

# **QUALITY REPORT** FOR STATISTICAL SURVEY

# CONSUMER PRICE INDEX 2014





Sarajevo, 2015

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

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

Consumer Price Index serves as a measurement of the inflation within the country. It serves for the aligning of wages and salaries in accordance with the collective agreements as well as the alignment of pensions and social benefits. It is also used for the maintenance of the value in agreements with index clauses, enables the comparison of the state of inflation with the state of inflation in other countries, comparison of prices within the country – among individual regions and serves as basis for as a basis for deflating national accounts macroeconomic data and other purposes.

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

- Laws on statistics of Bosnia and Herzegovina and its entities;
- Multi-annual statistical programs and annual work plans for BiH and its entities;
- Consumer Price Index methodology used in BiH;
- International recommendations and manuals (MMF, MOR, UN)

This statistical survey is the part of the annual programme of operations of the statistical institutions of Bosnia and Herzegovina. The statistical survey is a joint project of three statistical institutions working as a team to develop a set of instruments to implement the survey (methodology, instructions, forms, software solution for data entering), its implementation in the field, processing (each of the statistical institutions covering its area of jurisdiction) and data analysis.

The entity level institutes and BHAS for Brčko District Branch Office are responsible for the field work, collection and processing and publication of this index for entities and Brčko District.

Agency for Statistics of BiH shall consolidate data from the entities and Brčko District; it shall also process and publish the Consumer Price Indices for Bosnia and Herzegovina. In addition, the Agency for Statistics shall coordinate entity level institutes. It is also in charge of consumer price methodology in BiH and the exchange of data and documents with Eurostat.

#### 1.3 Observation unit

Observation unit refers to retail prices of products and services for final consumption that have the greatest share in an overall consumption of an average consumer and the fluctuation of which, at the same time, best reflects the fluctuations of prices of similar products or services. These products and services represent a so called »basket« of products. It mainly includes goods and services with more than 0.1% share in an overall consumption of the population.

#### 1.4 Data collection

All prices are collected locally – the collectors get clear specifications of products from the entity level Statistical Institutes and the Agency for Statistics of Bosnia and Herzegovina, their COICOP codes and the units of measure that were set forth. Based on this information, the collectors are selecting a specific product the price of which they will survey at the specific outlet.

The collector has to select the specific product using the criteria of the best selling product at the given outlet. In order to assure that the collectors observe the prices of same products month after month and in order to monitor which products the collectors are observing in the field, they are also obliged to enter a pre-defined set of additional product features into the questionnaire as well as to inform of any replacements of products, if any. Such a way of surveying enables the monitoring of the fluctuation of price between two periods.

For the purpose of the Consumer Price Index, the prices are being surveyed on following days within the month:

- the prices are being collected twice a month, in a first and in a third week of a month for the agricultural products sold at markets;
- Prices of all other products are, in line with the European regulations, being collected once a month (between the 1st and 21st each month). The interval between the surveys needs to remain the same, however.

#### 1.5 Scope

The Consumer Price Index in Bosnia and Herzegovina is calculated based on a representative list of products – in 2014, this list consisted of 604 products. About 21 000 prices are being collected each month, using a pre-defined sample of outlets at twelve geographic locations. The major products and services that the population is buying for final consumption are covered. The scope of products and services is revised regularly in order to maintain the representativeness of the list of products with regard to the taste of consumers and their shopping habits.

Prices are being collected at twelve locations – cities (Banja Luka, Bihać, Bijeljina, Brčko, Doboj, Istočno Sarajevo, Mostar, Prijedor, Sarajevo, Trebinje, Tuzla, Zenica) based on their weight in terms of population and their role within the geographic area they belong to.

The prices that are being collected for the Consumer Price Index in BiH are the prices being paid by the households in order to purchase individual goods and services using monetary transactions at the economic territory of Bosnia and Herzegovina. The prices collected are the prices actually paid in a moment of purchase, including all the taxes and excluding any subsidies to products. Prices are collected as a out of pocket expences taking into account all nondiscriminatory price reductions, including the VAT and excluding any possible subsidies on products.

#### 1.6 Definitions

*Consumer Price Index* refers to a measure of change in prices of products and services that the households are purchasing for their personal needs at the economic territory of Bosnia and Herzegovina.

*Product:* any product or service for personal consumption that can be purchased, common term for products and services.

