

# **METHODOLOGICAL DOCUMENT**

## **STRUCTURAL BUSINESS STATISTICS 2011 – Annexes I-IV**

### **BOSNIA AND HERZEGOVINA**



**Bosna i Hercegovina**  
Bosnia and Herzegovina



**BHAS**

**Agencija za statistiku**  
**Bosne i Hercegovine**  
Agency for Statistics of  
Bosnia and Herzegovina

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Pursuant to the Release Plan, the Agency for Statistics of Bosnia and Herzegovina presents its methodological paper titled “Structural Business Statistics 2011 Annexes I-IV, Bosnia and Herzegovina.”

The main purpose of this document is to describe in one place, each phase of the implementation of statistical surveys and production of results. In addition to the description of the individual phases of the process, the basic aspects of the quality of statistical data are described.

This document describes the statistical system and provides detailed information on the survey (the coverage of the survey, primary data collection methods and production of results, the quality measurement method and data dissemination method as well as planned improvements in production of structural business statistics) that all serves as a basis for production of variables and indicators for Annexes I-IV of the EU Regulation no. 295/2008. Along with the further development of the statistical system and metadata system development, this document will become a consisting part of the metadata with the aim of presenting not only the statistical results, but also detailed methodologies, quality indicators for presented results and improvements that are being taken in terms of methods of data collection and production of results.

Structural Business Statistics development was carried out with the support from the projects providing assistance to the statistical system of Bosnia and Herzegovina by means of the two Pilot Surveys. First Pilot Survey was conducted for the year 2007. It was not based on the Statistical Business Register and is presented in the publication called „Business Statistics – Planning New Structural Business Surveys in BiH.“ Further development of the Structural Business Statistics shall include the Pilot Survey for 2009 with the objective of further statisticians’ training and development so they could conduct survey and improve the methodology. The survey was based on the data from the Statistical Business Register (preparation of the frame and sample selection). The results of the Pilot Survey were presented in the methodological paper called „Structural Business Statistics – Pilot Survey for 2009.“ The publication presents instruments for conducting survey, preparation of the frame and sample selection, organization of the survey conduct, control and data analysis and assessment of totals.

In the process of preparation and implementation of the Structural Business Statistics Pilot Survey, the fundamental requirements of the EU Regulation no. 295/2008 were fully respected in this field of statistics with the aim of full harmonization with the European standards.

The full implementation of the Structural Business Statistics is carried out gradually to the full implementation of the EU Regulation no. 295/2008 into the statistical system of Bosnia and Herzegovina. Structural Business Statistics produced in 2010 and 2011 were fully harmonized with respect to the definition of variables and indicators. Harmonization regarding the coverage of statistical units, i.e. extension of coverage to all units of market production Structural Business Statistics Survey of enterprises for 2012 is going to include all market production enterprises, and entrepreneurs will be included when the conditions are met for their inclusion.

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## FOREWORD

**Director**  
**Zdenko Milinović**

## ABBREVIATIONS

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<b>BiH</b>	-	Bosnia and Herzegovina
<b>BHAS</b>	-	Agency for Statistics of Bosnia and Herzegovina
<b>FZS</b>	-	Institute for Statistics of the Federation of Bosnia and Herzegovina
<b>RZS RS</b>	-	Institute for Statistics of Republika Srpska
<b>FBiH</b>	-	Federation of Bosnia and Herzegovina
<b>RS</b>	-	Republika Srpska
<b>BD</b>	-	Brčko District
<b>EU</b>	-	European Union
<b>SBS</b>	-	Structural Business Statistics
<b>SBR</b>	-	Statistical Business Register
<b>EU CPA 2008</b>	-	European Classification of Products by Activity
<b>KPPD BiH 2010</b>	-	Classification of Products by Activity of Bosnia and Herzegovina 2010
<b>EU NACE Rev 2</b>	-	European Classification of Economic Activities
<b>KD BiH 2010</b>	-	Classification of Activities in Bosnia and Herzegovina 2010
<b>CPC Ver.2</b>	-	The Central Product Classification of the United Nation
<b>EU NUTS</b>	-	EU Nomenclature of Territorial Units for Statistics
<b>LAU</b>	-	Local Administrative Unit
<b>UNO (ITA)</b>	-	Indirect Taxation Authority of Bosnia and Herzegovina
<b>EC</b>	-	European Commission
<b>PDV / VAT</b>	-	Value Added Tax

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# 1. STATISTICAL SYSTEM OF BOSNIA AND HERZEGOVINA

## 1.1. Institutions

### 1.1.1. Name and address of the relevant institution

In accordance with the administrative organization and the Law on Statistics of Bosnia and Herzegovina, there are three official statistical institutions in Bosnia and Herzegovina as follows:

- Agency for Statistics of Bosnia and Herzegovina (BHAS), located in Sarajevo, responsible for the production of statistics at the level of the state - Bosnia and Herzegovina;
- Institute for Statistics of the Federation of Bosnia and Herzegovina (FZS) located in Sarajevo, responsible for the production of statistics at the level of the entity – Federation of Bosnia and Herzegovina;
- Institute for Statistics of Republika Srpska (RZSRS), seated in Banja Luka, responsible for the production of statistics at the level of the entity - Republika Srpska.

Agency for Statistics of Bosnia and Herzegovina in its composition has a branch in Brčko, which is partly responsible for the production of statistics for Brčko District (BD).

### 1.1.2. Responsibility for Structural Business Statistics

- Structural Business Statistics Department of the Agency for Statistics of Bosnia and Herzegovina and its branch in Brčko District of BiH,
- Economic Statistics Division of the Institute for Statistics of Republika Srpska,
- Business Statistics Division of the Institute for Statistics of the Federation of BiH.

The responsibility of the Structural Business Statistics Department of the Agency for Statistics of Bosnia and Herzegovina is the preparation of the methodological framework and the technical basis for surveys, coordination among entity institutes, production, publishing and presentation of results for Bosnia and Herzegovina. Entity Statistics are responsible for conducting surveys (data collection, control, editing) in line with a common action plan for surveys, as well as for production and publication of results for the entity level.

### 1.1.3. Persons responsible for Structural Business Statistics

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## 1.2. Legal basis

### 1.2.1. Statistical laws

According to the Law on Statistics of Bosnia and Herzegovina (“Official Gazette of BiH”, no. 26/04) the Agency for Statistics is responsible for production of statistics in line with the EU standards. Agreement on the Application of Common Methodologies and Common Standards in the preparation of statistics of Bosnia and Herzegovina (signed on 10<sup>th</sup> November 2005, pursuant to the Decision by the High Representative and the Law on Statistics of Bosnia and Herzegovina), stipulates the obligation of the statistical institutions to, in production of statistics, apply common methodologies and common standards.

Law on Statistics of the Federation of Bosnia and Herzegovina (“Official Gazette of the Federation of BiH”, no. 63/03) and Law on Amendments to the Law on Statistics of the Federation of Bosnia and Herzegovina (“Official Gazette of the Federation of BiH”, no. 9/09) and the Law on Statistics of Republika Srpska („Official Gazette of Republika Srpska,” no. 85/03) are all aligned with the Law on Statistics of Bosnia and Herzegovina.

### 1.2.2. The right to collect data

**Data collection is performed at the entity institutes of statistics** and the branch office of the Agency for Statistics of BiH in Brčko District.

Article 8, Paragraph 2(e) of the Law on Statistics of BiH defines that:

The Agency shall collect process and distribute statistics (“statistical data”) of Bosnia and Herzegovina in accordance with internationally recognized standards, based on data provided by **the entity institutes**, or data collected directly by the Agency. For this purpose, the Agencija may (i) collect statistical data from any statistical unit in either entity it deems necessary for the performance of its functions set forth in this Law; and (ii) collect data necessary for its functions from the institutions of Bosnia and Herzegovina, state-level legal entities, International organizations operating in the territory of Bosnia and Herzegovina and companies owned or controlled by foreign individuals as defined by this Law.



*Article 8, Paragraph 2(e) of the Law on Statistics of BiH defines that:*

In accordance with this law and entity laws, when necessary for the compilation of statistical data at the level of Bosnia and Herzegovina, the Agency requires the entity institutes to provide data at the level of individual statistical units, which may include confidential information.

*Article 3 of the Agreement on Application of Common Methodologies and Standards defines the following:*

In implementing their activities, statistical institutions in BiH shall use statistical standards, methodologies, classifications and nomenclature laid down by the Agency in accordance with the standards of the European Union and the International standards. The Agency for Statistics of Bosnia and Herzegovina, Institute for Statistics of the Federation of Bosnia and Herzegovina and Institute of Statistics of Republika Srpska actively participate in developing statistical standards, methodologies, classifications and nomenclature. Laying down the statistical standards by the Agency for Statistics of Bosnia and Herzegovina, dismisses (ceases) application of appropriate statistical standards used at any level of the territorial organization on Bosnia and Herzegovina.

### **1.2.3. The obligation of enterprises to respond to statistical surveys/questionnaires**

Article 43 of the Law on Statistics of the Federation of BiH and Article 8 of the Law on Statistics of Republika Srpska stipulate an obligation of the reporting units to provide entity institutes and other competent authorities for statistics or individuals authorized by them, within a specified period without charge and in prescribed form, with complete and accurate data on occurrences that have been identified as the subject to statistical surveys and enable them to verify the information of data obtained that way.

*Article 31 of the Law on Statistics of BiH sets down:*

Statistical unit (excluding the entity institutes) that upon the written request of the Agency deliberately provides false or inaccurate data necessary for the fulfillment of the Program, shall be considered guilty of an offense punishable by a fine not exceeding 5,000 KM or imprisonment for a maximum period of two years, or combined fine and imprisonment.

Fines are also prescribed by entity laws on statistics for reporting units in case of offenses if they fail to submit requested data in the content and within the specified time. It also applies if the reporting units fail to supplement the information in accordance with the instructions and within the specified time and if they deliver incomplete or inaccurate data or they disable the verification of data.

### **1.2.4. The obligation to protect confidential data**

The obligation to protect confidentiality of data is regulated with five articles in the Law on Statistics of Bosnia and Herzegovina:

*Article 19, paragraph 3*

Confidential Data collected for statistical purposes must not be used for other purposes unless otherwise provided for in this Law.

### Article 23

Data collected, processed and stored for the production of statistics of Bosnia and Herzegovina shall be deemed confidential when they allow statistical units to be identified, either directly or indirectly, thereby disclosing individual information.

