



Quality Report for Statistics on Wages of Employees, 2016



The report prepared by: Biljana Glušac
Release date: November 2017

TABLE OF CONTENTS

1	INTRODUCTION TO THE STATISTICAL PROCESS AND PRODUCT	5
1.1	Purpose of the survey.....	5
1.2	Legal basis and responsibility of statistical institutions	5
1.3	Relevant classifications	5
1.4	Reporting unit	5
1.5	Statistical observation unit	5
1.6	Scope and coverage.....	5
1.7	Statistical concepts and definitions.....	6
2	RELEVANCE, ASSESSMENT OF USERS' NEEDS AND PERCEPTIONS.....	6
2.1	Users of statistical survey data	6
2.1.1	<i>Key users of statistical survey data</i>	6
2.1.2	<i>Assessment of users' needs</i>	6
2.1.3	<i>Measuring users' perceptions and user satisfaction</i>	7
2.2	Data completeness	7
2.2.1	<i>Quality and performance indicator – Data completeness - rate (R1)</i>	7
3	ACCURACY AND RELIABILITY.....	7
3.1	Sampling error	7
3.1.1	<i>Quality and performance indicator – Sampling error (A1)</i>	7
3.1.2	<i>Activities to reduce sampling errors</i>	7
3.2	Non-sampling errors	7
3.2.1	<i>Non-sampling errors – Coverage errors</i>	7
3.2.1.1	<i>Quality and performance indicator – Over-coverage rate (A2)</i>	7
3.2.1.2	<i>Quality and performance indicator – Common units – proportion (A3)</i>	8
3.2.1.3	<i>Undercoverage error</i>	8
3.2.1.4	<i>Measures to reduce coverage errors</i>	8
3.2.2	<i>Non-sampling errors – Measurement errors</i>	8
3.2.2.1	<i>Reasons behind measurement errors</i>	8
3.2.2.2	<i>Measurements to reduce the number of measurement errors</i>	8
3.2.3	<i>Non-sampling errors – Non-response errors</i>	9
3.2.3.1	<i>Quality and performance indicator – Unit non-response rate (A4)</i>	9
3.2.3.2	<i>Quality and performance indicator – Item non-response rate (A5)</i>	9
3.2.3.3	<i>Procedures in the event of non-response</i>	9
3.2.3.4	<i>Procedures to reduce non-response rates</i>	9
3.2.4	<i>Revision</i>	9
3.2.4.1	<i>Quality and performance indicator – Date revision – average size (A6)</i>	9
3.2.5	<i>Imputation</i>	10
3.2.5.1	<i>Quality and performance indicator – Imputation - rate (A7)</i>	10
4	TIMELINESS AND PUNCTUALITY.....	10
4.1	Timeliness of publication	10
4.1.1	<i>Quality and performance indicator – Time lag – first results (TP1)</i>	10
4.1.2	<i>Quality and performance indicator – Time lag – final results (TP2)</i>	10
4.2	Punctuality of publication	10
4.2.1	<i>Quality and performance indicator – Punctuality – delivery and publication (TP3)</i>	11
4.3	Reasons for major delays and measures to improve timeliness and punctuality.....	11

5	COHERENCE AND COMPARABILITY	11
5.1	Coherence	11
5.1.1	<i>Quality and performance indicator – Coherence between different data sources (CH1)</i>	11
5.1.2	<i>Reasons for major discrepancies</i>	11
5.2	Comparability	11
5.2.1	<i>Quality and performance indicator – Asymmetry for mirror flows statistics (CC1)</i> .	11
5.2.2	<i>Quality and performance indicator – Length of comparable time series (CC2)</i> ...	12
5.2.3	<i>Breaks in time series</i>	12
5.3	Geographical comparability	12
5.3.1	<i>Comparability with the European Statistical System members</i>	12
6	ACCESSIBILITY AND CLARITY, DISSEMINATION FORMATS	12
6.1	Releases in which data are published	12
6.2	Publications in which data are published	12
6.3	Online database	12
6.4	Access to microdata	12
6.5	Accessibility of methodological documents.....	12
6.6	Measures to improve clarity of disseminated results	13
6.7	Quality and performance indicator – Data tables - consultations (AC1)	13
6.8	Quality and performance indicator – Metadata - consultations (AC2).....	13
6.9	Quality and performance indicator – Metadata completeness - rate (AC3)	13
7	SURVEY COSTS AND BURDEN ON RESPONDENTS.....	13
7.1	Costs of survey implementation.....	13
7.2	Burden on respondents	13
7.3	Measures to reduce costs and burden.....	13
8	CONFIDENTIALITY	13
8.1	Confidentiality - policy.....	13
8.2	Confidentiality – data handling.....	13
9	STATISTICAL PROCESSING	14
9.1	Source of data	14
9.2	Frequency of data collection.....	14
9.3	Data collection	14
9.4	Data validation	14
9.5	Data compilation	15
9.6	Adjustments.....	15
9.6.1	<i>Seasonal adjustment</i>	15