*Representative item*: item at the lowest level of product aggregation, i.e. item in an outlet in a geographic location with a weight. The items at the lower levels of aggregation do not have weights attributed due to the lack of relevant data. There is a lower weight level; and they refer to the data collected from the refrent outlets.

*Outlet:* main observing units where the prices of products and services are being collected.

*Aggregate indices*: indices calculated as weighted averages of the elementary indices, referring to hierarchical positions, starting from the product.

Aggregation (of the index): combining of connected categories, usually within the common hierarchy branch, providing information at the broader level – level broader that the one used for observations.

*Baseline period*: time period used to collect data that serve as the basis for the calculation of the index or other ratios.

*Baseline price*: price from the baseline period.

*Price before replacement*: the price of the replacement product from the previous month.

*Elementary item*: product identified by a collector who, at the same time, selects specific variety, brands and packages. A certain quota is allocated for each product.

*Collection frequency*: a frequency rate for the collection of elementary prices. In BiH, the data for CPI are being collected once or twice a month.

*Calculated indices*: indices calculated using the December of the previous year as a basis – as a reference index period.

*Measurement unit*: an actual – real unit with the associated values of official quantity of the individual product.

*Products group (basket):* a selection of products that the households buy in monetary transactions for which the prices are being collected. It is selected in order to represent the most common consumer behaviour in terms of their final consumption.

*Chain index*: indices linked by adopting unique reference index period for calculated baseline indices based on December of the previous year.

*Collected quantities*: a specific quantity the product is being sold in. It is expressed in different measurement units.

Average data: average values calculated based on the elementary indices or the average price calculated from collected prices. It refers to average prices or average indices with regard to a specific product. In general, for the puposes of CPI calculation in BIH we use the geometric mean as an average.

*Change rate*: rate of change in a specific reference period compared to the value from the beginning of that period or from a specifically defined previous period of time.

*Weights*: expenditure shares used to express the relevance of a product within a basket used to calculate aggregated indices as weighted averages, starting from elementary indices. They are based on a date related to the final consumption of households and on data on an estimated population of BIH according to the results of the HBS survey implemented in 20011.

*Reference baseline indices*: indices calculated on 2010 base. Calculated by chain linkage of indices.

*Index reference period*: the period with the index basis of 100. CPIs in BiH are calculated using the past year December as baseline (calculus indices) or 2010 baseline (reference indices) – a common baseline enabling the comparison between different years.

*Price reference period*: period used to evaluate the price. In general, the period applied when it comes to CPI in BiH is the December of the previous year.

Weight reference period: period from which the expenditures have been used to calculate weights.

#### 1.7 Data processing

Calculation of the Consumer Price Index starts by calculation of elementary indices (product indices) and the representative item indices at the level of towns. The average data are calculated as the geometric mean. Aggregated indices are then calculated using the Laspeyers type formula, starting from the representative item index at the entity level all the way up to the general index for Bosnia and Herzegovina. The reference baseline used to calculate indices is the year of 2010. Two types of weights are used for calculation of Consumer Price Index: population weights (horizontal) and the weights referring to the expenditures of the household of BIH (vertical).

Weights used to calculate the Consumer Price Index are shares reflecting the relative relevance of selected products and services within the overall consumption of households at the domestic territory. They are used to calculate elementary indices as weighted averages. They are based on data linked to the final consumption of households and the population data (number of inhabitants). The main source of data for CPI weights is the Household Budget Survey.

Starting from January 2014, the weights used to calculate the Consumer Price Index are based on the data from the Household Budget Survey 2011. Weights are price updated every year.

#### **1.8** Publishing of results

The Agency is preparing releases in order to disseminate and comment the reference baseline indices for the previous month, for the general index and the indices of divisions and groups of products and services according to COICOP classification at the level of BiH. In addition, it releases, on monthly basis, average consumer prices of the official quantities of products for a selected list of products consisting of 80 products and services – mainly consisting of vital products and utilities, with the warning to users that the published data can not be used for the calculation of a price changes over time; that is accurately measured by an index.

The Annual Bulletin of the Agency for Statistics of Bosnia and Herzegovina contains the analysis of monthly data on the Consumer Price Indices from January to December 2014. All the data shown in statistical tables and graphs and their analysis have been made in line with the COICOP classification divisions and groups for the level of BiH.