1. A Statistical Unit is directly identified from its name and address or from an officially allocated and generally known identification number.
2. Indirect identification is the possibility of deducing the identity of a statistical unit other than from the information mentioned in paragraph 2 hereof. To determine whether a Statistical Unit is indirectly identifiable, all means shall be taken into account that might reasonably be used to identify the mentioned statistical unit.

### Article 25, paragraph 2

Entity institutes are obliged to transmit to the Agency all data deemed by the Agency as needed for Production of Statistics of Bosnia and Herzegovina within the meaning of this Law. Entity institutes are obliged to provide Confidential Data to the Agency when this is deemed by the Agency to be needed to promote the information and the quality to be provided by the Statistics of Bosnia and Herzegovina.

### Article 26

1. Statistics of Bosnia and Herzegovina must not be disseminated to users if they contain or reveal confidential data. Aggregates shall comprise at least three units and the share of one unit in an aggregate must not exceed 85% of the total.
2. Derogations from paragraph (1) refer to information regarding the economic situation collected from enterprises and other economic agents and information on the environmental situation. Such information may be disseminated even if the results do not meet the aggregate requirements set out in paragraph (1) hereof, in cases where this is determined necessary by the Agency for ensuring significant basic information and provided that the Statistical Programme foresees the dissemination of such information.

### Article 29, paragraph (1)

In exercising its responsibilities set forth in this Law, the Agency for Statistics of Bosnia and Herzegovina shall act in keeping with the Law on Protection of Personal Data of Bosnia and Herzegovina (Official Gazette of Bosnia and Herzegovina, no. 32/01).

Entity laws on statistics stipulate that collected data shall be used exclusively for statistical purposes and there should be no presentation of any individual data whatsoever.

#### **1.2.5. Right of access to administrative data**

*Article 8, paragraph 2(e) of the Law on Statistics of BiH sets out that:*

The Agency collects processes and disseminates Statistics of Bosnia and Herzegovina in accordance with internationally accepted standards based on data submitted by the entity institutes and/or data collected directly by the Agency. For these purposes the Agency may (i) where it

deems necessary for the performance of its statutory functions provided herein, collect statistical data from any Statistical Unit in the Entities; and (ii) collect data for its statutory functions provided herein from BiH Institutions, legal entities at the State level, international organisations operating within BiH borders and foreign owned and controlled companies.

Currently, the Agency for Statistics does not have access to administrative data of the Indirect Taxation Authority (ITA) (VAT registration), nor it has access to the final statement data (Balance Sheet and Profit and Loss Account) collected and processed by the information agencies in the entities. Amendments to the Law on Indirect Taxation are pending, which would create the legal conditions for access to individual data on VAT registrations.

The Institute of Statistics of Republika Srpska has got an access to final statements and the Institute for Statistics of the Federation of BiH is still regulate the data exchange with the Financial-Information Agency that collects and processes the final statement data.

### **1.2.6. Programming and planning activities**

#### **Currently valid programming and planning documents**

Statistical Program of Bosnia and Herzegovina for the period 2009 -2012 and annual action plans (2012 Plan). Decision of the Council of Ministers to adopt the Statistical Program of Bosnia and Herzegovina for the period 2009 -2012, was announced in the „Official Gazette of BiH“, no. 19/09.

A new Statistical Program of Bosnia and Herzegovina for the period 2013 -2017 is now in preparation.

Statistical programs and annual action plans for entities are harmonized with the Statistical Program of Bosnia and Herzegovina or with the annual action plans of the Agency for Statistics.

## **1.3. Classifications used in BiH and its entities**

### **1.3.1. Classification of Economic Activities**

#### **Title of activity classification in use**

The statistical institutions in BiH in 2012 apply or use the Classification of Activities in BiH (KD BiH 2010).

#### **Date of creation, release and entry into force**

Pursuant to Article 6 and 9 of the Law on Classification of Activities in Bosnia and Herzegovina (“Official Gazette of BiH”, no. 76/06, 100/08 i 32/10), the Agency for Statistics of BiH passed a Decision on Classification of Economic Activities in BiH 2010, published in the “Official Gazette of BiH”, no. 47/10 from 8<sup>th</sup> June 2010. The decision applies starting from 1<sup>st</sup> January 2011. Each previously registered enterprise in the Statistical Business Register (SBR) was assigned an activity code from the new Classification - KD BiH 2010. Enterprises founded after 1<sup>st</sup> January 2011, are in the SBR also assigned an assumed activity code from the old classification. Two activity codes, an old one and a new one, will be operational in the SBR and will be used for statistical work and analysis until the historical data for all statistical areas are not converted to KD BiH 2010 (NACE 2010). Completion of activities on implementation of KD BiH 2010 to all statistical areas should end before 2015.

## **KD BiH 2010 comparability with EU - NACE**

Classification of Activities in BiH 2010 (KD BiH 2010) was developed based on the Statistical Classification of Economic Activities in the European Community - NACE Revision 2. The methodology for the application of statistical KD BiH was fully brought in line with the EU regulations (*European Parliament and Council Regulation No 1893/2006 of 20/12/2006 establishing the statistical classification of economic activities NACE Revision 2*). KD BiH 2010 has not got additional parsing to fifth digit and its structure is identical to the structure of NACE Rev. 2. Since the NACE Rev. 2 is far more detailed than the NACE Rev. 1.1 and it has 615 categories at the class level, the three BiH statistical institutions (in consultation with other relevant BiH and entity institutions) have agreed that the lowest level of KD BiH 2010 should be a class level, same as in case of NACE Rev.2.

### **Method of classification by activities**

Data on revenues and number of employees of a business company are used for the purpose of classifying the main and secondary activity.

Upon completion of the registration process with competent authorities (court, ministry, municipality) that grants a license to perform certain activity or activities in a specific territory in the manner and under the conditions prescribed by the law, business entities submit an application for classification by activity to the relevant entity institute of statistics and the Agency branch office in Brčko District of BiH.

In simple cases, when a business entity performs only one single economic activity, the main activity of the business entity is determined by the KD BiH 2010 class, which describes the activity. If a business entity is engaged in several activities, it is classified in the appropriate class of the classification according to the main (prevailing) activity, or the activity of which it creates the largest portion of total annual revenues, or which employs the largest number of employees.

The proposal for the first classification in the appropriate class is coming from the business entity, and if, according to the decision of the court registration or decision by the authority handling a special register, it is allowed to perform several activities, then it proposes the main activity.

Units of the register are classified independently from one another. Units within a business entity should be classified according to their own activities. Activity of the business units within will be determined by the type of product produced by the unit, or the type of service that the unit, although, in many cases, it is identical to the main activity of the parent business entity.

Business entities can change the activity by submitting an application for a change of activity.

### **Existence of time series according to new KD BiH 2010**

Regular production of Structural Business Statistics is based on KD BiH 2010 and data are available for 2010 and 2011.

It is planned that from the year 2013 for a large number of statistical indicators, processing will take place according to the new classification KD BiH 2010. Recalculation of historical data will be made backwards to the year 2005, wherever there are existing data series. For recent statistical data series will be recalculated back to the first year of regular production and dissemination of the respective statistics.

### 1.3.2. Regional classification

#### Classification title and level

There is no division of BiH territory to hierarchical regions in accordance with the requirements of EU NUTS classification/nomenclature of territorial units for statistics (*Nomenclature des unités territoriales statistiques*).

NUTS regional classification divides each national territory into five hierarchical levels: three basic levels, NUTS 1, NUTS 2 and NUTS 3, and two additional levels of local administrative units: LAU1 and LAU2. (*Regulation (EC) No 1059/2003 of the European Parliament and of the Council of 26 May 2003 on the establishment of a common classification of territorial units for statistics -NUTS*).

Population falls among the most important criteria for the establishment of NUTS classification: for NUTS 1 /3 000 000 to 7 000 000/, for NUTS 2 /800 000 to 3 000 000/, NUTS 3 /150 000 to 800 000/ people.

#### Connection with administrative classification

Since there is no regional statistical classification of territorial units in BiH, administrative division is used for the statistical purposes as well i.e. data are being produced and published at the level of BiH, Entity and Brcko District.

Bosnia and Herzegovina is administratively divided into two entities: the Federation of Bosnia and Herzegovina and Republika Srpska. Brcko District is a separate unit within BiH.

Federation of Bosnia and Herzegovina is divided into 10 cantons:

1 Una-Sana Canton; 2 Posavina Canton, 3 Tuzla Canton; 4 Zenica-Doboj Canton; 5 Podrinje Canton, 6 Central Bosnia Canton, 7 Herzegovina-Neretva Canton, 8 West Herzegovina Canton, 9 Sarajevo Canton and Canton 10 (Livno Canton).

Republika Srpska is officially administratively divided only into municipalities.

Number of municipalities at the state level (BiH level) is 142, of which 79 municipalities in the Federation of Bosnia and Herzegovina, 62 municipalities in Republika Srpska and one municipality in Brčko District of BiH.

City of Sarajevo is divided into four municipalities; City of Sarajevo East is divided into six municipalities.

### 1.3.3. Classification of Products by Activity (KPPD BiH 2010)

Statistical classification of products by activity, whose products are systematically sorted according to the criteria of economic origin and strictly related to the activities of KD BiH 2010 within which activities they are mainly produced.

KPPD BiH 2010 as a uniformed standard applies throughout the whole of Bosnia and Herzegovina. It was published in the „Official Gazette of BiH“, no. 30/2011 of 19 April 2011. The Classification of Products by Activity (KPPD BiH 2010) serves the statistical system of BiH as a central product classification.

KPPD BiH 2010 is aligned with the Statistical Classification of Products by Activity in the European Economic Community, 2008 version, EC No. 451/2008 - CPA 2008, which as a central classification has got mandatory application in the EU member states since January 2008 onwards. CPA 2008 is aligned with the Central Product Classification of the United Nations – CPC Ver.2 (*Central Product Classification - Version 2*). Based on these facts KPPD BiH 2010 was indirectly made compliant with CPC Ver.2 as well.

#### **1.3.4. Other classification**

##### **The Names of other classifications**

- Nomenclature of Industrial Products of Bosnia and Herzegovina - NIP BiH 2010
- Nomenclature of Main Industrial Groupings (MIG) - GIG (BiH)
- Classification of types of construction - KVG0 BiH.

