# Quality Report for MONTHLY REPORT ON BUILDING PERMITS ISSUED, 2014

Republika Srpska Institute of Statistics, Banja Luka, 2015

3

## Table of Contents

1. Introduction into the statistical survey and its output – Survey methodology	5
1.1. Purpose and periodicity of survey implementation	5
1.2. Legal basis and responsibility of statistical institutions	
1.3. Observation unit	
1.4. Data collection	5
1.5. Coverage	5
1.6. Definitions	
1.7. Data processing	
1.8. Data publishing	
1.9. Key variables	
1.10. Key statistics	
1.11. Questionnaire	
1.12. Annexes	
1.12.1. Instructions for completing the questionnaire	
1.12.2. Methodological explanations	
1.13. Contact information	
2. Relevance	7
2.1. Quality and performance indicator – Rate of available ESS statistics (R1)	
3. Accuracy	
3.1. Sampling errors	
3.2. Non-sampling errors	
3.2.1. Coverage errors	
3.2.2. Measurement errors	
3.2.2.2. Reasons for the occurrence of measurement errors	
3.2.2.3. Procedures in cases of measurement errors	8
3.2.2.4 Quality and performance indicator – Data editing rate (A3)	
3.2.2.5 Measures to reduce measurement errors	
3.2.3.1. Quality and performance indicator – Non-response rate (A4)	
3.2.3.2. Quality and performance indicator - Non-response rate of variable (A5)	9
3.2.3.3. Procedures in cases of non-response	
3.2.3.4. Procedures to reduce non-response rates	9 9
3.2.3.6. Quality and performance indicator – Number of errors, by type (A7)	9
3.2.3.7. Quality and performance indicator – Average size of revision (A8)	9
4. Timeliness and punctuality	9
4.1. Timeliness of release	10
4.1.1. Quality and performance indicator – Timeliness of preliminary results (T1)	
4.1.2. Quality and performance indicator – Timeliness of final results (T2)	
4.2. Punctuality of release	10
4.2.1. Quality and performance indicator – Punctuality of release (T3)	
4.3. Reasons for major delays and measures to improve punctuality and timeliness of release	
5. Accessibility and clarity	11
5.1. Accessibility	11
5.1.1. Dissemination channels	
5.1.2. Quality and performance indicator – Rate of used dissemination channels (AC1)	
5.1.3. Methods of dissemination	
5.1.4. Quality and performance indicator – Rate of used dissemination methods (AC2)	
5.2. Clarity	

5.2.1. Printed publications and Internet publication	
5.2.1.1. Disseminated results	12
5.2.1.3. Metadata	12
5.2.1.4. Measures to improve clarity of disseminated results	
5.2.2. Quality and performance indicator – Rate of metadata completeness (AC4)	
6. Comparability and coherence	
6.1. Comparability over time	
6.1.1. Quality and performance indicator – Length of comparable time series (CC1) 6.1.2. Breaks in time series	12
6.1.3. Other factors affecting comparability over time 6.2. Geographical comparability	
6.2.1. Comparability with the European Statistical System members	
6.4. Coherence between preliminary and final data	
6.5. Coherence with results of the reference survey	
7. Concessions – compromises between output quality components	13
8. Assessment of users' needs and perceptions	13
8.1. Classifying and understanding users	13
8.2. Measuring users' perceptions and user satisfaction	13
8.2.1. Quality and performance indicator – User satisfaction index (US1) 8.2.2. Quality and performance indicator – Time elapsed since the last user satisfaction survey (US2)	13 13
9. Costs and burden on respondents/reporting units	14
9.1. Costs of the Republika Srpska Institute of Statistics	14
9.1.1. Quality and performance indicator – Annual operating costs, average by main cost components (PCR1)	
9.2. Burden and costs of respondents/reporting units	
9.2.1. Quality and performance indicator – Annual burden on respondents in hours and/or financial indicators	14
9.3. Measures to reduce costs and burden	
10. Confidentiality, transparency and protection	14
10.1. Confidentiality	14
10.2. Transparency	
10.3. Protection	
11. Conclusion	15

### 1. Introduction into the statistical survey and its output – Survey methodology

### **1.1. Purpose and periodicity of survey implementation**

Monthly report on building permits issued – M KPS GRADJ-GD has been carried out since 2013 and it provides data for the production of short-term indicators of economic activity in the field of construction.

