built-in construction materials and consumed work regardless of whether the work and material were paid or not. Data on the value of performed works refer to works carried out in the reporting year on completed and unfinished buildings. A dwelling is considered as any building-related unit intended for housing consisting of one or more rooms with appropriate auxiliary rooms. The area of the apartment (m2) is the useful floor area of the apartment measured within the walls of the apartment.

### 1.7 Classifications

NACE Rev. 2

### 1.8 Frequency of data collection

Annualy

### 1.9 Frequency of data dissemination

Annually according to the Statistical Release Calendar.

### 1.10 Methodology

A statement of methodology is available on website :

https://www.monstat.org/userfiles/file/gradjevinarstvo/medodologije/Construction%20works\_Methodology.p

### 1.11 Base period

Reference year

### 1.12 Unit of measure

Thousand Euro

### 1.13 Source of data

Data are collected on a sample of reporting units including Statistical Business Register (SBR) in MONSTAT which are registered according to sector F by NACE Rev. 2 classification. The list of companies is taken from the Business Register.

### 1.14 Method of collection data

Data are collected through questionnaires (by post, email or fax).

### 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

With purpose of determining user satisfaction with quality data and defining their needs, Statistical Office for the first time carried out the User Satisfaction Survey in 2017. The survey was done from 1 September to 20 October. The survey link was sent to users that sent request to the official email address in period 2013-2017. Additionally, the questionnaire is put on the website of Statistical Office. The processing of data obtained by the mentioned survey is ongoing, while final result are ready until the end of year, both for total users satisfaction, and by domains.

## 3. Accuracy and reliability

### 3.1 Accuracy – Overall

The results of quarterly survey of construction activity 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 reporting units from class 1 are selected through random sampling method so it is logical that there is an error during the random sampling. Reporting units from the class 2 and 3: 50 employees is full coverage.

#### Indicators of sampling error

Sampling error is regularly calculated and on average it was 0,001% in 2017. Coefficient of variance is 0.01.

#### 3.3 Non-sampling error

Non-sampling errors are tied to other errors that are not related to the sample. Non-sampling errors include: coverage errors, measurement errors, processing errors, and non-response errors.

#### 3.3.1 Coverage error

Non-sampling errors are tied to other errors that are not related to the sample. Non-sampling errors include: coverage errors, measurement errors, processing errors and Non-response errors.

#### Indicators of coverage error

Coverage error is the divergence between the frame population and the target population. The coverage errors include: over coverage and under coverage.

#### 3.3.2 Error of measurement

Not relevant.

#### 3.3.3 Non response error

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 on editing phase is implemented for correction.

#### Unresponsive unit rate

Non-response errors occur when the survey fails to get response to one, or possibly to all questions of the survey. Non - response errors include: unit non response and item non response.

#### Non response rate

The item non response rate is calculated as the ratio of the eligible units which have not responded to a particular item and the in-scope units that are required to respond to that particular item. Average item non response rate in 2016 was about 7%

### 3.3.4 Error processing the data

Not available

Imputation rate

Not available

#### 3.4 Seasonal adjustment

Not available

#### 3.5 Data revision

#### 3.5.1 Data revision policy

Statistical Office has adopted the revision policy and it is available on the website http://www.monstat.org/userfiles/file/0%20nama/2017/Revision%20policy.pdf

#### 3.5.2 Data revision practice

In survey of construction works uses regular revisions. Large and unplanned revisions are only used in the specific cases defined by the revision policy.

#### 3.5.3 Data revision - average size

Not relevant

### 4. Timeliness and punctuality

#### 4.1 Timeliness

The data are published 6 months after the end of the reference period.

#### Time lag of the first results

The number of days (or weeks or months) from the last day of the reference period to the day of publication of first results: T1 = dfrst - dref, T1 = 35 days, dfrst - release date of first results; dref - last day (date) of the reference period of the statistics. Deadlines for balance of coal data during 2017 are published according to the Statistical Release Calendar.

#### Time lag of the final results

The number of days (or weeks or months) from the last day of the reference period to the day of publication of complete and final results. These data are published 6 months after the end of the reference period in accordance with the Statistical Release Calendar.

### 4.2 Punctuality

Deadlines for publication of data are met in accordance with 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) 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 date of releasing in the Calendar is published in advance in accordance with the Procedure on Unplanned Revisions.

#### 5.2 Access the data Release Calendar

http://monstat.org/userfiles/file/o%20nama/2017/Kalendar\_2017\_eng\_Monstat.pdf

### 5.3 Releases

Data are available on the website and press release: <u>http://monstat.org/eng/page.php?id=476&pageid=35</u>

### **5.4 Publication**

Statistical Office publishes the following regular publications:

- 1. Monthly Statistical Review,
- 2. Statistical Yearbook,
- 3. Montenegro in Numbers,
- 4. Annual Statistics of Transport, Storage and Connections,
- 5. Number and Structure of Business Entities.

In addition to the above regular ones, Statistical Office publishes also additionally publications. Some of the most important additional publications are as it follows:

- 1. Women and Men in Montenegro,
- 2. Children in Montenegro,
- 3. The most often used statistical data.

All publication published by Statistixal Office are available at the following link:

https://www.monstat.org/eng/publikacije.php?id=100

#### 5.5 On-line database

http://monstat.org/eng/pxweb.php

#### 5.6 Access to micro data

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 18/12) 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 these survey, the metadata fill rate is 100%.

### 6. Comparability

### 6.1 Spatial comparability

The survey is conducted for national purposes.

#### 6.2 Time comparability

Data on construction work has been produced more than 30 years.

#### Time comparability indicator

Data on construction work are available since 2010 on MONSTAT web site and they are comparable over time.