



# QUALITY REPORT FOR STATISTICAL SURVEY

## BASIC SCHOOLS 2013



Bosnia and Herzegovina



Agency for Statistics of  
Bosnia and Herzegovina

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## **1 Introduction – the statistical process and its results – survey methodology**

### **1.1 Purpose of the survey**

Agency for Statistics of Bosnia and Herzegovina in accordance with the Law on Statistics of Bosnia and Herzegovina ("Official Gazette of Bosnia and Herzegovina", No. 26/04) publishes data on basic schools.

Data was obtained through statistical reports of Federal Office of Statistics, Institute of Statistics of Republic of Srpska and Agencies branch office in District Brcko.

Conducting research on basic education, the data which is included are on basic schools as well as schools for children with special educational needs.

The aim of education statistics is to show the data about the condition, structure and development of basic schools, as well as the data on the structure of students and teachers in these schools, education results and factors affecting them.

### **1.2 Legal basis and the duties of the statistical institutions**

- Laws on statistics of Bosnia and Herzegovina and its entities;
- Multi-annual statistical programs and annual work plans for B&H and its entities;

This statistical survey is the part of the annual programme of Agency for Statistics of Bosnia and Herzegovina. According to the annual implementation of the Plan and programme for statistical activities for the year 2013, pursuant to the Law on Statistics of Bosnia and Herzegovina ("Official Gazette", No.26/04) data on basic schools is collected by the Agency for Statistics of B&H which aggregates and publishes on the basis of regular statistical surveys conducted by the entity statistical institutes and District Brcko of B&H.

### **1.3 Observation unit**

In the education statistics the unit of observation is every basic school that is operating, each of the basic school with special needs, as well as each department which was formed in a regular school and a nine-year basic education.

Reporting units that submit statistical data to the Agency for Statistics of B&H for basic education are: Federal Bureau of Statistics, National Bureau of Statistics of the Republic of Srpska and the branch of the Agency in District Brcko.

### **1.4 Data collection**

Data on basic schools refers to the school year. The survey was carried out at the beginning and end of the school year. In Bosnia and Herzegovina, there is an eight year and nine year system of basic school system. The data is published at the beginning and end of the school year, and on regular basic schools for children with special needs - the number of schools, number of classes, number of students, number of teachers. This data is collected on the basis of individual statistical questionnaires which entity statistical offices and the branch of the Agency District Brcko send to the reporting units.

The goal of basic education is the acquisition of general knowledge which should be established according to a certain curriculum.

Moving to a nine-year basic education is associated with changes in the structure of basic education, and its implemented gradually with eight year basic education.

### 1.5 Scope

Coverage of basic education is complete, which means that the statistical survey covers all mainstream basic schools (Central and independent schools as well as class departments which are displaced from the central school) and basic schools for children with special needs, and additional elementary music and ballet schools. Data refer to the school year, a survey has covered the beginning and end of the school year.

Data is processed annually for the calendar year.

In the Agency for Statistics of B&H certain controls of the statistical surveys are done, such as: control of the whole survey coverage, control for accuracy and completeness of data, calculation and logical control according to uniform criteria, data processing and tabulation.

Data obtained from the entity statistical offices and branch office of the Agency for Statistics in District Brcko are used only for statistical purposes which is published in aggregated form. The obtained data on basic education represent an official secret and can not be individually published.

### 1.6 Definitions

**School** in education statistics, is considered a group of pupils organized in one school unit with one or more teachers, who perform a certain kind of teaching by a certain educational plan and programme, irrespective of whether a school is independent, regional unit or a unit within another kind of school. Schools are also considered territorially separated units within basic schools as well as special classes within regular basic schools.

**Class** is a group of pupils, who are simultaneously and in the same classroom, taught by one or more teachers succesively, during one school year.

Considering the grades of which classes are consisted of, they can be non-combined and combined. **Non-combined** class is a class that consists of pupils of only one grade. **Combined** class is a class that consists of pupils of two or more grades.

**Grade** is a level of education in which pupils, in a certain time interval but no longer than one school year, attain a certain extent of knowledge in accordance with an educational plan and programme of a certain kind of school.

**Repeater (a pupil who repeats the grade)** is a pupil who enrolls to a same grade two or more times.

**Pupil instructed to repeat a grade** is a pupil that has got negative marks in three or more subjects at the end of a school year (according to regulations for that kind of school) or a pupil that does not pass a resit at the end of the school year.