## **1.4. Statistical units**

### **A List of statistical units relevant to structural business statistics**

- Enterprise
- Local unit
- Kind of activity unit (KAU)
- Local kind of activity unit (LKAU).

### **Definitions of statistical units**

Definitions of statistical units used in structural business statistics are harmonized with the definitions of the EC Regulation on statistical units for the observation and analysis (*Council Regulation No. 696/93. on the statistical units for the observation and analysis of the production system in the Community*). A single company that operates in one location is considered to be identical to a local unit for purposes of structural business statistics. The unit in the composition is used in the sense of kind of activity unit.

*Enterprise* is the smallest combination of legal units that makes an organizational unit producing goods or services. It has a certain degree of autonomy in decision-making, especially in the allocation of its resources. An enterprise carries out one or more activities at one or more locations. One company may be one legal unit.

*Kind of activity unit* is made of parts of company that contribute to the performance of activities at the level of a single class (four-digit numerical code) KD BiH 2010. It corresponds to one operational subdivision of an enterprise. Information system in the company would have to provide the following information for each kind of activity unit: the value of production, the value of intermediate or interphase consumption, number of employees and actual hours worked, labor costs and gross fixed capital formation.

*The local unit* is an enterprise or part thereof (eg. a workshop, factory, warehouse, office, mine) situated in a geographically specific location. At each location an economic activity shall be performed that employs one or more persons (sometimes only part-time), working for the same company.

*Local Kind of activity unit* is part of an enterprise that is located in one location where it performs only one production activity (class level of activity) with the full-time employees.

#### Using statistical units

- In the registration process: Enterprise, unit in the composition;
- Reporting unit: Enterprise;
- Observation unit: Enterprise, Local unit or Local kind of activity unit.

## 1.5. Statistical Business Register (SBR)

### 1.5.1. General information about SBR

#### The name of the register

Statistical Business Register (SBR)

#### Institutions responsible for the register

Statistical Business Register is managed and maintained by the Agency for Statistics of BiH in cooperation with Institute for Statistics of the Federation of BiH, Institute of Statistics of Republika Srpska and the branch office of the Agency for Statistics of BiH in Brčko District.

#### Purpose of the register

Statistical Business Register (SBR) is a register kept for the purpose of gathering information about business companies in the Entities and Brčko District of BiH, i.e. the business community in Bosnia and Herzegovina as a whole, which are important from the statistical standpoint. SBR collects and consolidates information from various administrative sources and statistical surveys. Therefore, the SBR can be considered a system for the transformation of data from administrative sources into data appropriate for statistical use or purpose. It is designed in such a way to represent a bridge between administrative and statistical units, thus to be used only for statistical purposes.

The business community (population) is determined by considering the statistical units and statistical classifications.

SBR is of fundamental importance for the compilation of economic / business statistics and is used for various purposes. The most important are the following intentions of the SBR:

- For identification and establishment of statistical units;
- As an instrument for the preparation and coordination of statistical surveys, which includes: preparation of the lists with addresses where the questionnaires are to be delivered, providing a framework for the population of the business community for which effective sample schemes can be design, preparing the grounds for the production of the total results of the surveys based on a poll to obtain estimates for the approximate or the target population (grossing-up); avoiding duplication or omissions in collecting information on units; improving correspondence between the results of different surveys, improving coverage and debugging; coordination among departments conducting surveys of all activities; control of statistical



burden to which small enterprises are exposed (taking care of questions asked), to avoid the inclusion of the same units more than once.

- As a tool for mobilization of administrative sources - statistical surveys should avoid requesting information that the company has already submitted to other authorities. It is difficult since the administrative units do not always correspond with the statistical units.
- For the compilation of business demography statistics data (foundations, mergers, acquisitions, cessation, restructuring, the survival rate and the rate of rapid growth, etc.) and connecting the register units with units from administrative databases.

### **Obligation to register foundation and cessation of the business entity**

Registration of business entities is regulated by entity laws that are consistent with the Framework Law on Registrations of Business Entities in Bosnia and Herzegovina („Official Gazette of BiH“, no. 42/04), which applies to all business entities established in BiH, both domestic and foreign legal entities and individuals. Responsibilities in the entities and Brčko District are regulated in the following laws:

- Law on Registration of Business Entities in the Federation of Bosnia and Herzegovina („Official Gazette of the Federation of BiH“, no. 27/05 i 68/05);
- Law on Registration of Business Entities in Republika Srpska („Official Gazette of Republika Srpska“, no. 42/05);
- Law on Registration of Business Entities in Brčko District of BiH („Official Gazette of Brčko District of BiH“, no. 15/05).

Termination of business entities is performed by sign out at the registration authority with an application for deletion from the register. The date of the decision on deletion from the register is considered to be the date of termination of activities. There are business entities that stop with their economic activities in practice, but they never apply for deletion from the register at the respective registration authority.

The activity of business entities in the SBR is mainly monitored based on the submission of annual financial statements (final statements), so if they failed to submit financial statements for the last two years, the business entity is considered to be inactive in terms of statistics and therefore such entities are not included in the frame population for surveys.

### **Date of creation and major changes in the SBR**

In 2008, with the assistance from the CARDS Twinning Project, the basic SBR model was established for BiH, for both entities and Brčko District of BiH. Since the SBR was not yet ready for use in statistical surveys at the end of the project, certain modifications took place in 2009 as follows: modification of procedures for entering data from administrative sources; improved “batch” procedure to reduce the manual work on updating the data and setting up the connection between the application for review and update of the SBR and application for the statistical survey side, which enables navigation between the two systems.

The initial data loading in the SBR was carried out from the administrative registers with the balance as at 31 December 2008. Updating for enterprises was made with data from the annual financial statements (final statements) for the year 2007 and 2008.



The new classification of activities KD BiH 2010 (NACE Rev. 2) is applied in the SBR as of 1<sup>st</sup> January 2011. Appliance of KD BiH 2010 in the SBR includes double encryption of business entities, which means that all businesses should have two activity codes, by the old and the new classification.

In 2010, recoding for enterprises and local units took place, without entrepreneurs. Double encryption will persist in the SBR until all statistical surveys do not convert the historical data series to the new classification of activities, which will be carried out extensively in the year 2013. It is planned for the process of implementation in statistical areas to be completed before 2015.

#### **Date of first use for structural business statistics**

At the beginning of 2010 for the purpose of taking frame and sample for the Pilot Structural Business Survey in BiH (EU Structural Business Statistics - Pilot SBS/2009), with the balance of register as of 31 December 2009.

### **1.5.2. Coverage of the population in the SBR**

#### **Covered activities**

SBR covers all economic activities in Bosnia and Herzegovina, according to KD BiH 2010.

#### **Geographical area covered**

SBR covers all business entities in the territory of Bosnia and Herzegovina. This includes business entities (legal entities and individuals) whose directorates or head offices are located in the residential territory of Bosnia and Herzegovina, which consists of the Federation of Bosnia and Herzegovina, Republika Srpska and Brčko District and perform their activities on the territory of Bosnia and Herzegovina.

#### **Coverage by different size classes of the subject**

SBR includes all business entities, irrespective of their size or type of organization.

#### **Other inclusions or exclusions**

SBR does not still contain units from the section T of KD BiH 2010 – “Activities of households as employers; Undifferentiated goods - producing activities of households for own use.” Family farms, belonging into the section A - Agriculture, forestry and fishing are not fully covered by SBR, their registration is largely voluntary.

Entrepreneurs are included, but most often, the data on their activity / inactivity, type of their economic activity and economic indicators are outdated and incomplete and therefore unreliable for making frames and sample for conducting surveys.

#### **The coverage rate**

There are no reliable indicators on which to determine the rate of business entities coverage by SBR, however it is estimated to be pretty high.

### **Type of units in the SBR**

The units contained in the SBR are:

- Administrative units
  - Legal unit
  - Local legal unit
- Statistical units
  - Entrepise
  - Kind of activity unit
  - Local unit
  - Local Kind of activity unit.

### **1.5.3. Content of the SBR records**

#### **The level of classified economic activity**

Units in the SBR are classified based on the lowest level of activity classification. The lowest level of classified economic activity in the KD BiH 2010 (NACE Rev. 2) is class level (four digits).

#### **Geographic location record level**

Municipality (and inhabited place), canton, entity. Business entity address includes postal code.

#### **Method of classification by size of the business entity**

There are two criteria used for classification of business entities by size: number of employees and annual revenues.

Different size classes according to the number of employees:

1. 0-9
2. 10-19
3. 20-49
4. 50 -249
5. 250 and more.

Classes by revenues (in thousand of KM):

1. 0 – 99,999
2. 100,000 – 499,999
3. 500,000 – 3,999,999
4. 4,000,000 – 19,999,999
5. 20,000,000 – 99,999,999
6. 100,000,000 and higher.

The SBR handled by the Agency for Statistics of BiH disposes with the both abovementioned data, but only in the classes in which the business entities are divided.

Entity institutes of statistics dispose with absolute data for each unit in the Register.

#### **Registration of the legal form**

The legal form of each unit is recorded in the SBR. This information is taken from the administrative registers.

#### **Classification of foreign ownership**

Foreign ownership over the units is concluded based on the data on the type of ownership and origin of the capital from administrative registers.

#### **Registration of public ownership**

Type of ownership for each unit was recorded in the SBR. The data is taken from administrative registers.

#### **Registration of the relationships between business entities (units)**

Statistical units are interrelated in the SBR. There are the following relations:

- Legal unit and Local legal unit;
- Enterprise and Legal unit (one enterprise created for each Legal unit in the SBR);
- Local unit and Local legal unit;
- Enterprise and Local unit (relations between enterprise and main local unit are different from the relations between the seat of the enterprise and the enterprise and all other local units).

#### **List and definitions of registered economic variables**

- The main activity;
- Number of employees;
- Annual revenue from operations or turnover.

Definition Main Activities: The Main Activity of a statistical unit is an activity that contributes most to the total value added of the unit. In practice, it is the activity that generates the highest income for the unit or that is performed by the largest number of employees.

Definition Number of Employees: The average number of employees per year, calculated on the basis of 12 totals at the end of the month (data includes working proprietors, persons absent for a short period (e.g. sick leave, paid leave), persons on strike, part-time workers considered as such according to the law and who are on the payroll, as well as seasonal workers and trainees).