1 INTRODUCTION TO THE STATISTICAL PROCESS AND PRODUCT

1.1 Purpose of the survey

The purpose of the statistical survey on wages is to provide data on the average gross and net wages in Republika Srpska by section of the Classification of Economic Activities and total wages, as well as to present the dynamics of wage trends, through nominal and real indices. Data on average wages are used in the application of laws (the Law on Labour, the Law on Pension and Disability Insurance, etc.), collective agreements, establishing and monitoring of social policies, etc.

Calculation of average wages in Republika Srpska begun in 1994, when the survey Monthly report on employees and their wages RAD-1 was established. This survey serves to collect data on paid gross and net wages in the reporting month and the number of employees the payments refer to. The survey is carried out monthly and it provides data on average paid gross and net wages by economic activity in Republika Srpska. Based on monthly data, the average annual wage is calculated.

1.2 Legal basis and responsibility of statistical institutions

Statistical activities within Wages statistics are carried out in accordance with the [Law on Statistics](#) of Republika Srpska ("Official Gazette of Republika Srpska, No. 85/03), the Statistical Programme of Republika Srpska for the period 2013-2017 and the current annual Work Plan of the Republika Srpska Institute of Statistics.

1.3 Relevant classifications

Since January 2013, statistical data on wages are monitored, processed and presented in accordance with the Classification of Economic Activities KDBiH 2010, which in its content and structure fully complies with the EU Statistical Classification of Economic Activities NACE Rev.2.

1.4 Reporting unit

Reporting units for the collection of data on wages are business entities registered in Republika Srpska and, in certain cases, their units that operate on the territory of Republika Srpska, which have been selected in the monthly coverage.

1.5 Statistical observation unit

Observation units are business entities registered in Republika Srpska and their units that operate on the territory of Republika Srpska, selected in the monthly coverage. If a business entity has organisational units (parts) engaged in an activity other than the principal (main) activity (regardless of the municipality/city where they are located) or located outside the municipality/city of the headquarters of the business entity (regardless of the activity they are engaged in), these units are also observation units, as they submit a separate report according to the activity they are engaged in and according to the municipality/city where they are located.

1.6 Scope and coverage

The survey on wages is based on the Statistical Business Register. It is implemented using a sample of selected observation units. The sampling frame for 2016 was the Semi-annual survey on employees and their wages for September 2015 and it covered a total of 12,957 observation units. All units with 50 or more employees at the business entity level are included in the sample. Units with more than nine and less than 50 employees at the business entity level are divided into strata determined by the municipality in which they are located and by the section of economic activity. The sample includes 10% of randomly selected units

from each stratum. An analysis has found that units with less than 10 employees at the business entity level do not affect the average wage significantly and therefore are not included in the sample. The number of units in the monthly coverage in 2016 is 2,704 observation units and these employ approximately 70% of workers.

1.7 Statistical concepts and definitions

Major definitions applied in Wages statistics include:

- *Net wage* refers to paid net wage in the month, for full time work, part-time work and overtime work, arrears of net wages for previous months paid during the reporting month, regardless of the period they refer to, as well as compensation of net wages for unworked hours (annual leave, paid leave, public holidays and non-working days determined by law, sick leave benefits at the expense of the employer, absence for vocational training, downtime through no fault of employees). Net wage does not cover other personal income (meal allowances, transportation, refunds, heating costs, winter food storage, solidarity assistance, one-off financial assistance) and sick leave benefits that are not at the expense of the employer.
- *Gross wage* refers to paid net wage, with related taxes and contributions.
- *Paid hours* refers to the total number of hours for which the wage has been paid.
- *Average wage* is calculated by dividing the total wages paid in the month by the number of employees the payments refer to.
- *Nominal index of net wages* represents the ratio between the nominal net amounts of the average wage in certain observation periods.
- *Real index of net wages* represents the ratio between the nominal index of net wages and the consumer price index in a period.