Reports on issued building permits are collected monthly and published quarterly. The observation period is a quarter and it coincides with the calendar quarter.

#### **1.2. Legal basis and responsibility of statistical institutions**

The statistical survey is carried out in accordance with the Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska", No. 85/03) and pursuant to the Statistical Programme of Republika Srpska for the period 2013 – 2017 (Decision of the National Assembly on the adoption No. 01-1901/12 of 13<sup>th</sup> December 2012, published in the "Official Gazette of Republika Srpska", No. 120/12) and the current annual Work Plan of the Republika Srpska Institute of Statistics.

### 1.3. Observation unit

Observation units for the Monthly report on building permits issued – M KPS GRADJ-GD include the ministry in charge of construction activities and cities/municipalities, that are responsible for issuing building permits.

### 1.4. Data collection

The collection of data within this statistical survey is carried out using the reporting method.

The questionnaire Monthly report on building permits issued – M KPS GRADJ-GD is used for the survey. Reporting units, which are also observation units, complete the Monthly report on building permits issued – M KPS GRADJ-GD for each building permit. These completed questionnaires, together with the Control Form that refers to the given observation unit, are submitted to the Republika Srpska Institute of Statistics within 10 days after the end of the observation month.

### 1.5. Coverage

The survey covers business entities responsible for issuing building permits. There are 63 observation units in this survey.

### **1.6. Definitions**

**Dwelling** is any construction unit intended for dwelling purposes, consisting of one or more rooms with adequate auxiliary spaces (kitchen, bathroom, lobby, pantry, toilet, etc.) or without auxiliary spaces and with one ore more separate entrances.

**Room** is a space intended for dwelling purposes, separated from the rest of the dwelling by permanent walls, having direct daylight and at least 4 square metres of floor area.

Useful floor area of a dwelling (m<sup>2</sup>) is the floor area of the dwelling, measured inside the dwelling walls.

**Residential buildings** are constructions in which 50% or more of the useful floor area is intended for dwelling purposes.

**Non-residential buildings** are constructions without dwelling area or those in which less than 50% of the overall useful floor area is intended for dwelling purposes.

### 1.7. Data processing

Before data entry, collected data are controlled at the Production Statistics Division of the RSIS. If necessary, additional data are obtained through subsequent telephone or personal contact with the reporting unit and corrections are made on the basis of these data.

Data entry is carried out at the Production Services Division of the RSIS. The application used for data entry and processing contains mainly "hard" controls which prevent the entry of computationally or logically incorrect data.

### 1.8. Data publishing

Quarterly reports "Building permits issued" are published 35 days after the end of the observation quarter. All published data refer to the Republika Srpska level.

The release "Building permits issued" presents indices and absolute values referring to total building permits issued, for buildings and for civil engineering.

The release contains four tables:

- 1. Indices of building permits issued;
- 2. Indices of planned dwellings;
- 3. Building permits issued, by type of works;
- 4. Dwellings in buildings for which permits were issued, by type of buildings, type of works and number of rooms.

Graph presents dwellings by number of rooms. The release provides brief methodological explanations.

Data on issued building permits for the Republika Srpska level are regularly sent to the Agency for Statistics of Bosnia and Herzegovina (BHAS), which is the institution responsible for the compilation of data for the BiH level and for the reporting to Eurostat

### 1.9. Key variables

In accordance with the Classification of Types of Constructions in BiH (CC BiH)<sup>1</sup>), key variables refer to buildings and civil engineering:

- Number of building permits issued;
- Number of dwellings;
- Useful floor area of dwellings.

### 1.10. Key statistics

- Indices of building permits issued, quarter of 2014 compared to the previous year average;
- Indices of building permits issued, quarter of 2014 compared to the same quarter of the previous year;
- Indices of planned dwellings, quarter of 2014 compared to the previous year average;
- Indices of planned dwellings, quarter of 2014 compared to the same quarter of the previous year;
- Building permits issued, by type of works;
- Dwellings in buildings for which permits were issued, by type of buildings, type of works and number of rooms.