Definitions Turnover: Turnover includes all invoiced values during the reference period, corresponding to the value of goods and services sold in the market to third parties. The calculation of turnover includes all invoiced taxes (excluding VAT and similar deductible taxes), as well as costs that are passed on to the customer (transport, packaging, etc.). It excludes discounts on sales, price reductions, the value of returned goods, and subsidies provided by the government, financial, and other extraordinary income.

### **SBR Economic characteristics definitions compliance with EU SBR Regulation**

Main activity – the recommended top-down method can be used only for a certain number of business entities, due to the lack of relevant statistical data in SBR.

Number of employees – Data compliant with EU SBR requirements.

Turnover – the SBR had an alternative characteristic in use „Annual income from operations“ up to 2011, and from 2012 onwards the turnover data are being used. Turnover data are taken from the annual financial statements.

Data on the “Net assets” is not mandatory economic variable in the SBR. Institute for Statistics of the Federation of BiH does not have such data. Therefore, SBR does not contain data on net assets for all entities.

### **Other registered characteristics of the business entity in the SBR**

Other stratification characteristics are: an ancillary activity and legal form of organization.

Identifying characteristics are: thirteen-digit tax number, statistical number, full name, abbreviated name, address (street and number, postal code, settlement or town, municipality, canton/region, entity), phone and e-mail.

Demographic characteristics include: date of foundation or establishment, date of cessation of activities, activity status and date of last change.

Concerning legal unit (administrative unit) the following characteristics are followed: thirteen-digit tax number; full name and abbreviated name; activity; date of registration, date of last change, date of extinction; ownership, origin of capital, legal form; the status of activity/inactivity of transaction accounts; entity, canton/region (in Republika Srpska regions do not indicate administrative unit, but regional units of RSIS outside headquarters: Banja Luka, Doboј, Bijeljina, Trebinje, Foča and Sarajevo East), municipality, town or settlement, postal code, street name, house number, phone, e-mail; the responsible person and a source of information for updating the SBR. Units in Republika Srpska have got a unique identification number of the „Classification Unit Register of Business Entities and their Units in the Composition“. Units in the SBR in the Federation of BiH have got data such as „type of entrepreneur “and „interest of entrepreneur. “

The following characteristics are monitored for an enterprise (statistical units in the SBR): statistical identification number (twelve-digit number where the first digit indicates the Entity followed by the ordinal number and the last digit is the control number by module 11); thirteen-digit tax number; activity status (active, inactive, at rest or idle, establishment-status unknown and inactive due to succession); the full name and abbreviated name; main activity and ancillary activities (up to three different ancillary activities), date of establishment, date last modified, date of cessation of activities; entity, canton / region, municipality , settlement of town, postal code, street name, house number, telephone, fax and e-mail; a source of information to update and a method on how to make changes (automatically or manually).

#### **1.5.4. SBR updating**

##### **The Main sources of information for updates**

Updating SBR is performed at the Entity statistical institutes and the BHAS branch office in Brčko District of BiH from several sources.

Data sources could be divided in two groups:

- Administrative sources (administrative records on business entities from different institutions);
- Statistical sources (information collected through different statistical surveys).

Data are regularly updated from administrative sources, and corrected with information collected through statistical surveys and additional sources.

#### **Frequency of updates by SBR team**

Statistical Institutes in the Entities and Brčko District BHAS branch quarterly receive data from administrative registers in the electronic form. Based on these data, a newly formed business entities are automatically included in the SBR, while the changes of the identity and demographic characteristics are received in the same way. Updating the economic variables is currently performed annually (once a year) on the basis of the annual financial statements obtained as mentioned above. Updating data coming from administrative sources is carried out automatically.

Updating SBR with data coming from surveys is carried out manually. For now, only the personnel of the Statistical Business Register Department in the entity statistical institutions and BHAS branch in Brčko District are authorized to do the updates. After the obtained findings from a survey, the information are verified using additional data sources (other statistical surveys, the Central Bank of Bosnia and Herzegovina, the information from websites and official gazettes) and only then the manual update for separate business entities are made.

#### **Frequency of updates of input data in the administrative sources**

Data on newly created units in the administrative registers of the entities and Brčko District of BiH, as well as changes to existing units are updated daily.

Central Bank of BiH receives information on changes in transaction accounts from all the banks on the territory of the state of Bosnia and Herzegovina.

#### **Exchange of SBR data among the statistical institutions**

Exchange of information on individual units from the register (having in mind the aforementioned restrictions) among all statistical institutions is carried out quarterly (15<sup>th</sup> January, 30<sup>th</sup> April, 31<sup>st</sup> July, 31<sup>st</sup> October). The entity statistical institutes and Brčko District branch submit updated registers to the Agency for Statistics of BiH, which after having data integrated, forwards the complete updated SBR to the entity statistical institutes and Brčko District branch. This means that all statistical institutions have the same content of data between the two successive data exchanges.



## 2. STRUCTURAL BUSINESS STATISTICS (SBS) - ANNEXES I - IV

### 2.1. General information on Structural Business Statistics

Structural Business Statistics survey presents a general framework for data collection of all active market units (enterprises and entrepreneurs). Indicators for the reference year are produced on the basis of these surveys and they show the changes compared to the previous years. Most variables are expressed as values at current prices and therefore the change indexes refer to changes in value.

Contents of structural business statistics (SBS) in the European Union is prescribed in the core EU Regulation no. 295/2008

Statistics produced under this regulation are grouped into the following modules:

- General module for annual structural statistics is defined in **Annex I**. This module has established a general framework for all market activities, which defines **the services** for which detailed module was not provided.
- A detailed module for structural statistics on **industry** defined in **Annex II**,
- A detailed module for structural statistics of **trade** defined in **Annex III**,
- A detailed module for structural statistics of **construction** defined in **Annex IV**,
- A detailed module for structural statistics of insurance defined in Annex V,
- A detailed module for statistics of credit institutions is defined in Annex VI,
- A detailed module for statistics of pension funds is defined in Annex VII,
- A detailed module for statistics of business services is defined in Annex VIII and
- A detailed module for structural statistics of business demography is defined in Annex IX.

The statistical system of Bosnia and Herzegovina is currently producing statistics related to the first four Annexes of the EU Regulation no. 295/2008.

#### Source type

Statistical survey.

#### Source name

Annual structural business statistical survey for enterprises. Specific questionnaires were designed, depending on the activity type (as per the annexes) and size of enterprise.

#### Legal basis

The legal basis to conduct surveys is set out in the three laws regulating the official statistics: the Law on Statistics of Bosnia and Herzegovina, "Official Gazette of BiH", no. 26/04 and 42/04; Law on Statistics of the Federation of Bosnia and Herzegovina "Official Gazette of the Federation of BiH", no. 63/03 and 9/09 and the Law on Statistics of Republika Srpska „Official Gazette of Republika Srpska,“ no. 85/03. Furthermore, there is the Mid-Term Statistical Program of Bosnia and Herzegovina (2009-2012) and the appropriate entity programs as well as the annual statistical

plans that include comprehensive information on the content of the survey, results, responsibilities and deadlines.

In the European Union, structural business statistics are regulated by: the Law on Statistics of the EU (Legal framework for European statistics, EU Regulation 203/2010), the elementary EU SBS Regulation 295/2008 and regulations for the implementation of 250/2009, 251/2009 and 275/2010.

#### **Units' obligation to provide data**

The survey is mandatory for the reporting unit. The laws on statistics in all three statistical institutions provides penalties for non-compliance of the provisions in relation to obligatory completing the questionnaire, the accuracy and quality of data and the deadlines for the submission to the relevant statistical institutions.

#### **Date of the first use of the source**

Survey in this form dates back since 2010. Structural business variables and indicators for Bosnia and Herzegovina and the entities, based on this source are regularly calculated since 2010.

#### **Reference year of this survey**

2011

#### **Frame for the SBS survey**

Enterprises that fall within the frame of survey are selected from the Statistical Business Register (SBR) based on data on the activities of enterprises in the reference period (Final Statements - Income Statement and Balance Sheet).

#### **Planned amendments to the legal basis, changes in the obligation of the units to respond to the survey and the frame**

The plan is to improve the quality and timeliness of records in the SBR, particularly in the part referring to the main activity code, secondary activity and local unit, as well as simplifying access to other administrative sources and their analysis in terms of opportunities for the production of structural business statistics.

### **Questionnaires**

#### **Questionnaires used in the survey**

Statistical institutions of Bosnia and Herzegovina have established a unique structure for the collection, processing and production of Structural Business Statistics of Bosnia and Herzegovina and its entities in accordance with EU Regulation no. 295/2008. A unique set of questionnaires is designed to be used in data collection. Two questionnaires are designed for each Annex (I-IV) of the Regulation, a detailed questionnaire for enterprises with 20+ (twenty and more) employees and a shortened questionnaire for other enterprises.



The annual Structural Business Statistics Survey uses 8 principal questionnaires:

- SBS/IND D – Detailed questionnaire for Industry;
- SBS/IND S – Short questionnaire for Industry;
- SBS/CONS D – Detailed questionnaire for Construction;
- SBS/CONS S – Short questionnaire for Construction;
- SBS/TRADE D – Detailed questionnaire for Trade;
- SBS/TRADE S – Short questionnaire for Trade;
- SBS/SERVICES D – Detailed questionnaire for Services;
- SBS/SERVICES S – Short questionnaire for Services.

And 3 additional questionnaires:

- SBS/IND AQ – Additional questionnaire for Industry;
- SBS/CONS AQ- Additional questionnaire for Construction;
- SBS/TRADE AQ - Additional questionnaire for Trade.

#### **Planned changes in national questionnaires**

Following changes are planned in order to improve the existing questionnaires:

- 1) Minor revisions of the existing questionnaires in consultations with the internal users of data (national accounts and short-term statistics),
- 2) Designing new questionnaires for the purpose of full harmonization of structural business statistics with requirements of the EU Regulation 295/2008 (business services and entrepreneurs).

## **2.2. Data coverage**

### **Covered activities**

The survey covers active enterprises from the Statistical Business Register (SBR) managed by the Agency for Statistics of BiH in association with the Institute for Statistics of the Federation of BiH, Institute of Statistics of Republika Srpska and Brčko District – Branch of the Agency for Statistics of BiH.