**Teachers** are a professional persons who together with pupils realized different programme for primary school education.

**Professional associates** are the persons who performing specific educational duty, who helped teachers to implement his functions, who takes part in improving educational school work, but they are not direct in instruction. Professional associates are the pedagogues, psychologists, healthworkers, librarians etc.

### 1.7 Data processing

Data processing is carried out through research instruments.

Summary data from basic schools in FB&H, RS and DB B&H are sent to entity statistical offices where the data is collected and after processed to the Agency for Statistics of Bosnia and Herzegovina in the form of tables.

After collecting the questionnaires, the Federal Office for Statistics and the Statistical office of Republic of Srpska, controll the coverage, accuracy of data, encryption, data entry into an application, logical and computational control.

Reporting units are obliged to deliver statistical reports on basic schools to the entity statistical institutes and branch of the Agency in District Brcko.

### 1.8 Publishing of results

Data on education statistics, are collected for the whole territory of Bosnia and Herzegovina. To users only aggregated data may be available.

The resulting data are published through First release (annual periodicity).

The data is published in electronic form on the (web site of the Agency for Statistics of B&H). Thematic Bulletin of the Agency for Statistics of B&H - contains an analysis of annual data on basic education. All data are presented in the statistical tables for the entities and District Brcko. Data are presented in absolute and relative values (absolute numbers, percentages). Final data on basic schools are published in the First release on education statistics and the same are presented in tables and graphs.

### 1.9 Key variables

- type of basic school,
- gender,
- classes,
- age,
- teachers.

### 1.10 Key statistics

- Basic schools at the end of the school year 2012/2013,
- eight year basic education,
- nine year basic education,
- students attending regular basic schools to learn a foreign language at the end of the school year 2012/2013,
- teachers in basic schools who teach foreign language at the end of the school year 2012/2013.,
- students of regular basic schools who during the school year 2012/2013 changed the school or dropped out,
- teaching staff of basic schools at the end of the school year 2012/2013,
- basic schools at the beginning of the school year 2012/2013,
- eight year basic education,
- nine year basic education,
- regular basic schools equipped with computers at the beginning of the school 2013/2014 year.

### 1.11 Questionnaire

The first release is available on the web – page

[http://www.bhas.ba/index.php?option=com\\_publicacija&view=publicacija\\_pregled&ids=1&id=21&n=Obrazovanje](http://www.bhas.ba/index.php?option=com_publicacija&view=publicacija_pregled&ids=1&id=21&n=Obrazovanje)

### 1.12 Contacts

Vedrana Đerić, Agency for Statistics of B&H, e-mail: [vedrana.djeric@bhas.ba](mailto:vedrana.djeric@bhas.ba), tel: +387 33 911 990

## 2 Relevance

### 2.1 Quality and performance indicator – the rate of the ESS statistics available (R1)

The statistical survey on education statistics is in line with the laws defining the field of education statistics at the level of the Entities and District Brcko of B&H. Education statistics data meet the current needs of the user.

## 3 Accuracy

### 3.1.1 Sampling error – quality and performance indicator – variation coefficient (A1)

Statistical survey on education statistics is conducted on full coverage.

### 3.1.2 Explanations

No sampling.

### 3.1.3 Activities aiming to reduce sampling errors

No sampling.

## **3.2 Non-sampling errors**

### *3.2.1 Coverage errors*

Since the statistical survey covers all regular basic schools and also basic schools for children with special needs, additional education-basic music and ballet schools with the data relating to the school year (beginning and end of the school year) coverage errors have not been established.

#### *3.2.1.1 Quality and performance indicator – overcoverage error (A2)*

Excessive coverage was not possible because the scope is created based on the data from the Business Register of the Agency, and all units are included. Their activity code is 85.20 (basic schools).

#### *3.2.1.2 Undercoverage error*

The fault of insufficient coverage can occur if at the time of making the address book for the reference school year, a reporting unit is registered, which by the Classification of Activities belongs to a different area. To date, such errors have not occurred.

#### *3.2.1.3 Measures taken in order to reduce the coverage errors*

Excessive errors or insufficient coverage are minimized. Entity statistical offices as well as the Agency's branch in District Brcko for every reference year do a comparison of the address book in their possession according to the Business Register Office data, to the Ministries of Education and Culture about basic institutions in the entities and in District Brcko. If there are differences, the address book is updated.