The bulletin shows Consumer Price Indices with or without temporary price reductions for each month in 2010. It also shows average annual indices compared to baseline year of 2005. Graphs also show general indices by months with or without temporary price reductions and the share of individual COICOP divisions within the annual change in prices, calculated as a 2010 average compared to the 2005 and 2009 average. This bulleting also shows a graph with the analysis of the state of inflation in BiH in 2010.

The graphs are showing general Consumer Price Indices by months, as well as the share of specific COICOP divisions within the annual change of prices, calculated as the 2014 average compared to 2010 and 2013. When it comes to general indices, the indicators of the index level have been presented compared to December 2013 and compared to the same month of 2013. At the level of COICOP divisions, their share in an average annual inflation rate is shown. The indices analyzed represent an important and extensive indicator of the key inflation tendencies

in BiH, based on common methodologies for different domains and in line with the major principles stated in relevant European regulations.

#### 1.9 Key variables

- Retail prices of food products,
- Retail prices of non-food products,
- Retail prices of services,
- Retail prices of agricultural products,
- Retail prices of energy sources (energents)

#### 1.10 Key statistics

- Monthly index, showing change in prices in a current month compared to the previous one;
- Cumulative index, showing change in prices in a current month compared to past year December;
- Annual index, showing change in prices in a current month compared to the same month of the previous year;
- Average annual index, showing change in prices from the beginning of the year to the current month compared to the same period during the past year;
- Baseline index, showing change in prices in a current month compared to the average of a base year.

#### 1.11 Questionnaire

Data are mainly collected by field work. The consumer prices of products and services are collected using a unique paper form that consisted of the code and location of the data collection, the COICOP product code, brand and sort of the product and the quantity required for the observed products and services. In addition, this form contains cells used to enter the price, reduced price and the replacements made in terms of the sort, outlet, quantity or the product brand. Unlike the stated form, the form used to collect the consumer prices of products being collected by-monthly does not contain the data on the brand and variety of the product, since such info are not relevant for this type of products. In addition, this form does not have cells used to enter the reduced prices since this information is irrelevant too.

#### 1.12 Contacts

- Rubina Ligata Advisor at the Price Department of BHAS (rubina.ligata@bhas.ba)
- Gorcin Stojanovic Junior Official at the Price Department of BHAS (gorcin.stojanovic@bhas.ba)

#### 2 Relevance

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

CPI is designed based on internationally comparable methodological foundations defined by European Commission directives. Main requirements of these directives have been met. The key statistics required according to the international standards are being calculated for this index.

## **3** Accuracy

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

The methodology for calculating the accuracy of the Consumer price Index is still underdeveloped.

#### 3.1.2 Explanations

The methodology for calculating the accuracy of the Consumer price Index is still underdeveloped.

#### 3.1.3 Activities aiming to reduce sampling errors

The methodology for calculating the accuracy of the Consumer price Index is still underdeveloped.

#### 3.2 Non-sampling errors

#### 3.2.1 Coverage errors

The sample selected for the purpose of collecting of the consumer prices is not a random one; it was selected in order to meet the specific objectives. It is selected in a process consisting of four stages: selection of geographic areas, outlets, list of products and basic (elementary) items. A basic principle of selection was used in order to assure the representation in terms of consumer behaviour – in terms of coverage of the most frequently purchased products, most frequently visited outlets and best selling products. This is a purposive sample, thus the coverage errors are excluded.

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

This is a purposive sample, thus the coverage errors are excluded.

#### 3.2.1.2 Undercoverage error

This is a purposive sample, thus the coverage errors are excluded.

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

The lists of active outlets, best selling products and brands are updated regularly, in order to eliminate the coverage errors.

#### 3.2.2 Mesurement errors

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

The initial data control is done by collectors themselves, they are obliged to enter correct prices of the products and service from the list in a current month but also to accurately register any change in terms of brand, sort, quantity or in terms of the outlet.

This is followed by the logical data control. After the prices are entered into MS Access 2000 database, there is also the following automatic control being performed: if a price is equal to 0, the control of prices recording a huge change that cannot be justified – compared to the previously collected price and the control of prices reduced by more than 50%, controls whether a change or replacement of the brand, sort, outlet or reference quantity was entered, while such a change did not actually happened and the change rate controls.