Only the active companies are included that are, according to their main activity, categorized into the following areas of activity: B - Mining and quarrying, C – Manufacturing, D - Electricity, gas, steam and air conditioning supply, E - Water supply, sewerage, waste management and remediation activities, F - Construction, G - Wholesale and retail trade; repair of motor vehicles and motorcycles, H - Transportation and storage, I - Accommodation and food service activities, J - Information and communication (Divisions 59, 60, 61 and Groups 63.1 and 58.1), L - Real estate activities, M - Professional, scientific and technical activities (Divisions 72, 74 and 75), N - Administrative and support service activities (Divisions 77, 79, 80, 81 and 82) and S - Other service activities (Divisions 95 and 96).

### **Geographical area covered**

The entire state territory of Bosnia and Herzegovina, including the Federation of Bosnia and Herzegovina and Republika Srpska and Brčko District.

### **Classes covered by enterprise size (measured by number of employees)**

SBS survey covers all active enterprises (enterprises that submitted their Annual financial statement) of all classes of employees from the activities listed in the "Covered Services".

### **Other inclusions or exclusions**

Companies that should be involved in production of the statistics mentioned in Annex VIII (business services) of the Regulation and were not included in the survey for reference year 2011, fall into the following activities: Software publishing (58.2), Computer programming, consultancy and related activities (62), Data processing, hosting and related activities; web portals (63.1), Legal and accounting activities (69), Management consulting activities (70.2), Architectural and engineering activities; technical testing and analysis (71), Advertising and market research (73), Employment activities (78). It is planned to have these activities included in the survey for the year 2012.

Entrepreneurs are not included.

### **Reporting units**

Enterprise

### **Observation units**

Several different types of statistical units are used for SBS surveys. The largest number of SBS data refers to „enterprise“ as a statistical unit. Local unit is used in order to calculate regional data and for the calculation of pure activity kind of activity unit.

### **Planned changes in the population of respondents**

Expansion includes surveys on the full business economy of enterprises planned for year 2012 and entrepreneurs will be included when the conditions are created for their inclusion (recoding by NACE Rev. 2 in SBR and provision of data from administrative sources for regular updates - the number of employees).

## **2.3. Information collected at the level of observation unit**

Specific questionnaires were created for each Annex (I-IV) of the Regulation no. 295/2008, for collection of data based on which all the variables required by the regulation on the level of observation units can be calculated. For multiannual series of Annex III – Trade, we have created special questionnaires used to collect data required in a multiannual period (turnover as per CPA classification).

## List and Definition of Variables

### *11 11 0 Number of enterprises (Annexes I - IV)*

A count of the number of market enterprises registered to the population concerned in the business register corrected for errors, in particular frame errors. Only active units which either had turnover or employment at any time during the reference period should be included. Dormant (temporarily inactive) and inactive units are excluded.

### *11 21 0 Number of local units (Annexes I - IV)*

A count of the number of local units as defined in Council Regulation No 696/93 registered to the population concerned in the business register corrected for errors, in particular frame errors. Local units must be included even if they have no paid employees. This statistic should include all units active during at least a part of the reference period.

### *11 31 0 Number of kind-of-activity units (Annexes II and IV)*

A count of the number of kind-of-activity units as defined in Council Regulation No 696/93 registered to the population concerned in the business register corrected for errors, in particular frame errors, or an estimate if this type of unit is not registered. This statistic should include all units active during at least a part of the reference period.

### *12 11 0 Turnover (Annexes I - IV)*

Turnover comprises the totals invoiced by the observation unit during the reference period, and this corresponds to market sales of goods or services supplied to third parties. Turnover includes all duties and taxes on the goods or services invoiced by the unit with the exception of the value added type taxes (VAT). It also includes all other charges (transport, packaging, etc.) passed on to the customer, even if these charges are listed separately in the invoice. Goods produced for own consumption or investment should be excluded from turnover. Reduction in prices, rebates and discounts as well as the value of returned packing must be deducted. Income classified as other operating income, financial income and extra-ordinary income and revenue from the use by others of enterprise assets yielding interest, royalties and dividends and other income is excluded from turnover. Operating subsidies received from public authorities are also excluded.

### *12 12 0 Production value (Annexes I - IV)*

The production value measures the amount actually produced goods and services by the unit. The production value is defined as turnover or revenue from sales of goods and rendering of services, plus or minus the changes in stocks of finished products, work in progress and goods and services purchased for resale, minus the purchases of goods and services for resale (only for the goods and services sold during the reporting period), plus capitalized production, plus other operating income (including subsidies). Income and expenditure classified as financial or as revenue in the form of interests and dividends in company accounts is excluded from production value. Capitalized production includes the own-account production of all goods that are retained by their producers as investment. The latter includes the production of fixed tangible assets (buildings, etc.) as well as intangible assets (development of software, etc.). Capitalized production is unsold production and is valued at production cost. These capital goods are also included in investment.

### *12 13 0 Gross margin (Annexes II - IV)*

Gross margin is the difference between the value of turnover from trading activities and the cost of goods sold to the trade.

### *12 15 0 Value added at factor costs (Annexes I - IV)*

Value added at factor cost is the gross income from operating activities after adjusting for operating subsidies and indirect taxes. It can be calculated from turnover, plus capitalised production, plus other operating income (including operating subsidies), plus or minus the changes in stocks, minus the purchases of goods and services, minus other taxes on products which are linked to turnover but not deductible, minus the duties and taxes linked to production. The duties and taxes linked to production are compulsory, unrequited payments, in cash or in kind which are levied by general government in respect of the production and importation of goods and services, the employment of labour, the ownership or use of land, buildings or other assets used in production irrespective of the quantity or the value of goods and services produced or sold.

### *12 17 0 Gross operating surplus (Annexes I - IV)*

Gross operating surplus is the surplus generated by operating activities after the labour factor input has been recompensed. It can be calculated from the value added at factor cost less the personnel costs. It is the balance available to the unit which allows it to recompense the providers of own funds and debt, to pay taxes and eventually to finance all or a part of its investment.

### *13 11 0 Total purchases of goods and services (Annexes I - IV)*

Purchases of goods and services include the value of all goods and services purchased during the accounting period for resale or consumption in the production process, excluding capital goods the consumption of which is registered as consumption of fixed capital. The goods and services concerned may be either resold with or without further transformation, completely used up in the production process or, finally, be stocked. Included in these purchases are the materials that enter directly into the goods produced (raw materials, intermediary products, components), plus non-capitalised small tools and equipment. Also included are the values of ancillary materials (lubricants, water, packaging, maintenance and repair materials, and office materials) as well as energy products. Included in this variable are the purchases of materials made for the production of capital goods by the unit. Services paid for during the reference period are also included. In this figure are payments for all work carried out by third parties on behalf of the unit including current repairs and maintenance, installation work and technical studies. Amounts paid for the installation of capital goods and the value of capitalised goods are excluded. Also included are payments made for non-industrial services such as legal and accountancy fees, patents and license fees (where they are not capitalised), insurance premiums, costs of meetings of shareholders and governing bodies, contributions to business and professional associations, postal, telephone, electronic communication, telegraph and fax charges, transport services for goods and personnel, advertising costs, commissions (where they are not included in wages and salaries), rents, bank charges (excluding interest payments) and all other business services provided by third parties. Included are services which are transformed and capitalised by the unit as capitalised production. Expenditure classified as financial expenditure in the form of interests and dividends is excluded from the total purchases of goods and services. Purchases of goods and services are valued at the purchase price, i.e. the price the purchaser actually pays for the

products, including any taxes less subsidies on the products bought excluding value added type taxes. All other taxes and duties on the products are therefore not deducted from the valuation of the purchases of goods and services. The treatment of taxes on production is not relevant in the valuation of these purchases.

*13 12 0 Purchases of goods and services purchased for resale in the same Condition (Annexes I - IV)*

Purchases for resale are purchases of goods for resale to third parties without further processing. It also includes purchases of services by “invoicing” service companies, i.e. those whose turnover is composed not only of agency fees charged on a service transaction but also the actual amount involved in the service transaction, e.g. transport purchases by travel agents. Purchases of goods and services purchased for resale in the same condition as received are valued at the purchase price excluding deductible VAT and other deductible taxes linked directly to turnover. All other taxes and duties on the products are therefore not deducted from the valuation of the purchases of goods and services.

*13 13 1 Payments for agency workers (Annexes I - IV)*

Included in this figure are payments to temporary employment agencies and similar organizations supplying workers to clients’ businesses for limited periods of time to supplement or temporarily replace the working force of the client, where the individuals provided are employees of the temporary help service unit. However, these agencies and organizations do not provide direct supervision of their employees at the clients’ work sites. Only the payments for the provision of personnel which is not linked to the provision of a particular industrial or other non-industrial service is included.

*13 21 0 Change in stocks of goods and services (Annex III)*

Change in stocks (positive or negative) is the difference between the value of the stocks at the end and the beginning of the reference period. Change in stocks may be measured by the value of entries into stocks less the value of withdrawals and the value of any recurrent losses of goods held in stocks. Stocks are recorded at purchaser’s prices exclusive of VAT if they are purchased from another unit, otherwise at production cost. Among stocks (and the change in stocks), the following breakdown can be made: stocks of finished goods, stocks of work in progress, stocks of goods and services purchased for resale in the same condition as received and stocks of raw materials and consumables. Included are the stocks of finished products or in the course of production, which have been produced by the unit and which have not yet been sold. These products include work in progress belonging to the unit, even if the products in question are in the possession of third parties. Equally, products held by the unit which belong to third parties are excluded. Included are the stocks of goods and services bought for the sole purpose of reselling them in the same condition. Excluded are stocks of goods and services which are provided to third parties on a commission basis. Products purchased for resale and stocked by services enterprises can include goods (industrial equipment in the case of “turnkey” engineering contracts, or buildings in the case of property development, etc.) as well as services (rights to use advertising space, transport, accommodation, etc.). Included also are the stocks of raw and ancillary materials, intermediary products, components, energy, non-capitalised small tools and services which belong to the unit.

### *13 21 1 Change in stocks of goods and services purchased for resale (Annex III)*

This variable is defined as the change in stocks at purchaser's prices exclusive of VAT between the end and the beginning of the reference period. The change in stocks may be measured by the value of entries into stocks of products purchased for resale less the value of withdrawals and the value of any recurrent losses of goods held in stocks. Included in these stocks are goods and services bought for the sole purpose of reselling them in the same condition. Excluded are stocks of goods and services which are provided to third parties on a commission basis.