## **3.2.2 Measurement errors**

### *3.2.2.1 Controls used to detect the measurement errors*

Entity statistical offices and the branch in District Brcko, perform troubleshooting by contacting the reporting units to determine the reason of error. Control for error detection measurements, entity statistical offices perform when when the number of submitted individual application sheets compare with the data from the summary report.

### *3.2.2.2 Causes of measurement errors*

The most common reasons for measurement errors are:

- if the person who completes the questionnaire did not thoroughly read the instructions for filling,
- lack of attention of the person who completes the questionnaire when responding,
- not an adequate methodology.

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

The person responsible for methodological support for research is responsible for the elimination of errors. For this purpose the entity statistical offices establish telephone contact with the reporting unit and after that the check is performed. Then the error is corrected if possible.



#### *3.2.2.4 Quality and performance indicator – editing rate (A3)*

Currently there are no accurate records on corrections in the data editing phase.

#### *3.2.2.5 Measures taken in order to reduce the number of measurement errors*

Agency for Statistics of B&H, together with the entity statistical offices and District Brcko, works to reduce the number of measurement errors by creating precise and understandable methodological instructions for completing the questionnaires.

### *3.2.3 Non-response errors*

#### *3.2.3.1 Quality and performance indicator – reporting unit non-response rate (A4)*

Non-response errors are not reported, meaning that the coverage is complete.

#### *3.2.3.2 Quality and performance indicator – variable non-response rate (A5)*

Reporting units to the entity statistical offices and branch of the Agency in District Brcko submit the data for variables that have been registered as an appearance in the observed period. If the data is not completed for certain variables, this means that it's the case of absence of the appearance during the reporting period.

#### *3.2.3.3 Procedures in non-response cases*

If data is missing, i.e. answers to specific questions are not provided (on certain variables), the entity statistical offices and the branch of the Agency in District Brcko make a telephone connection with the reporting unit or a person and with his/her help, if necessary completes the missing values.

#### *3.2.3.4 Procedures used to reduce the non-response rate*

The entity statistical offices and the branch of the Agency in District Brcko tend to reduce the response rate for the reference year writing precise methodological instructions relating to a specific question (variable).

#### *3.2.3.5 Quality and performance indicator - imputed data rate (A6)*

Agency for Statistics of B&H has no imputed data.

#### *3.2.3.6 Quality and performance indicator – number of errors made, as per type (A7)*

There was no number of the errors made in the microdata because the entity statistical offices and the Agency's branch in District Brcko remove them during processing.

#### *3.2.3.7 Quality and performance indicator – average revision scale (A8)*

They are not planned and the revision of the data for education statistics was not conducted.

## **4 Timeliness and the accuracy of the release**

### **4.1 Timeliness of the release**

#### *4.1.1 Quality and performance indicator – timeliness of first result releases (T1)*

Timeliness of the first publication of research results is determined as the difference between the date of first publication and the end of the reference period.

Table 1: Timeliness of the first results

The reference period	2013
Release Date	30.05.2013
Time delay	-

#### 4.1.2 Quality and performance indicator – timeliness of final results release (T2)

First results are also final.

### 4.2 Accuracy of the release

#### 4.2.1 Quality and performance indicator – accuracy of the release (T3)

The actual date of publication of data on basic schools did not deviate from the planned date of publication according to the calendar publishing.

### 4.3 Reasons for major delays and the measures taken in order to improve the timeliness and accuracy of releases

There was no delay, i.e. the data is published within the deadlines.

## 5 Availability and clarity

### 5.1 Availability

#### 5.1.1 Dissemination channels

Statistical data users can quickly and easily get to the available data on education because they are published on the website of the Agency for Statistics (Statistical first release statement – Education statistics, Bulletin B&H in numbers, Bulletin women and men in Bosnia and Herzegovina).

The announcement of the results of education statistics in 2013 using the following channels of dissemination:

Tabel 2: Channels of dissemination

No.	Channels of dissemination	Used
1	Web page – internet release	YES
2	Users written requests per their specification	YES
3	The data which is released by telephone	NO
4	Digital media (CD, diskette, etc ...)	NO
5	The data presented at the news conference	YES
6	Thematic bulletin	YES
7	Specially printed publications	YES
8	Base, available to external users	YES
9	Statistical protected microdata	YES

#### 5.1.2 Quality and performance indicator – the rate of the dissemination channels used (AC1)

The rate of the dissemination channels used is 77,7 % (7/9X100).