<sup>1) &</sup>quot;Classification of Types of Constructions in BiH" (CC BiH) complies with The EU Classification of Types of Constructions – CC, final version, Eurostat 1997

### 1.11. Questionnaire

The questionnaire Monthly report on building permits issued – M KPS GRADJ-GD, which has been published at the website of the Republika Srpska Institute of Statistics, is used for the collection of data within this statistical survey. The questionnaire is available at:

http://www2.rzs.rs.ba/static/uploads/obrasci/gradjevinarstvo/Gradj\_GD.pdf

### 1.12. Annexes

### 1.12.1. Instructions for completing the questionnaire

Instructions for completing the Monthly report on building permits issued – M KPS GRADJ-GD is used to complete the Monthly report on building permits issued – M KPS GRADJ-GD. The instructions are available at the website of the Republika Srpska Institute of Statistics:

http://www2.rzs.rs.ba/static/uploads/obrasci/gradjevinarstvo/Uputstvo\_Za\_Popunjavanje\_GRADJ\_GD. pdf

Completion of the Monthly report on building permits issued – M KPS GRADJ-GD requires the application of the Excerpt from the Classification of Types of Constructions in BiH (KVGO BiH), which has been published at the Institute's website:

http://www.rzs.rs.ba/static/uploads/obrasci/gradjevinarstvo/IZVOD\_KVGO\_CIR.pdf

### 1.12.2. Methodological explanations

Methodological explanations are available at the official website of the Institute, at:

http://www2.rzs.rs.ba/static/uploads/metodologije/gradjevinarstvo/Gradjevinske\_Dozvole.pdf

### **1.13. Contact information**

Production Statistics Division – Construction Statistics of the Republika Srpska Institute of Statistics is responsible for the implementation of this statistical survey

Name and address of the responsible institution:

Name of the institution: Republika Srpska Institute of Statistics

Address of the institution: Veljka Mlađenovića 12d, 78 000 Banja Luka, Republika Srpska, BiH

Contact person:

Želimir Radišić <u>zelimir.radisic@rzs.rs.ba</u> 051 332-772

### 2. Relevance

Data on issued building permits for the Republika Srpska level are sent to the Agency for Statistics of Bosnia and Herzegovina, which is the institution responsible for the compliation of data for the BiH level and for the reporting to Eurostat.

Except for the purpose of reporting to Eurostat, data are also used by the Ministry of Spatial Planning, Civil Engineering and Ecology, Ministry of Finances of Republika Srpska, local self-government bodies, Chamber of Commerce of Republika Srpska, Central Bank of BiH, Economics Institute, and other educational and research institutions, as well as for the needs of physical entities, the media, National Accounts Statistics, etc.

#### 2.1. Quality and performance indicator - Rate of available ESS statistics (R1)

The rate of available statistics represents the ratio between available statistics and statistics required (prescribed) by ordinances and regulations (primarily ordinances and regulations of the European Commission and other relevant international organisations).

Methodology used for the calculation of absolute value using data on issued building permits is based on the EU Recommendations referring to short-term statistics (Council Regulation (EC), No. 1165/98), definitions of variables, list of variables and frequency of data collection (Commission Regulation (EC), No. 1503/2006).

The EU Regulation referring to short-term statistics (Council Regulation (EC) No. 1165/98) defines the variables 411 - number of dwellings and 412 - useful floor area of the dwelling (m<sup>2</sup>), as well as their presentation in the form of absolute values, quarterly, which is fully applied. Thus, the rate of available statistics is 100%.

### 3. Accuracy

### 3.1. Sampling errors

The survey covers reporting units (ministries responsible for construction activities, city/municipality) that are responsible for issuing building permits.

As the coverage of the survey is full, the calculation of sampling errors in accordance with the methodology for calculating sampling errors is not applicable.