### *13 21 3 Change in stocks of finished products and work in progress (Annexes II and IV)*

This variable is defined as the change in the value of the stocks of finished products or in the course of production, which have been produced by the unit and which have not yet been sold, between the first and last days of the reference period. These products include work in progress belonging to the unit, even if the products in question are in the possession of third parties. Equally, products held by the unit which belong to third parties are excluded. Stocks are valued at production cost, and are valued prior to value adjustments (such as depreciation).

### *13 31 0 Personnel costs (Annexes I - IV)*

Personnel costs are defined as the total remuneration, in cash or in kind, payable by an employer to an employee (regular and temporary employees as well as home workers) in return for work done by the latter during the reference period. Personnel costs also include taxes and employees' social security contributions retained by the unit as well as the employer's compulsory and voluntary social contributions. Personnel costs are made up of: wages and salaries and employers' social security costs. All remuneration paid during the reference period is included, regardless of whether it is paid on the basis of working time, output or piecework, and whether it is paid regularly or not. Included are all gratuities, workplace and performance bonuses, ex gratia payments, thirteenth month pay (and similar fixed bonuses), payments made to employees in consideration of dismissal, lodging, transport, cost of living and family allowances, commissions, attendance fees, over-time, night work etc. as well as taxes, social security contributions and other amounts owed by the employees and retained at source by the employers. Also included are the social security costs for the employer. These include employer's social security contributions to schemes for retirement pensions, sickness, maternity, disability, unemployment, occupational accidents and diseases, family allowances as well as other schemes. These costs are included regardless of whether they are statutory, collectively agreed, contractual or voluntary in nature. Payments for agency workers are not included in personnel costs.

### *13 32 0 Wages and salaries (Annexes I - IV)*

Wages and salaries are defined as "the total remuneration, in cash or in kind, payable to all persons counted on the payroll (including home workers), in return for work done during the accounting period" regardless of whether it is paid on the basis of working time, output or piecework and whether it is paid regularly or not. Wages and salaries include the values of any social contributions, income taxes, etc. payable by the employee even if they are actually withheld by the employer and paid directly to social insurance schemes, tax authorities, etc. on behalf of the employee. Wages and salaries do not include social contributions payable by the employer. Wages and salaries include: all gratuities, bonuses, ex gratia payments, "thirteenth month payments", severance payments, lodging, transport, cost-of-living, and family allowances, tips, com-



mission, attendance fees, etc. received by employees, as well as taxes, social security contributions and other amounts payable by employees and withheld at source by the employer. Wages and salaries which the employer continues to pay in the event of illness, occupational accident, maternity leave or short-time working may be recorded here or under social security costs, dependent upon the unit's accounting practices. Payments for agency workers are not included in wages and salaries.

#### *13 33 0 Social security costs (Annexes I - IV)*

Employers' social security costs correspond to an amount equal to the value of the social contributions incurred by employers in order to secure for their employees the entitlement to social benefits. Social security costs for the employer include the employer's social security contributions to schemes for retirement pensions, sickness, maternity, disability, unemployment, occupational accidents and diseases, family allowances as well as other schemes. Included are the costs for all employees including home workers and apprentices. Charges are included for all schemes, regardless of whether they are statutory, collectively agreed, contractual or voluntary in nature. Wages and salaries which the employer continues to pay in the event of illness, occupational accident, maternity leave or short-time working may be recorded here or under wages and salaries, dependent upon the unit's accounting practices.

#### *13 41 1 Payments for long term rental and operational leasing of goods (Annexes II and IV)*

The payments for long-term rental include all charges relative to the renting of tangible goods for a period greater than one year. Operational leases are those leases which do not transfer substantially all the risks and rewards incident to legal ownership to the lessee. Under an operational lease, the lessee acquires the right to use a durable good for a certain period of time, which may be long or short and not necessarily settled in advance. When the leasing period expires, the lessor expects to receive his good back in more or less the same condition as when he hired it out, apart from normal wear and tear. Thus the leasing period does not cover all, or a predominant part of, the good's economic lifetime. Payments for the operational leasing of goods relate to the cost of using the tangible goods made available to the unit through these contracts.

If all risks and rewards of ownership are, de facto though not de jure, transferred from lessor to lessee, the lease is a financial one. In financial leasing, the leasing period covers all, or most of, the economic lifetime of the durable good. At the end of the leasing period the lessee often has the option to buy the good at a nominal price.

All payments regarding financial leasing should be excluded from variable 13411.

The purchase price of the good in question should be recorded under gross investments at the time of the acquisition of the good.

#### *15 11 0 Gross investment in tangible goods (Annexes I - IV)*

Investment during the reference period in all tangible goods. Included are new and existing tangible capital goods, whether bought from third parties, acquired under a financial lease contract (i.e. the right to use a durable good in exchange for rental payments over a predetermined and protracted term) or produced for own use (i.e. Capitalised production of tangible capital goods), having a useful life of more than one year including non-produced tangible goods such as land.

Purchased goods are valued at purchase price, i.e. transport and installation charges, fees, taxes and other costs of ownership transfer are included.

The value of goods acquired via financial lease corresponds to the market value of the good if it had been purchased in the year of acquisition only. This value is in principle known in the contract or can be estimated by summing-up the part of the installments that cover the capital reimbursement. The part of installments corresponding to the interest payments are to be excluded. For the goods acquired via financial leasing the value is to be recorded at the time when the good is delivered to the lessee.

Own produced tangible goods are valued at production cost. Goods acquired through restructuring (such as mergers, take-over, break-ups, split-off) are excluded.

Purchases of small tools which are not capitalised are included under current expenditure.

Also included are all additions, alterations, improvements and renovations which prolong the service life or increase the productive capacity of capital goods.

Current maintenance costs are excluded as is the value and current expenditure on capital goods used under rental and operational lease contracts. Annual payments for assets used under financial leasing should be excluded. Investments in intangible and financial assets are excluded.

Concerning the recording of investments where the invoicing, delivery, payment and first use of the good may take place in different reference periods, the following method is proposed as an objective.

Investments are recorded when the ownership is transferred to the unit that intends to use them. Capitalised production is recorded when produced. Concerning the recording of investments made in identifiable stages, each partinvestment should be recorded in the reference period in which they are made.

#### *15 12 0 Gross investment in land (Annexes II - IV)*

Included under this variable, in addition to land, are underground deposits, forests and inland waters. Where land is purchased with existing buildings and the value of the two components is not separable, the total is recorded under this heading if it is estimated that the value of the land exceeds the value of the existing buildings. If the existing buildings are estimated to be of greater value than the land, the total is recorded under gross investment in existing buildings and structures (15 13 0). Also included here is land merely improved by leveling, the laying of pipes or by the provision of paths or roads. Land acquired through restructuring (such as mergers, take-over, break-ups, split-off) is excluded.

#### *15 13 0 Gross investment in existing buildings and structures (Annexes II – IV)*

The investment includes the cost of the existing buildings (that have been used before) and structures which have been acquired during the reference period. Where land is purchased with existing buildings and the value of the two components is not separable, the total is recorded under this heading if it is estimated that the value of the existing buildings exceeds the value of the land. If the land is estimated to be of greater value than the existing buildings, the total is recorded under gross investment in land (15 12 0).



Purchases of new buildings that have never been used are excluded. Existing buildings and structures acquired through restructuring (such as mergers, take-over, break-up, split-off) are excluded.

*15 14 0 Gross investment in construction and alteration of buildings (Annexes II – IV)*

This variable covers expenditure during the reference period on the construction or conversion of buildings. Purchases of new buildings that have never been used are included. Also included are all additions, alterations, improvements and renovations which prolong the service life or increase the productive capacity of buildings.

Included are permanent installations such as water supply, central heating, air conditioning, lighting etc. as well as construction expenditure related to oil wells (drilling), operational mines, pipe lines, power transmission lines, gas-pipes, railway lines, port installations, roads, bridges, viaducts, drains and other site improvements. Current maintenance costs are excluded.

*15 15 0 Gross investment in machinery and equipment (Annexes II – IV)*

This variable covers machinery (office machines, etc.), special vehicles used on the premises, other machinery and equipment, all vehicles and boats used off the premises, i.e. motor cars, commercial vehicles and lorries as well as special vehicles of all types, boats, railway wagons, etc. acquired new or second hand during the reference period.

Machinery and equipment acquired through restructuring (such as mergers, take-over, break-up, split-off) are excluded. Also included are all additions, alterations, improvements and renovations which prolong the service life or increase the productive capacity of these capital goods. Current maintenance costs are excluded.

*15 21 0 Sales of tangible investment goods (Annexes II – IV)*

Sales of tangible goods include the value of existing tangible capital goods, sold to third parties. Sales of tangible capital goods are valued at the price actually received (excluding VAT), and not at book value, after deducting any costs of ownership transfer incurred by the seller.

*15 42 0 Gross investment in concessions, patents, licenses, trade marks and similar rights (Annex II)*

Investment in concession, patents, licenses, trade marks and similar rights are recognized to be an intangible asset if and only if it is probable that the future economic benefits that are attributable to the asset will flow to the enterprise and if the cost of the asset can be measured reliably. This requirement applies whether an intangible asset is acquired externally or generated internally.

A concession is a business operated under a contract or license associated with a degree of exclusivity in exploiting a business within a certain geographical area. For example, sports arenas or public parks may have concession stands; and public services such as water supply may be operated as concessions. The owner of the concession — the concessionaire — operates as an independent business and pays either a fixed fee, a percentage of revenue or profit, or both to the entity with the ability to assign exclusive rights for an area or facility. A concession may involve the transfer to the concessionaire of the right to use some existing infrastructure required to carry out a business (such as a water supply system in a city). A patent is a legal title of industrial property granting its owner the exclusive right to exploit an invention commercially for a limited

area and time. The patent confers its owner the right to stop others from, among other things, making, using or selling such invention without authorization. In return for the exclusive right to exploit it, the technical details of the invention are published. Patentability requires novelty, inventiveness and industrial applicability of the invention.

A licensor may grant license under “intellectual property” to do something (such as copy software or use a patented invention) without fear of a claim of intellectual property infringement brought by the licensor. A license under intellectual property commonly has several component parts, including a term, territory, renewal, as well as other limitations deemed vital to the licensor.

A trademark is a distinctive sign that can be represented graphically. A competitive tool, it is a means for industries and other businesses of attracting and retaining customers by distinguishing their goods and services from their competitors’ A Mark is used to differentiate a product or a service. Trademarks can be two - or three-dimensional and can be made up of words, pictures, colors, and/or sounds and so forth.