Major definitions are available to reporting units on the RAD-1 form.

2 RELEVANCE, ASSESSMENT OF USERS' NEEDS AND PERCEPTIONS

2.1 Users of statistical survey data

2.1.1 Key users of statistical survey data

Data on gross and net wages for the Republika Srpska level are submitted to the Agency for Statistics of Bosnia and Herzegovina, as the institution responsible for aggregating data at the BiH level and reporting to the Statistical Office of the European Union, Eurostat.

Key users of data on wages are:

- Public sector: Republika Srpska Ministry of Finance, Republika Srpska Ministry of Labour and Protection of War Veterans and Disabled Veterans, BiH Directorate for Economic Planning, Chamber of Commerce of Republika Srpska, municipal administrations, courts, prosecutors' offices;
- business entities: law firms, institutions, limited liability companies;
- science, research and education: institutes, educational institutions, students;
- general public: natural persons, retired persons;
- the media: broadcasters, news agencies;
- international users: International Labour Office;
- internal users: National Accounts Division.

2.1.2 Assessment of users' needs

The survey on wages provides monthly data on paid gross and net wages by economic activity and data on total wages, as well as wage trends expressed through nominal and real indices. The published data largely meet the needs of users, who use these data for the purpose of monitoring economic trends, calculating

various fees, calculating the amount of pension, developing studies and analyses, etc. Sometimes, users also need data on wages for particular occupations, which are not provided by this survey.

2.1.3 Measuring users' perceptions and user satisfaction

In 2017, Republika Srpska Institute of Statistics conducted the [User Satisfaction Survey](#) and the results are available on the official website of the Institute. There is no special users satisfaction survey for the statistics of wages.

2.2 Data completeness

2.2.1 Quality and performance indicator – Data completeness - rate (R1)

The rate of available statistics is the ratio of available statistics to statistics required (prescribed) by regulations (regulations of the European Commission and other relevant international organisations). Since Wages statistics are not regulated by a special regulation, this indicator is not calculated.

3 ACCURACY AND RELIABILITY

3.1 Sampling error

3.1.1 Quality and performance indicator – Sampling error (A1)

Stratified random sampling is applied to select observation units of Wages statistics. The sample design and size, as the most important factors determining the size of sampling error, are controlled by statisticians, in order to reduce the sampling error to a minimum.

The average wage is calculated by dividing the total paid wages in the month with the number of employees the payments refer to. The calculation of sampling errors in line with the methodology for calculating sampling errors is not applicable, due to the method applied to calculate the average wage.

3.1.2 Activities to reduce sampling errors

The size of the sample is modified periodically, to meet the quality requirements for data on average wages on the domains of interest. The quality of monthly data on the average wage is compared to the semi-annual data on the average wage, as well as with historical data to measure the impact of errors arising from the use of the sample.

3.2 Non-sampling errors

3.2.1 Non-sampling errors – Coverage errors

3.2.1.1 Quality and performance indicator – Over-coverage rate (A2)

The coverage for the Monthly survey on wages is produced at the beginning of the year, based on the Semi-annual report on employees and their wages for September of the previous year. If a business entity is dissolved during the observation year, it is not replaced by another business entity. In addition, there is no change in the principal activity of business entities that had such a change during the year.

Table 1. Over-coverage rate in 2016

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Annual average
Number of units in the address book	2,704	2,704	2,704	2,704	2,704	2,704	2,704	2,704	2,704	2,704	2,704	2,704	2,704
Number of irrelevant units in the address book	21	23	25	29	33	48	51	55	57	60	57	62	43
Over-coverage rate (%)	0.8%	0.9%	0.9%	1.1%	1.2%	1.8%	1.9%	2.0%	2.1%	2.2%	2.1%	2.3%	1.6%

3.2.1.2 Quality and performance indicator – Common units – proportion (A3)

The survey on wages does not use units from multiple sources, but only business entities and their units selected in the monthly coverage.

3.2.1.3 Undercoverage error

Since the coverage for the Monthly report on wages is not changed from January to December, business entities that started operating during the observation year are not covered by this survey.

3.2.1.4 Measures to reduce coverage errors

Measures taken to reduce coverage errors include the timely and regular updating of the address book of observation units based on the Register of Business Entities and information obtained through other statistical surveys.