### 3.2. Non-sampling errors

#### 3.2.1. Coverage errors

Coverage errors refer to differences between the target population and the population selected into the sample. The survey covers the ministry responsible for construction activities and all cities/municipalities on the territory of Republika Srpska that are responsible for issuing building permits. In 2014, there were no undercoverage or overcoverage errors.

#### 3.2.2. Measurement errors

#### 3.2.2.1. Controls to detect measurement errors

The first stage of data checking is carried out at the Production Statistics Division of the RSIS. Completeness of the questionnaire is checked. Missing data are provided through telephone contact with the reporting unit.

Data entry is carried out at the headquarters of the Republika Srpska Institute of Statistics, i.e. in its Production Statistics Division. Measurement errors are detected and prevented through computational and logical controls built into the application.

#### 3.2.2.2. Reasons for the occurrence of measurement errors

The most common measurement errors occur in cases when the person completing the questionnaire is not qualified enough to complete it or when he/she does not read the instructions for completing carefully, as well as due to lack of attention from the persons who fill out the report that should have been completed before the predefined deadline (10 days after the end of the month).

#### 3.2.2.3. Procedures in cases of measurement errors

In case measurement errors are detected, reporting unit must be contacted, via telephone or directly, in order to obtain accurate information, with the aim of correcting data or refilling the form. Data are never edited automatically.

9

### 3.2.2.4 Quality and performance indicator - Data editing rate (A3)

This indicator is calculated as the ratio of the number of observation units for which submitted data were corrected and the number of observation units for which reports were submitted. When this number is multiplied by 100, the data editing rate is obtained, as an indicator of data collection quality. All observation units from the Address Book for 2014 submitted completed questionnaires, but there are no accurate records of corrections made in the data editing phase. The estimated share of corrected reports in each month, on the average, does not exceed 30%.

### 3.2.2.5 Measures to reduce measurement errors

Direct contact with reporting units is established. Reasons that led to errors are examined. The clarity of instructions for completing the questionnaire is checked and additional methodological explanations are provided.

### 3.2.3. Non-response errors

### 3.2.3.1. Quality and performance indicator - Non-response rate (A4)

Non-response cases include reports which have not been submitted, as well as those that do not provide complete, relevant and acceptable answers.

There are no non-response cases in monthly construction statistics.

### 3.2.3.2. Quality and performance indicator – Non-response rate of variable (A5)

Currently, there are no accurate records of non-response per specific variable.

### 3.2.3.3. Procedures in cases of non-response

In case an entire report or certain data are missing, reporting units are contacted to help complete the entire report or missing values.

#### 3.2.3.4. Procedures to reduce non-response rates

In order to reduce non-response rates, the following procedures are usually used:

- Multiple contacts with the reporting unit (in cases of unavailability);
- Flexible deadlines for the submission of reports (possibility of advancing the deadlines of data submission);
- Combining several different methods of data collection (telephone, email, fax);
- Revision of the questionnaire and instructions for completing the questionnaire, in order to simplify and facilitate its completion.

#### 3.2.3.5. Quality and performance indicator - Rate of imputed data (A6)

No imputations are done, as all data are obtained directly from reporting units.

3.2.3.6. Quality and performance indicator – Number of errors, by type (A7)

The current methodology was applied properly.

### 3.2.3.7. Quality and performance indicator – Average size of revision (A8)

Revision was not planned or implemented.

### 4. Timeliness and punctuality

### 4.1. Timeliness of release

Timeliness of release represents an interval between the observation period the data refer to and the date of release.

### 4.1.1. Quality and performance indicator – Timeliness of preliminary results (T1)

Data on issued building permits are published on the average 37 days after the end of the quarter, as final data, while no preliminary data are published (Table 1).

### 4.1.2. Quality and performance indicator – Timeliness of final results (T2)

### Table 1. Timeliness of release of data on building permits issued for 2014

	Data on building permits issued				
Observation period	1 <sup>st</sup> quarter	2 <sup>nd</sup> quarter	3 <sup>rd</sup> quarter	4 <sup>th</sup> quarter	Average
Date of release 07 May 0		04 Aug	05 Nov	09 Feb 2015	-
Interval of release (days after the end of the quarter)	37	35	36	40	37

### 4.2. Punctuality of release

Punctuality of release represents an interval between the actual and planned dates of release, as specified in the Release Calendar.