#### *16 11 0 Number of persons employed (Annexes I - IV)*

The number of persons employed is defined as the total number of persons who work in the observation unit (inclusive of working proprietors, partners working regularly in the unit and unpaid family workers working regularly in the unit), as well as persons who work outside the unit who belong to it and are paid by it (e.g. sales representatives, delivery personnel, repair and maintenance teams). It includes persons absent for a short period (e.g. sick leave, paid leave or special leave), and also those on strike, but not those absent for an indefinite period. It also includes part-time workers who are regarded as such under the laws and who are on the pay-roll, as well as seasonal workers, apprentices and home workers on the pay-roll.

The number of persons employed excludes manpower supplied to the unit by other enterprises, persons carrying out repair and maintenance work in the enquiry unit on behalf of other enterprises, as well as those on compulsory military service. Unpaid family workers refer to persons who live with the proprietor of the unit and work regularly for the unit, but do not have a contract of service and do not receive a fixed sum for the work they perform. This is limited to those persons who are not included on the payroll of another unit as their principal occupation.

#### *16 12 0 Number of unpaid persons employed (Annexes I - IV)*

The number of unpaid persons employed is defined as the number of persons who work regularly in the observation unit and who do not receive compensation in the form of wages, salaries, fees, gratuities, piecework pay or remuneration in kind (unpaid family workers, working proprietors not receiving a compensation in the form of wages, salaries).

#### *16 13 0 Number of employees (Annexes I - IV)*

The number of employees is defined as those persons who work for an employer and who have a contract of employment and receive compensation in the form of wages, salaries, fees, gratuities, piecework pay or remuneration in kind. (All persons for whom payments are booked under the heading personnel costs in the profit and loss accounts of the enterprise should be included even if in some cases no contract of employment exists).

The relationship of employer to employee exists when there is an agreement, which may be formal or informal, between an enterprise and a person, normally entered into voluntarily by both parties, whereby the person works for the enterprise in return for remuneration in cash or in kind.

A worker is considered to be a wage or salary earner of a particular unit if he or she receives a wage or salary from the unit regardless of where the work is done (in or outside the production unit). A worker from a temporary employment agency is considered to be an employee of the temporary employment agency and not of the unit (customer) in which they work. In particular the following are considered as employees: paid working proprietors; students who have a formal commitment whereby they contribute to the unit's process of production in return for remuneration and/or education services; home workers if there is an explicit agreement that the home worker is remunerated on the basis of the work done and they are included on the pay-roll. The number of employees includes part-time workers, seasonal workers, and persons on strike or on short-term leave, but excludes those persons on long-term leave. The number of employees does not include voluntary workers.

#### *16 14 0 Number of employees in full time equivalent units (Annexes I - IV)*

Figures for the number of persons working less than the standard working time of a full-year full-time worker should be converted into full time equivalents, with regard to the working time of a full-time full-year employee in the unit. It is the total hours worked divided by the average annual number of hours worked in full-time jobs within the economic territory. Since the length of a full-time job has changed through time and differs between industries, methods which establish the average proportion and average hours of less than full-time jobs in each job group have to be used. A normal full-time week must first be estimated in each job group. If possible, a job group can be defined, inside an activity, according to sex and (or) kind of work of people. Hours contractually agreed upon can constitute for employee jobs, the appropriate criteria for determining those figures. Fulltime equivalent is calculated separately in each job group, and then summed. Included in this category are people working less than a standard working day, less than the standard number of working days in the week, or less than the standard number of weeks (or months) in the year. The conversion should be carried out on the basis of the number of hours, days, weeks or months worked.

#### *16 15 0 Number of hours worked by employees (Annexes II and IV)*

The total number of hours worked by employees represents the aggregate number of hours actually worked for the output of the observation unit during the reference period. This variable excludes hours paid but not actually worked such as for annual leave, holidays and sick leave. It also excludes meal breaks and commuting between home and work.

Included are hours actually worked during normal working hours; hours worked in addition to those; time which is spent at the place of work on tasks such as preparing the site and time corresponding to short periods of rest at the work place. If the exact number of hours actually worked is not known, it may be estimated on the basis of the theoretical number of working hours and the average rate of absences (sickness, maternity, etc.)

#### *20 11 0 Purchases of energy products (in value) (Annexes II and IV)*

Purchases of all energy products during the reference period should be included in this variable only if they are purchased to be used as fuel. Energy products purchased as a raw material or for resale without transformation should be excluded.

*21 11 0 Investment in equipment and plant for pollution control and special anti-pollution accessories (mainly 'end-of-pipe' equipment) (Annex II)*

Capital expenditures for methods, technologies, processes or equipment designed to collect and remove pollution and pollutants (e.g. air emissions, effluents or solid waste) after their creation, prevent the spread of and measure the level of the pollution, and treat and dispose of pollutants generated by the operating activity of the company. It is the sum of expenditure in the environmental domains: Protection of ambient air and climate, Wastewater management, Waste management and other environmental protection activities. Other environmental protection activities includes Protection and remediation of soil, groundwater and surface water, Noise and vibration abatement, Protection of biodiversity and landscape, Protection against radiation, Research and development, General environmental administration and management, Education, training and information, Activities leading to indivisible expenditure and Activities not elsewhere classified.

The main purpose or function of this capital expenditure is environmental protection and the total expenditure for these should be reported.

The expenditure should be reported gross of any cost-offsets resulting from the generation and sale of marketable by-products, savings made, or subsidies received.

Purchased goods are valued at the purchase price excluding deductible VAT and other deductible taxes directly linked to turnover.

*21 12 0 Investment in equipment and plant linked to cleaner technologies ("integrated technology") (Annex II)*

Capital expenditures for new or adaptation of existing methods, technologies, processes, equipment (or parts thereof) designed to prevent or reduce the amount of pollution created at the source (e.g. air emissions, effluents or solid waste), thereby reducing the environmental impacts associated with the release of pollutants and/or with polluting activities. It is the sum of expenditure in the environmental domains Protection of ambient air and climate, Wastewater management, Waste management and other environmental protection activities. Other environmental protection activities includes Protection and remediation of soil, groundwater and surface water, Noise and vibration abatement, Protection of biodiversity and landscape, Protection against radiation, Research and development, General environmental administration and management, Education, training and information, Activities leading to indivisible expenditure and Activities not elsewhere classified.

The expenditure should be reported gross of any cost-offsets resulting from the generation and sale of marketable by-products, savings made, or subsidies received. Purchased goods are valued at the purchase price excluding deductible VAT and other deductible taxes directly linked to turnover.

*21 14 0 Total current expenditure on environmental protection (Annex II)*

Total current expenditure on environmental protection is the expenditure for operating and maintaining an activity, technology, process, equipment (or parts thereof) designed to prevent, reduce, treat or eliminate pollutants and pollution (e.g. air emissions, effluents or solid waste) or any other degradation of the environment resulting from the operating activity of the company.

It is the sum of expenditure in the environmental domains: Protection of ambient air and climate, Wastewater management, Waste management and other environmental protection activities. Other environmental protection activities includes: Protection and remediation of soil, groundwater and surface water, Noise and vibration abatement, Protection of biodiversity and landscape, Protection against radiation, Research and development, General environmental administration and management, Education, training and information, Activities leading to indivisible expenditure and Activities not elsewhere classified.

Total current expenditure on environmental protection should be reported gross of any cost-offsets resulting from the sale of marketable by-products, savings or subsidies received.

Current expenditure is the sum of “in-house expenditure” and “purchases of environmental protection services”. In-house expenditure includes all current expenditure on environmental protection except purchases of environmental protection services from other units. It is the sum of labour costs, use of raw materials and consumables including energy costs and payments for operational leasing.

## 2.4. Primary data collection method

### Media

Paper (printed) questionnaire is sent to all reporting units by post.

### Timetable of data collection

Data collection carried out by entity statistical offices and branch office in Brcko District BiH. Questionnaires are sent 3-4 months from the end of the reference year, the deadline for collecting questionnaires is half of year, and the deadline for the control and contact with the reporting units is nine months from the end of the reference year.

### Sample or census

The sample was designed as a stratified random sample. Stratification is described in the “Criteria for stratification.” The allocation was made taking into account information on the evaluation of the variance of the SBS survey which was conducted a year ago (turnover, value added and personal costs), as well as auxiliary variables in the Statistical Business Register (employment and financial data), and by setting a minimum threshold for the number of units in stratum in the following domains:

- DOM1 – stratum ie. Entity\_2or3digitNACERev2\_EmploymentClass\_CensusCondition\_CensusOutliers
- DOM2 – Entity\_Section\_EmploymentClass\_CensusCondition\_CensusOutliers
- DOM3 – EntityCode\_Section
- DOM4 – EntityCode
- DOM5 - BiH

where the CensusCondition is mark on the basis of which has been determined that certain strata according to the initial definition entered the census strata, and CensusOutliers is mark census strata that are incurred by applying certain conditions to define strata in the design of the sample (eg, standard deviation, turnover per employee, enterprises with higher financial data from the register, etc.). It was used Newman's optimal allocation (Bethel allocation). Final sample size was determined using the proportional allocation for those strata in which the number of units produced Bethel's allocation were less than the number of units obtained proportional allocation.

### Criteria for stratification

Stratification is defined taking into account the territorial affiliation, level of Section, employment class and the conditions of the initial census for certain strata. It is taken to the level of the Section field NACE 2010:

1. Section B „Mining and quarrying“
2. Section C „Manufacturing“
3. Section E „Water supply, sewerage, waste management and remediation activities“
4. Section F „Construction“
5. Section G „Wholesale and retail trade; repair of motor vehicles and motorcycles“
6. Section H „Transportation and storage“
7. Section I „Accommodation and food service activities“
8. Section J „Information and communication“ Divisions 59,60 and 61
9. From Section M „Professional, scientific and technical activities“ Divisions 72, 74 and 75
10. From Section N „Administrative and support service activities“ Divisions 77, 79,80, 81 and 82
11. From Section S „Other service activities“ Divisions 95 and 96

Or level of Group for Sections:

1. Section D „Electricity, gas, steam and air conditioning supply“
2. Section J „Information and communication“ Groups 63.1 and 58.1
3. Section L „Real estate activities“

**For all Sections, except for the G is used following size class by the number of persons employed:**

1. I class 0 – 19 persons employed
2. II class 20 – 49 persons employed
3. III class 50 and more persons employed,

**while for the G “Wholesale and retail trade, repair of motor vehicles and motorcycles” is used following size class by the number of persons employed:**

1. I class 0 – 1 persons employed
2. II class 2 - 9 persons employed
3. III class 10 – 19 persons employed
4. IV class 20 – 49 persons employed

5. V class 50 – 249 persons employed
6. VI class 250 and more persons employed

#### **Threshold values and sample percentages**

0-19 persons employed: 38.4%

20-249 persons employed: 100%

250+ persons employed: 100%

#### **Response rate**

For the BiH level response rate was 68%. The response rate (response reporting units) by entities is slightly different.