3.2.2 Non-sampling errors – Measurement errors

3.2.2.1 Reasons behind measurement errors

The most frequent reasons behind measurement errors are:

- Misunderstanding of methodology by reporting units;
- Random errors when entering data into the form;
- The lack of interest of the reporting unit;
- The form is not always completed by the same person.

3.2.2.2 Measurements to reduce the number of measurement errors

The person in charge of methodological support in this survey eliminates errors. In the event of a measurement error, depending on the type of error, it is either corrected by the methodologist, based on other data in the questionnaire and data from the previous period, or the reporting unit is contacted in order to correct the detected error for the observation unit. In the event of a systemic error, the correction is made in cooperation with the reporting unit, using data from previous months.

The most important tools for reducing the occurrence of errors when completing the form are instructions delivered to the reporting units on the form. These instructions describe in detail how the form should be completed. Contacts between the methodologist and reporting units are also of great importance in terms of directly interpreting methodological explanations and pointing out the most common errors that occur when completing the form.

3.2.3 Non-sampling errors – Non-response errors

3.2.3.1 Quality and performance indicator – Unit non-response rate (A4)

Non-response covers all observation units for which no data were collected, regardless of the reason for non-response.

Table 2. Non-response rate in 2016

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Annual average
Number of observation units	2,704	2,704	2,704	2,704	2,704	2,704	2,704	2,704	2,704	2,704	2,704	2,704	2,704
Number of non-response cases	26	27	29	33	37	52	55	59	61	64	61	66	45.4
Non-response rate (%)	1.0%	1.0%	1.1%	1.2%	1.4%	1.9%	2.0%	2.2%	2.3%	2.4%	2.3%	2.4%	1.7%

3.2.3.2 Quality and performance indicator – Item non-response rate (A5)

There is no information that allows the calculation of item non-response rate.

3.2.3.3 Procedures in the event of non-response

In case individual data are missing or if data are inconsistent, the reporting unit is contacted in order to complete the report in line with the methodology.

Exceptionally, in the event of non-response for the entire report or for certain questions only, or if there are discrepancies, inconsistencies and errors that cannot be corrected by re-contacting the reporting unit, data are imputed based on available data for the reporting unit from the previous month.

3.2.3.4 Procedures to reduce non-response rates

The following procedures are most often used to reduce the non-response rate:

- Multiple contacts with the reporting unit (in the event 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);
- More precise methodological explanations which refer to a certain question (variable);
- Providing the reporting unit with the name and telephone number of the contact person available for any questions.

3.2.4 Revision

3.2.4.1 Quality and performance indicator – Data revision – average size (A6)

Revision was not planned nor implemented.

3.2.5 Imputation

3.2.5.1 Quality and performance indicator – Imputation - rate (A7)

There is no precise record of the number of imputed variables. Missing values are imputed for variables to which responsible persons from the business entity did not know the answer or did not want to provide one. In most cases, this happened with the variable “Number of hours paid by the employer to which the total payment refers”.

In the event of non-response of an active observation unit, data from the previous month are imputed.

Table 3. Rate of imputed observation units

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Annual average
Number of imputed observation units	0	4	0	3	2	4	4	1	3	2	0	3	2.2
Number of observation units not being imputed	2,664	2,659	2,661	2,657	2,652	2,646	2,631	2,632	2,625	2,624	2,626	2,619	2641.3
Rate of imputed data (%)	0%	0.2%	0%	0.1%	0.1%	0.2%	0.2%	0%	0.1%	0.1%	0%	0.1%	0.1%

4 TIMELINESS AND PUNCTUALITY

4.1 Timeliness of publication

The timeliness of data publication represents the time lag between the observation period the data refer to and the date of publication.

4.1.1 Quality and performance indicator – Time lag – first results (TP1)

Monthly data on paid gross and net wages are released as final data only. Thus, the TP1 indicator is not calculated.

4.1.2 Quality and performance indicator – Time lag – final results (TP2)

The timeliness of final results (annual average) is T+22.3.

Table 4. Timeliness of publication of monthly data on wages

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Average
Date of final data publication	22.2.	22.3.	22.4.	23.5.	22.6.	22.7.	22.8.	22.9.	24.10.	22.11.	22.12.	23.1.	/
Time lag (number of days)	T+22	T+22	T+22	T+23	T+22	T+22	T+22	T+22	T+24	T+22	T+22	T+23	T+22.3

4.2 Punctuality of publication

The punctuality of data publication represents the time lag between the release date of data and the target date for release, as announced in the Release Calendar.