### 4.2.1. Quality and performance indicator – Punctuality of release (T3)

The actual date of release of data on issued building permits differed from the planned date of release according to the Release Calendar (Table 2) for the 1<sup>st</sup> quarter only.

	Data on building permits issued				
Observation period	1 <sup>st</sup> quarter	2 <sup>nd</sup> quarter	3 <sup>rd</sup> quarter	4 <sup>th</sup> quarter	Average
Planned date of release according to the Release Calendar	05 May	04 Aug	05 Nov	09 Feb 2015	-
Actual date of release	07 May	04 Aug	05 Nov	09 Feb 2015	-
Difference between the planned and actual dates of release	2	0	0	0	0.5

11

### 4.3. Reasons for major delays and measures to improve punctuality and timeliness of release

For data published for the first time for the 1<sup>st</sup> quarter of 2014, multiple checks were done for collected data and for data which were being prepared for publishing.

### 5. Accessibility and clarity

### 5.1. Accessibility

Users of statistical data can easily and quickly access the data, as these are published at the Institute's website and in printed publications.

### 5.1.1. Dissemination channels

Number	Dissemination channels	Used
1	Website of the Institute	YES
2	Written requests of users according to their specification	YES
3	Data published via telephone	NO
4	Digital media (CD, floppy disk, etc.)	NO
5	Data presented at press conferences	NO
6	Thematic bulletin	NO
7	Special printed publications	NO
8	Databases available to external users	NO
9	Statistically protected microdata	NO

### 5.1.2. Quality and performance indicator – Rate of used dissemination channels (AC1)

The rate of used channels of dissemination is 22.2% (2/9X100).

### 5.1.3. Methods of dissemination

The following methods of dissemination were used to publish data on building permits issued:

Number	Method of dissemination	Used
1	Website of the Institute	YES
2	Websites of other institutions	NO
3	Websites of international institutions	NO
4	Written requests	YES
5	Telephone mediation	YES
6	Digital media (CD, floppy disk, etc.)	NO
7	Data presented at press conferences	NO
8	Statistical Yearbook	NO
9	This is Republika Srpska	NO
10	Release	YES
11	Thematic bulletin	NO
12	Special publications	NO
13	Eurostat's publications	NO
14	Publications of other international organisations (OECD, IMF)	NO
15	Databases for internal use	YES
16	Databases available to external users	NO

### 5.1.4. Quality and performance indicator – Rate of used dissemination methods (AC2)

The rate of used methods of dissemination is 31.2% (5/16X100).

### 5.1.5. Quality and performance indicator – Number of accesses to the online database (AC3)

Online database of data on building permits issued is being developed.

### 5.2. Clarity

In addition to data, publications also provide methodological explanations and definitions of basic indicators and concepts.

### 5.2.1. Printed publications and Internet publication

- Quarterly release "Building permits issued".

### 5.2.1.1. Disseminated results

- Quarterly release "Building permits issued" – indices of building permits issued, indices of planned dwellings, building permits issued by type of works, dwellings in buildings for which permits were issued, by type of buildings, type of works and number of rooms, graph presenting dwellings by number of rooms.

### 5.2.1.2. Level (level of detail) of dissemination

Quarterly releases present quarterly indices and absoulte values for total building permits issued, both for buildings and civil engineering. Data are presented at the Republika Srpska level.

### 5.2.1.3. Metadata

As part of Metadata at the official website of the Institute, basic concepts and definitions referring to this survey are available, as well as the Methodology in the part of the website which refers to Construction Statistics. In addition, brief metadata are provided in printed and electronic publications, namely in the Building permits issued release.

### 5.2.1.4. Measures to improve clarity of disseminated results

Data are presented clearly.

### 5.2.2. Quality and performance indicator – Rate of metadata completeness (AC4)

See item 5.2.1.3.

### 6. Comparability and coherence

### 6.1. Comparability over time

6.1.1. Quality and performance indicator – Length of comparable time series (CC1)

A comparable series of data on issued building permits has been available since 2013.