### 5.1.3 Dissemination modalities

The announcement of the results of education statistics in 2013 using the following channels of dissemination:

Tabel 3: Channels of dissemination

No.	Methods of dissemination	Used
1	Web page – internet release	YES
2	Web page of other institutions	NO
3	Web page of international organizations	YES
4	Thematic Web pages (eg. census population)	YES
5	Written requests	YES
6	Telephone intervention	NO
7	Digital media (CD, diskette, etc ...)	NO
8	The data presented at the news conference novinarskoj konferenciji	YES
9	Yearbook	NO
10	B&H in numbers	YES
11	First release – statement	YES
12	Thematic bulletin	YES
13	Special publications	YES
14	Publications of Eurostat	YES
15	Publications of other international organizations (OECD, IMF)	NO
16	Data bases, intended for internal use	YES
17	Base, available to external users	NO

#### 5.1.4 Quality and performance indicator – the rate of the dissemination modalities (AC2)

The rate of the channels used for the dissemination is 64,7 % (11/17X100).

#### 5.1.5 Quality and performance indicator – number of visits to online database (AC3)

This should be developed in cooperation with the IT staff.

## 5.2 Clarity

Together with the data on education statistics in the context of the first release, methodology and definitions of basic concepts and indicators are available.

### 5.2.1 Printed publications and internet publications - releases

- First release statement »Education statistics in year 2013«

#### 5.2.1.1 Disseminated results

Results for the observed year are presented as absolute values. Data is presented for the beginning and the end of the school year, and that is specifically for the regular basic schools and basic schools for the children with special needs - number of schools, number of pupils and number of teachers which are shown as absolute numbers and percentages.

### 5.2.1.2 Level (of details) of dissemination

In statistical reports, the absolute values are shown to a certain level of detail for the level of Bosnia and Herzegovina.

### 5.2.1.3 Metadata

Within the metadata, on the official website of the Agency for Statistics of B&H, for this survey are available basic concepts and definitions.

Data on education statistics in B&H are obtained by aggregating the data from entity statistical offices and by the branch of the Agency in District Brcko.

Data series are published on the website of the Agency for Statistics of B&H [www.bhas.ba](http://www.bhas.ba) in accordance with the annual plan of publication. The data are published in the form of press releases.

Statistical concepts and definitions are in line with international recommendations. Education data are collected according to the International Standard Classification of Education (ISCED-97).

As for the method of measuring customer satisfaction, there is still no survey of this kind.

### 5.2.1.4 Measures used in order to improve the clarity of disseminated results

The information is on the website of the Agency for Statistics presented in PDF format, in Excel spreadsheets to enable users to analyze and use data.

### 5.2.1.5 Quality and performance indicator – metadata completeness rate (AC4)

On the website of the Agency can be found the survey's methodology, as well as all the data shown at the detailed and aggregated level.

## 6 Comparability and compliance

### 6.1 Comparability over time

#### 6.1.1 Quality and performance indicator – the length of comparable time series (CC1)

Annual data on education statistics are available from 2006 and since then it has been published regularly in the annual dynamics.

#### 6.1.2 Interruptions within the time series

There was no interruption of the annual time series.

#### 6.1.3 Other factors affecting comparability over time

There were no relevant factors that would affect the comparability over time.

### 6.2 Geographic comparability

#### 6.2.1 Comparability with other members of the European statistical system

Survey on basic education, it could be said that the survey is internationally comparable, but it's primarily used for internal or national purposes.

All recommendations by EUROSTAT in terms of this survey are complied in order to be internationally comparable.

### 6.3 Deseasonalization

The data on education statistics have not been deseasoned.

### 6.4 Compliance between the interim (temporary) and final data

#### 6.4.1 Interim data dissemination policy

Provisional data published in the month of May and are the first results of pupils enrolled in basic schools, as well as pupils who have completed basic school for the reference school year.

#### 6.4.2 Quality indicator – compliance between the interim and final data (CC2)

		Total number of classes	Pupils
1.	Previous data	15.427	304.665
2.	Final data	15.402	304.605
3.	Relative difference(1.-2./1.*100)	0,16	0,01

#### 6.4.3 Reasons for significant differences between the interim and final data

There is a slight difference between the previous and the final data as it can be seen in the table 6.4.2.