The entity level statistics institutes then, upon the processing of data, controls the indices calculated with regards to the expected trends and the information obtained from other sources (such as announced changes in prices of certain products), logical data control for different cities, etc. The Agency for Statistics of BiH is doing the same thing for the data collected for Brčko District as well as the control in terms of comparability of data between the two entities.

#### 3.2.2.2 Causes of measurement errors

The measurement errors are only possible at the collection and data entry stages – by the collector or the person entering the data. Questionnaires and methodological instructions have been delivered to the collectors and regular contacts with the collectors are maintained in order to minimize errors.

#### 3.2.2.3 Procedures in cases of measurement errors

Upon detecting an error in the price collection or entry stages, the collectors are contacted – they then go to the specific outlet in order to check the data entered and then the entered data are corrected in application (but also in the registers used to store the data) for any future controls and analyses.

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

Any errors during price collecting and entering are corrected before the Consumer Price Index and the average prices are calculated, thus no subsequent data reviews are done.

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

Data collection and processing methodology for the Consumer Price Indices is well documented and precise. Regular annual meetings are being held with all collectors in order to explain any doubts and dilemmas and the methodology changes – this prevents any misinterpretations of the methodology.

Since the collectors are in constant contact with the outlets, they are able to get all the relevant information related to data collection ahead – information such as any closing-down of outlets, termination of contracts with the suppliers of certain brands, reasons for changes in prices or product descriptions, etc. that can be relevant for their future work.

#### 3.2.3 Non-response errors

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

Consumer prices of selected representative products and services used to calculate CPI are monitored at the selected outlets (such as shops, markets, craft shops, service and other organizations). The number of outlets cannot change during the year, thus the data on prices needs to be collected each month from each outlet selected at the beginning of the year. Since the prices are observed by collectors and that the outlets are currently not delivering these prices individually, each month, the coverage rate is 100%.

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

The quotas for each product or a service are established at the beginning of the year, and this number usually does not change, with the exception of the retail prices of agricultural products. In that case, the prices are collected only during the months when these products are sold at the market (i.e. during the season). In those months when a certain product is not available due to seasonal trends, the price is automatically assessed according to the last price for that product entered. Products that are seasonal fall within the fresh fruits and vegetables, clothing and footwear groups – some 45 products whose availability varies in certain months.

#### 3.2.3.3 Procedures in non-response cases

The collector may encounter a situation where s/he will not be able to collect the price of a certain product due to one of the following reasons:

- Collecting of prices was not conducted due to legitimate reasons;
- The outlet was temporarily closed;
- The outlet was closed-down permanently;
- The selected product was currently unavailable;
- The selected product is permanently not available;
- The selected product is unavailable due to season.

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

In cases listed above, the collector shall make a note on a collection form, and the cantonal/regional department in charge for the data entry, shall re-enter the price collected during the previous collection period – whether it was conducted last month or during the first half of the same month (if the prices are collected twice a month), with an appropriate mark.

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

Description	Maximum assessment period
Data not collected: collector did not collect the price	1 month
Data not collected: temporary closure	2 months
Data not collected: permanent closure	1 month
Data not collected: product unavailable currently	2 months
Data not collected: product permanently unavailable	1 month
Data not collected: product monitored by the municip. office	1 month
Data not collected: product monitored by BHAS	1 month
Data not collected: product unavailable due to season	Depending of the product (max. 11 months)

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

As already stated, any errors are eliminated during the data processing thus no subsequent revisions of data are conducted and there are no releases in that regard.

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

The data used for the Consumer Price Index statistics are not subjected to any revisions.

## 4 Timeliness and the accuracy of the release

#### 4.1 Timeliness of the release

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

The timeliness of the first release of the survey results is defined as the difference between the date of the first release and the end of the reference period – in our case it is 25 days from the end of the reference month. Deviations are rare and mainly refer to those months when significant changes in product lists are made or when the weights are being updated (usually the data for January).

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

The first release is at the same time the final data release – no subsequent changes are being made.

## 4.2 Accuracy of the release

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

There were no deviations in terms of the announced date within the annual publication calendar and the actual date of the release, with the exception of January – usually, due to the transfer into a new year and related changes in terms of methodology related to this Index, the data in January is published about a week later.

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

January is the only exception, and the reasons for these delays are already explained in a previous paragraph.