### 6.1.2. Breaks in time series

Data on building permits issued in Republika Srpska have been published since 2014.

Indices for 2014 were calculated in accordance with the KD BiH 2010, which is harmonised with the NACE  $\operatorname{Rev.2}$ 

### 6.1.3. Other factors affecting comparability over time

There were no significant factors affecting comparability over time.

### 6.2. Geographical comparability

#### 6.2.1. Comparability with the European Statistical System members

Available data on building permits issued are fully comparable with the data provided by the European Statistical System members, since this statistical activity is implemented in accordance with the EU recommendations referring to short-term statistics (Council Regulation (EC) No. 1165/98), definitions of variables, list of variables and frequency of data collection (Commission Regulation (EC) No. 1503/2006).

### 6.3. Seasonal adjustment

Data referring to issued building permits are not seasonally adjusted.

### 6.4. Coherence between preliminary and final data

Results are published in the form of final data.

### 6.5. Coherence with results of the reference survey

Monthly reports on building permits issued – M KPS GRADJ-GD are the only source of data for the calculation of quarterly indices of building permits issued, number and useful floor area of dwellings planned for construction the permits refer to. There is no reference survey with which data could be compared or harmonised.

### 7. Concessions – compromises between output quality components

Compromises between output quality components are not subject to special analyses.

### 8. Assessment of users' needs and perceptions

### 8.1. Classifying and understanding users

Key users of data on issued building permits are: Government of Republika Srpska - Ministry of Spatial Planning, Civil Engineering and Ecology, Ministry of Finances, local self-government bodies, Agency for Statistics of BiH, Central Bank of BiH, Chamber of Commerce of Republika Srpska, IMF, the media, Economics Institute, and other educational and research institutions, physical entities, etc.

Internal users of data on issued building permits are the National Accounts Division and Labour Statistics Division.

#### 8.2. Measuring users' perceptions and user satisfaction

### 8.2.1. Quality and performance indicator – User satisfaction index (US1)

A general User Satisfaction Survey has been conducted, but not specifically for this survey.

### 8.2.2. Quality and performance indicator – Time elapsed since the last user satisfaction survey (US2)

A general User Satisfaction Survey has been conducted, but not specifically for this survey.

### 9. Costs and burden on respondents/reporting units

### 9.1. Costs of the Republika Srpska Institute of Statistics

9.1.1. Quality and performance indicator – Annual operating costs, average by main cost components (PCR1)

Not subject to special analyses.

### 9.2. Burden and costs of respondents/reporting units

9.2.1. Quality and performance indicator – Annual burden on respondents in hours and/or financial indicators

Burden on respondents/reporting units is obtained based on data from the Monthly report on building permits issued - M KPS GRADJ-GD.

**Table 3.** Burden for the Monthly report on building permits issued in 2014, minutes

Number of observation units	Total number of questionnaires	Time required to complete one questionnaire (minutes)	Total time spent to complete questionnaires (minutes)
63	2,092	20 (average)	41,840

### 9.3. Measures to reduce costs and burden

Introduction of a WEB application would be the most significant measure to reduce costs and burden on reporting units.

### **10.** Confidentiality, transparency and protection

### 10.1. Confidentiality

Data referring to individual observation units are used for statistical purposes only.

The confidentiality of data and protection of personal information are guaranteed by Articles 25 and 27 of the Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska", No. 85/03) and the Rules of protection of confidential data of the Republika Srpska Institute of Statistics. The confidentiality of statistical data is also ensured through the Law on the protection of personal data ("Official Gazette of BiH", No. 49/06).

### 10.2. Transparency

Users are familiar with the method of data use. Errors observed in published editions are corrected. Corrected data are clearly marked in the given editions.

### 10.3. Protection

See chapter 10.1.

### 11. Conclusion

In the future period, it is necessary to:

- Establish procedures for complete records of corrections in the phase of data editing for all variables (not only for key variables);
- In cooperation with IT staff, develop an online database and a system for recording the number of accesses to electronic releases referring to this statistical field;
- Develop a WEB application;
- Through a specific User Satisfaction Survey, obtain information about user satisfaction for this statistical field.