4.2.1 Quality and performance indicator – Punctuality – delivery and publication (TP3)

The indicator is calculated and presented in two ways – from the aspect of application for producers of statistics and for users of statistics.

Indicator for producers of statistics:

The punctuality of publication (annual average) is T+0.

Table 5. Punctuality of publication of monthly data on wages

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Average
:Target date for release (as announced in the Release Calendar)	22.2.	22.3.	22.4.	23.5.	22.6.	22.7.	22.8.	22.9.	24.10.	22.11.	22.12.	23.1.	/
Release date	22.2.	22.3.	22.4.	23.5.	22.6.	22.7.	22.8.	22.9.	24.10.	22.11.	22.12.	23.1.	/
Time lag (number of days)	T+0	T+0	T+0	T+0	T+0	T+0	T+0	T+0	T+0	T+0	T+0	T+0	T+0

Indicator for users of statistics:

The punctuality rate of publication of data on wages is 100%.

4.3 Reasons for major delays and measures to improve timeliness and punctuality

The results are published in a timely manner. There have been no delays, that is, the data were published within the foreseen deadlines. Actual release dates of data on paid gross and net wages were in line with the target dates for release announced in the Release Calendar.

5 COHERENCE AND COMPARABILITY

5.1 Coherence

5.1.1 Quality and performance indicator – Coherence between different data sources (CH1)

The reference survey is the semi-annual survey on employees and their wages, which is implemented on the full coverage of observation units for September 2016.

The average net wage obtained through the monthly survey on wages is 8% higher than the average net wage obtained through the semi-annual survey on employees and their wages.

5.1.2 Reasons for major discrepancies

There have been no major discrepancies.

5.2 Comparability

5.2.1 Quality and performance indicator – Asymmetry for mirror flows statistics (CC1)

The calculation of this indicator is not applicable in Wages statistics.

5.2.2 Quality and performance indicator – Length of comparable time series (CC2)

Monthly data on paid gross and net wages have been available since 1994. A comparable series of data by section of the Classification of Economic Activities KD BiH 2010 has been available since 2005, therefore:

CC₁ = December 2004 - January 1994 = 132 months

CC₂ = December 2016 - February 2005 = 143 months

5.2.3 Breaks in time series

The new Classification of Economic Activities¹ (KD BiH 2010) has been applied since 2013. Because of the need to compare time series by section of the Classification of Economic Activities, the data were recalculated back to 2005.

5.3 Geographical comparability

5.3.1 Comparability with the European Statistical System members

Eurostat has not defined a unified basis for the production of data on wages. Each country has its own wage definitions which are directly based on national legislation.

6 ACCESSIBILITY AND CLARITY, DISSEMINATION FORMATS

6.1 Releases in which data are published

Data on average wages are published at the Institute's website www.rzs.rs.ba in the monthly release "[Average wages of employees](#)". The release presents final data on the average gross and net wages by section of the Classification of Economic Activities, as well as net wage trends expressed through nominal and real indices.

6.2 Publications in which data are published

Data on average wages are published in the following publications:

- [Monthly Statistical Review](#) – final results;
- [Wages, Employment and Unemployment Statistical Bulletin](#) – final results;
- [Statistical Yearbook](#) – final results;
- [This is Republika Srpska](#) – final results.

6.3 Online database

Online database on wages is not available to users.

6.4 Access to microdata

Microdata are not available.

6.5 Accessibility of methodological documents

At the official website of the Institute, in the part referring to Wages statistics, [basic concepts and definitions](#) for this survey are available, as well as the [Methodology](#).

¹ Official Gazette of Republika Srpska, No. 8/14

In addition, brief metadata are provided in printed and electronic publications – Statistical Yearbook, Monthly Statistical Review and the release Average wages of employees.

6.6 Measures to improve clarity of disseminated results

Data are presented clearly.

6.7 Quality and performance indicator – Data tables - consultations (AC1)

There is no procedure for recording the number of accesses to datasets on wages.

6.8 Quality and performance indicator – Metadata - consultations (AC2)

There is no procedure for recording the number of accesses to sets of metadata on wages.

6.9 Quality and performance indicator – Metadata completeness - rate (AC3)

The rate of metadata completeness (ESMS v.2.0) for Wages statistics is 95.0% (57/60x100).