#### **Actions to speed up or increase the rate of response**

Missing responses are first urged by postal reminders and then by phone contacts. In the case of higher non-response, reporting units that do not respond to previous urgings staff from regional statistical offices visit. In the case of key reporting units, staff from the central office visit them directly.

#### **Frequency of data collection**

Data are collected annually.

#### **Expected changes in data collection methodology**

The introduction of electronic questionnaires with “smart” data entry with controls and e-mail delivery, with printed postal questionnaires for the rest of the enterprises (which electronic forms for any reason are not accepted).

Using administrative data to produce SBS statistics for enterprises with less than 20 persons employed.



## 2.5. Production of results

### Imputation methods to compensate for non-response

In the data processing phase, relating to the editing and imputation of missing data for the enterprises that responded, were used annual financial statements, as well as other statistical surveys. In addition, the Federation of BiH has worked out cold-deck imputation using these available resources in order to increase data quality and (final) response rate. After that, estimates for units that did not respond was done, by correction of initial weights, taking into account the final response rate.

### Estimates for grossing-up

The estimates of population parameters are obtained using calibration method. All available auxiliary information from Statistical Business Register in BiH is used, such as:

- Number of enterprises by stratum
- Number of persons employed (by stratum)
- Total turnover (by stratum).

Initial weights are calculated as inverse of inclusion probability of sampled unit. Then, the initial weights are corrected for total non-response. Such corrected initial weight, known population totals and values of auxiliary variables for response units are input information for calibration process. In the calibration process, we look for solution to the following constrained optimization problem (looking for constrained extremum):

$$\left\{ \begin{array}{l} \min \sum_{i \in r} d(g_i, w_i) \\ \sum_{j \in r_h} g_j = N_h \\ \sum_{j \in r_h} g_j x_j^{emp} = X_h^{emp} \\ \sum_{j \in r_h} g_j x_j^{fin} = X_h^{fin} \end{array} \right. \quad h = 1, \dots, H$$

where:

- $d$  - Distance function (in this case - logarithmic)
- $g_i$  - Calibrated weight (outcome of calibration process)
- $w_i$  - Non-response corrected weight
- $N_h$  - Number of population elements in the stratum  $h$
- $r_h$  - Response in the stratum  $h$
- $x_j^{emp}$  - Number of persons employed from the register for the responding unit  $j$
- $x_j^{fin}$  - Financial data from the register for the responding unit  $j$
- $X_h^{emp}$  - Number of persons employed by stratum
- $X_h^{fin}$  - Total income by stratum
- $H$  - Total number of strata.



Having in mind the level of data exchange in the statistical business register, calibration of weights is especially made to the entity / Brcko District, which then were used for the score on all domain of interest including the level of the state.

#### **Confrontation with other data sets**

Comparison of data with data from the national accounts, PRODCOM statistics, employment, etc.

#### **Criteria for the identification of confidential data**

Minimum numbers of reporting units for which information may be published are three units. The second rule is the rule of dominance by which the aggregated data can not be published if one unit contributes 85% or more. The exception to this rule is cases where there is agreement of the reporting unit.

Currently, national data are published only aggregated at two digits of classification of activities and employment classes at the level of the Section. Protection of confidentiality does not apply in its entirety.

#### **Expected changes in production methods**

Using administrative data for small enterprises and survey for other enterprises and for the entrepreneurs to create the framework from SBR based on which will be done estimates of SBS variables or creating a special survey for this group of reporting units.

## **2.6. Quality**

### **The Quality assessment**

With the intention of monitoring and evaluating quality, Eurostat recommended a special form of reporting based on which the quality of statistics produced is assessed. In the Quality Report the statistics produced is observed in relation to the following aspects:

- Relevance
- Accuracy and reliability of data
- Actuality and timeliness
- Accessibility and clarity
- Comparability and coherence.

### **Relevance**

Relevance is a degree to which statistical outputs meet the current and potential customers' needs and the extent to which the statistics (definitions, classifications, etc.) are compliant with the European and International standards.

Structural business statistics are harmonized with the EU regulations 295/2008.

### **Accuracy and reliability of data**

Accuracy and reliability of the data is determined at all survey stages. Data control is performed (logical and mathematical) at the stage of the input of data received from reporting units, then a statistical analysis takes place of the extreme values of the variables and their control by either contacting the reporting units, or based on other statistical sources or historical data.

In case of sample-based surveys, errors are divided into non-sampling and sampling related errors. Non-sampling related errors are very difficult to measure, while sampling related errors are expressed as a variation coefficient of the basic variables (number of enterprises, turnover, value added, compensation of employees, number of employees and investments in tangible assets).

### **Actuality and timeliness**

Actuality of statistic is expressed as a length of time between the availability of data and the reference period to which the data relate.

Timeliness of statistics is expressed by time delays of published or released data in relation to set deadlines.

According to regulation, the deadlines for the transmission of the previous data are 10, and for the final data 18 months after the end of the reference year.

According to the Plan for the Implementation of the Statistical Surveys, the deadline for the presentation of the initial results is 14 months and for the final results it is 18 months after the end of the reference year. SBS data are announced according to the Release Plan of the Agency for Statistics of BiH.

### **Accessibility and clarity**

Accessibility and clarity are expressed in the simplicity of access to data by users, the possibility of using simple procedures for obtaining data in the expected form within a reasonable time, with the necessary explanations provided.

The results of the Structural Business Statistics are published in the thematic bulletin "Structural Business Statistics" and are available on the website of the Agency for Statistics of BiH.

### **Comparability and coherence**

Comparability of data is intended to measure the impact of different concepts and definitions applied in the survey. Comparability is expressed on the basis of two components, namely:

- comparability with other countries and
- comparability over time.

Comparability with data from other countries can be achieved by accepting the basic principles and definitions set forth in EC (EU) regulations.

Comparability over time is achieved by using the same methodology, definitions and concepts in conducting surveys over a number of years.

Structural Business Statistics for Bosnia and Herzegovina are produced from 2010 using the same methodology, besides definitions of variables and indicators are harmonized with EU definitions.

Coherence of statistics is expressed in its adequacy for use by a variety of users. Structural Business Statistics data are compared with data from other statistics, such as data from national accounts, PRODCOM statistics, employment statistics, etc.

Full comparability is not possible because of different definitions of certain variables (value added at factor prices in the SBS and in the national accounts at basic prices) and different observation units (PRODCOM statistics follows a unit of homogeneous production, and SBS – enterprise statistics).

### **The Coefficient of variation calculation method**

#### **Brief description of quality criteria to be taken into consideration for the needs of the country**

Control and data editing is performed by entity institutes.

The application for data entry that is unique to all three statistical institutions has got (built inn) a set of controls for checking the completeness, accuracy and logics of the data at the level of primary subject. Errors are fixed through the contact with the reporting unit or by using some other source. After that, the statistical analysis of variables and indicators is performed, through which the extreme values are established (extrinsic value) that are then listed and verified. To determine outliers, the following indicators are used: turnover per person employed, value added per person employed, labor costs per employee, share of gross operating surplus in turnover, share of gross operating surplus in value added, investment per person employed and share of value added in production value. To determine outliers the algorithm Hidioglou-Berthelot in the programming environment “R” is applied.

#### **Calculation of the coefficient of variation**

Rating variance was performed using the package “survey” in the programming environment R, taking as a basis the initial sample design, as described in “Pattern or a list (census).” Bearing in mind that the calibration is performed separately for the entities and Brcko District of BiH, auxiliary variables are not directly used in the estimates of variance for domains related to the state (i.e. the level of BiH), which resulted in a wider confidence intervals for the estimates of parameters related to this domain.

## **2.7. Dissemination**

### **Names/Titles of printed publications**

Annual Release: Structural Business Statistics – preliminary results

Thematic Bulleting: Structural Business Statistics – final results and

Bosnia and Herzegovina in Figures: includes a brief overview of annual data for Bosnia and Herzegovina, including the Structural Business Statistics. Publications listed for the level of Bosnia and Herzegovina are issued in four language versions. Entity statistical institutions, in addition

to annual reports, prepare and publish periodic and annual publications that, among other data, publish data on structural business statistics as well.

#### **Title of electronic dissemination**

All listed publications are available at the website of the Agency for Statistics of BiH ([www.bhas.ba](http://www.bhas.ba)) and the website of the entity institutes ([www.fzs.ba](http://www.fzs.ba) and [www.rzs.rs.ba](http://www.rzs.rs.ba)).

#### **Description of the standard tables produced**

Standard tables include basic structural variables (number of enterprises, number of employees, turnover, production value, value added, employee costs, gross operating surplus and total purchases) and indicators (turnover per person employed, the value added per person employed, the share of value added in value production, the average labor cost per employee, gross operating rate). All variables and indicators for Bosnia and Herzegovina are published by sections and divisions and the following classes of employees:

- Small enterprises (0 to 49 employees),
- Medium enterprises (50 do 249 employees) and
- Large enterprises (250 and more employees).

#### **Deadlines for the releases**

Preliminary data are to be released 14 months and final 18 months of the end of the reference year.

#### **Confidential data treatment**

We do not use any protection in publications.

#### **Planned changes in methods of dissemination**

There is a plan to prepare a meta-data base at the Agency for Statistics of BiH is expected, which is going to include structural business statistics.

## **2.8. Transmission of data to Eurostat**

Bosnia and Herzegovina is not required to submit data to Eurostat, although the evaluation of the the statistical systems of candidate countries and potential candidates is performed on the basis of data provided to Eurostat.

Transmission of data to Eurostat shall be made in the prescribed format. The first transmission of SBS data for the year 2011 is in preparation stage. The transmission will continue in the future. Upon completion of the data transmission, countries are required to provide a Quality Report in precisely defined format.