### 6.5 Compliance with the reference survey results

#### 6.5.1 Short description of the reference survey

The reference research is an annual survey of basic education which is carried out on the full scope of observation units for May 2014.

#### 6.5.2 Quality and performance indicator - compliance with the reference data (CC3)

There are no reference surveys being conducted that could be used to compare data.

#### 6.5.3 Reasons for significant deviations

There are no similar surveys being conducted.

## 7 Trade-offs between the quality output components

Not a subject to specific analysis.

## 8 Assessment of the needs and perceptions of users

### 8.1 Classification and understanding users

The key users of data on basic schools are:

- public sector (government and other institutions such as Ministry of education, culture and sports of B&H, Entity Governments and the District Brcko Government; B&H Gender Equality Agency and the entity-level Gender Centres, and other institutions on state level)
- Economic operators
- Science, research and education (universities and research centres)
- General public
- Media (broadcasters and print media)
- International users (Eurostat; UNESCO; UNICEF; UNDP; embassies; international media)

## 8.2. Measuring User Perception and Satisfaction

### 8.2.1 Quality and Performance Indicator – Customer Satisfaction Index (US1)

No separate user satisfaction survey is conducted to determine level of satisfaction with this product, i.e. the Survey outputs.

### 8.2.2 Quality and performance indicator-time elapsed from the previous user satisfaction survey (US2)

No separate user satisfaction survey is conducted to determine level of satisfaction with this product, i.e. the Survey output.

## 9 Cost and Respondent/Reporting Unit Burden

### 9.1 Survey costs for the statistical office

#### 9.1.1 Quality and Performance Indicator – annual operational costs, with breakdown by major cost components (PCR1)

The operative costs for conducting the statistical survey on basic education are carried through the material costs and the number of used working hours of employees of the Agency for Statistics of B&H and the Agency's branch in District Brcko.

Tabel 4: Survey costs

Material costs (BAM)	Labour costs (BAM)	Total costs (BAM)
100,00	960,00	1060,00

### 9.2 Respondent/Reporting Unit Burden and Costs

#### 9.2.1 Quality and Performance Indicator – Annual Respondent Burden in Hours and/or Financial Terms (PCR2)

Agency for Statistics of Bosnia and Herzegovina has no information of the total annual burden on respondents as the information is provided in an aggregated form from the entity statistical offices and the branch of the Agency in District Brcko, which work directly with reporting units.

Tabel 5: Costs of reporting units and respondent burden

Number of reporting units	Annual number of questionnaires	Time spent on one questionnaire (hours)	Total time spent (hours)
1927	1927	1	1927

### 9.3 Measures to reduce costs and burden

Measures used for reduction of costs and burdens are kept to a minimum because the Agency for Statistics of B&H the data obtains through the output tables which are filled in excel tables and sent by e-mail from the entity statistical offices and by branch of the Agency in District Brcko.

## **10 Confidentiality, Transparency and Protection**

### *10.1 Confidentiality*

Confidentiality of statistical data collected for the survey on basic education, are subject to statutory limits of confidentiality and used exclusively for statistical purposes.

For instance, in Article 27. of the Law on Statistics it's stated that "When collecting, processing, transmitting and disseminating statistical data of Bosnia and Herzegovina, the competent authorities, including the authorities at the entity level, shall take all the regulatory, administrative and technical nature necessary to protect the confidentiality of data against unauthorized access, disclosure and use. ", and in the Article 28. of the same Act, it says" People which in the performance of their duties have access to classified information must comply with the provisions of this law, even after they cease to perform their duties.

Also, in the document "Regulations on the Protection of the statistical data of the Agency for Statistics" procedures are set for ensuring confidentiality during data collection, processing and dissemination - which includes protocols for securing personal data which it has access, the rules for defining the sensitive cells in the output tables and procedures for the detection and prevention of subsequent disclosure, as well as access to microdata for research purposes to external users.

### *10.2 Transparency*

The users are familiar with how to use the data from education statistics. There were no errors in the published editions of First release on education statistics, so there was no need for corrections and the publication of the above mentioned edition of First release.

### *10.3 Protection*

Referred in section 10.1.

## **11 Conclusion**

In the upcoming period, it is necessary to:

In the field of education statistics the improvement could be made in regards of methodology and questionnaires which are recommended by the EUROSTAT and other international organizations, in order to meet user needs and provide a full international comparability of data.