7 SURVEY COSTS AND BURDEN ON RESPONDENTS

7.1 Costs of survey implementation

No data are available on the costs of the Republika Srpska Institute of Statistics for the implementation of statistical activities within the scope of Wages statistics.

7.2 Burden on respondents

No data are available on costs and burden on reporting units.

7.3 Measures to reduce costs and burden

Measures to be taken to reduce costs and burden on reporting units are:

- Use of administrative data sources;
- Promoting the use of the electronic questionnaire.

8 CONFIDENTIALITY

8.1 Confidentiality - policy

Data collected for the purposes of Wages statistics are subject to the legal framework of confidentiality and are used for statistical purposes only.

The confidentiality of data and protection of personal data are regulated by the Law on Statistics of Republika Srpska (“Official Gazette of Republika Srpska, No. 85/03) and the Rulebook on protection of confidential data of the Republika Srpska Institute of Statistics. The confidentiality of statistical data is also provided by the Law on protection of personal data (“Official Gazette of BiH”, No. 49/06).

8.2 Confidentiality – data handling

The confidentiality of data and protection of personal data are guaranteed by Articles 25 and 29 of the Law on Statistics of Republika Srpska (“Official Gazette of Republika Srpska”, No. 85/03). The Institute informs all reporting units that the collected data will be used for statistical purposes only and that confidential data will remain confidential in accordance with this Law.

Collected, processed and stored data are considered confidential if reporting units can be directly or indirectly identified using these data, thereby disclosing individual data.

Statistical data must not be given to users if they contain or disclose confidential data. Confidential data are the data referring to a reporting unit or a group that consists of at least three reporting units, when a share of one of the units in the group exceeds 85%.

In the collection, processing and delivery of data, the Institute and authorised bodies and organisations undertake all organizational, regulatory, administrative and technical measures necessary to protect data confidentiality and to prevent unauthorized access, publication and use of data.

Persons who, while carrying out their duties, may have access to confidential data, must act in accordance with the provisions of this Law even after they cease to perform their functions.

9 STATISTICAL PROCESSING

9.1 Source of data

The source of data for the monthly survey on wages (RAD-1) are business entities registered in Republika Srpska and their units that operate on the territory of Republika Srpska, which have been selected in the monthly coverage.

All units with 50 or more employees at the business entity level are included in the monthly sample. Units with more than nine and less than 50 employees at the business entity level are divided into strata determined by the municipality in which they are located and by the section of economic activity. The sample includes 10% of randomly selected units from each stratum. An analysis has found that units with less than 10 employees at the business entity level do not affect the average wage significantly and therefore are not included in the sample. The number of units in the monthly coverage in 2016 is 2,704 observation units.

9.2 Frequency of data collection

Data on wages are collected and published monthly.

9.3 Data collection

Monthly data on wages are collected using the paper questionnaire [RAD-1](#), from business entities and their units on the territory of Republika Srpska. Reporting units submit two copies of completed reports to regional offices of the Republika Srpska Institute of Statistics, by the 3rd of the month for the previous month. Data are entered by the staff of the regional offices. Twelve days after the end of the reporting month at the latest, regional offices submit the entered reports to the Institute's headquarters for further processing.

The Institute has also launched an Internet portal for online data collection for the RAD-1 report. This enables business entities to enter their data directly using the web application, instead of completing and sending the report using the paper questionnaire. Approximately 5% of the observation units submitted their data using the web application.

9.4 Data validation

Data processing within the scope of Wages statistics is organised at the headquarters of the Republika Srpska Institute of Statistics, at the Labour Statistics Division, while the Institute's regional offices perform the entry of data.

All received reports are recorded at the headquarters of the Institute. Afterwards, the data on paid gross and net wages and the number of paid workers at the observation unit level are compared with the values from the previous month. Any unexpected large discrepancy and missing data are controlled and verified by telephone contact with the reporting unit. There are controls built into the data entry application which make it impossible to enter incorrectly calculated and logically incorrect data into the database.

9.5 Data compilation

In the event of non-response for the entire report or for certain questions only, or if there are discrepancies, inconsistencies and errors that cannot be corrected by re-contacting the reporting unit, data are imputed based on available data for the reporting unit from the previous month.

9.6 Adjustments

9.6.1 *Seasonal adjustment*

Data of Wages statistics are not seasonally adjusted.