## 5 Availability and clarity

## 5.1 Availability

#### 5.1.1 Dissemination channels

Following dissemination channels are used to publish the results of the ICP conducted:

No	Dissemination channels	Used
1	Web page – internet release	YES
2	Written requests from users according to the specification they provide	YES
3	Data published via phone	NO
4	Digital media (CD, discs, etc)	YES
5	Data presented at the press conference	YES
6	Thematic bulletin	YES
7	Specialized printed publications	NO
8	Bases, available to external users	YES
9	Statistically protected microdata	YES

5.1.2 Quality and performance indicator – the rate of the dissemination channels used (AC1) The rate of the dissemination channels used is 78% (7/9X100).

#### 5.1.3 Dissemination modalities

Following dissemination modalities are used for the publishing of data from the ICP conducted:

No.	Dissemination modalities	Used
1	Web page – internet release	YES
2	Web pages of other institutions	YES
3	Web pages of international institutions	NO
4	Thematic web pages (i.e. Census)	NO
5	Written requests	YES
6	Phone facilitation	YES
7	Digital media (CD, disks, etc)	YES
8	Data presented at the press conference	YES
9	Yearbook	YES
10	BiH in Numbers	YES
11	First release	YES
12	Thematic bulletin	YES

13	Specialized publications	NO
14	Eurostat publications	NO
15	Publications of other international organizations (OECD, IMF)	NO
16	Databases, for internal use	YES
17	Bases available to external users	YES

5.1.4 Quality and performance indicator – the rate of the dissemination modalities (AC2) The rate of the channels used for the dissemination is 71% (12/17X100).

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

Should be developed in cooperation with the IT staff.

## 5.2 Clarity

## 5.2.1 Printed publications and internet publications - releases

- The release titled *Consumer Price Index in Bosnia and Herzegovina for the Month of.....* 2014;

- The release titled Average Consumer Prices for the Month of ...... 2014;
- Thematic bulletin titled 2014 CONSUMER PRICE INDEX IN BOSNIA AND HERZEGOVINA
- BiH in Numbers the part related to prices.

## 5.2.1.1 Disseminated results

The results of consumer prices survey is provided in the form of average prices of the products selected and in the form of indices. In addition to the tabled data overview, some of the data presented in the publications mentioned is also shown in the form of graphs.

## 5.2.1.2 Level (of details) of dissemination

The Consumer Price Index – in terms of its aggregation in publications mentioned is shown up to the level of 12 basic divisions and 40 product groups. Following indices are being presented by BHAS in its publications:

- Monthly index (current month compared to the previous one)
- Cumulative index
- Annual index
- Average annual index
- Average index for 12 months
- Baseline index.

## 5.2.1.3 Metadata

Reference metadata - ESMS: <u>Contact</u> (organization, organizational unit, mail address); <u>Metadata Updating - Dates</u>; <u>Statistical Presentation</u> (data description, classification system, sectoral coverage, statistical concepts and definitions, statistical unit, statistical population, reference domain, coverage in terms of time, baseline period); <u>Measurement Unit</u>; <u>Reference</u> <u>Period</u>; <u>Institutional Jurisdiction (Mandate)</u> (legal documents and other agreements, data provision);

<u>Confidentiality</u> (confidentiality – policy, confidentiality – data processing); <u>Publication Policy</u> (publication calendar, calendar of access to publications, user access); <u>Dissemination</u>

<u>Frequency</u>; <u>Dissemination Format</u> (releases – news, publications, on-line data base, access to micro-data, other); <u>Availability of Documents</u> (methodology documents, quality related documents); <u>Quality Management</u> (quality assurance, quality assessment); <u>Relevance</u> (user needs, user satisfaction, completeness); <u>Accuracy and Reliability</u> (overall accuracy, sampling error, non-sampling error - a) coverage error - b) measurement error - c) processing error - d) non-response error); <u>Timeliness and Release Accuracy</u> (timeliness, release accuracy); <u>Comparability</u> (comparability – geographical, comparability – within time); <u>Coherence</u> (coherence – between domains, coherence with i.e. population statistics, coherence with i.e. employment estimates in national accounts, coherence with the employment estimates derived from buss. surveys, coherence – internal); <u>Costs and Laud</u>; <u>Data Revision</u> (data revision – policy, data revision - practice); <u>Statistical Processing</u> (data sources, data collection frequency, data collection, data validity control, data compilation, adjusting).

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

Data posted at the new BHAS web page are shown in PDF format.

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

The total number of metadata elements from the Reference ESMS used is 56. The number of available metadata elements within the Consumer Price Index survey is 45. Thus, the metadata completeness rate for the Consumer Price Index is 80% (45/56x100).

## 6 Comparability and compliance

## 6.1 Comparability over time

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

The data on consumer price trends in Bosnia and Herzegovina is being collected in a unique way since 2005, while the first results were published in mid 2007. They are being regularly published ever since.

The monthly data are, thus, published from January 2005. By 2014, we already have a 9-years long time series for BiH. The value of this indicator, considering that these are monthly series is 9x12=108.

## 6.1.2 Interruptions within the time series

There were no interruptions in the Consumer Price Index in BiH series, from the introduction of the unique data collection process (2005).

## 6.1.3 Other factors affecting comparability over time

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

## 6.2 Geographic comparability

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

Despite certain differences in terms of methodology between the countries, the Consumer Price Index is being used as an internationally recognized measure of inflation.

It is, however, primarily used nationally. When it comes to BiH CPI, the majority of requirements deriving from directives and recommendations related to the CPI have been implemented recently. Unfortunately the Harmonized Index of Consumer Prices is not produced in BiH yet – this index is used to compare the inflation rate between the countries and to calculate the convergence measures in terms of price stability.

#### 6.3 Deseasonalization

The CPI data for the past years have not been deseasoned.

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

#### 6.4.1 Interim data dissemination policy

The Interim data dissemination policy does not apply to the presentation of results of the Consumer Price Index in BiH.

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

First results are the final results as well. This indicator is not being calculated.

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

There are no differences between the interim and final data since the first data are the final data as well.

#### 6.5 Compliance with the reference survey results

#### 6.5.1 Short description of the reference survey

No reference survey is being implemented since the Harmonized Index of Consumer Prices is not being produced in BiH yet.

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

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

#### 6.5.3 Reasons for significant deviations

There are no reference surveys being conducted.

## 7 Trade-offs between the quality output components

No trade-offs (trade-off between the quality output components) were analyzed within this survey.

## 8 Assessment of the needs and perceptions of users

Frequent requests from users were met by on line publishing of the data. This table contains the index series by COICOP codes (total, index, divisions and groups) facilitating data management and analysis and by the constant availability of the staff involved in the production of these data for any possible users requests or questions. In order to facilitate the interpretation of the data presented, each release includes a short comment and the methodology instructions in all three official languages used in Bosnia and Herzegovina and in English as well – to assist the foreign users. Thematic bulletin includes an English version as well.

#### 8.1 Classification and understanding users

Institutions such as the Central Bank of Bosnia and Herzegovina, Agency for Economic Planning, Public Procurement Agency, World Bank, International Monetary Fund, European Central Bank are listed as the primary users of the Consumer Price Index that the Agency of Statistics of BiH maintains regular contacts with and delieveres all the requested data on indices and the weights that are not publicly available. Additional users are private sector banks (commercial banks), university workers and students that are provided all the information allowed upon written request.

#### 8.2. User perception and satisfaction monitoring

Satisfaction of users is mainly monitored based on the frequency of their requests and petitions sent to BHAS – in terms of frequency of similar requests which are, later on, being introduced into release itself – if these requests are found to be legitimate and if they do not refer to data we are obliged o protect.

#### 8.2.1 Quality and performance indicator – the user satisfaction index (US1)

No specific survey in terms of the user satisfaction with regard to this product is being conducted.

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

No specific survey in terms of the user satisfaction with regard to this product is being conducted.

## 9 Respondents/reporting units costs and workload

#### 9.1 Survey costs for the statistics office

9.1.1 Quality and performance indicator – annual operational costs, averages as per main cost components (PCR1)

The costs to statistical institutions in BiH implementing the survey related to the Consumer Price Index will be presented using labour costs, i.e. the number of working hours spent by employees engaged in the implementation of this survey.

Table: Number of working hours spent in 2010 (2+7+2+5+2)x2184=39312 hours

	Number of working hours
TOTAL	39312
Index calculation	13104
Price collection and control	26208

#### 9.2 Respondents/reporting units costs and workload

## 9.2.1 Quality and performance indicator – respondents' annual workload in hours and/or financial indicators (PCR2)

Reporting units' costs and workload are negligible, considering that all the data needed to implement this survey are collected by price collectors that are employed by statistical institutions. There is no traditional delivery of forms to the field, as is the case with the majority of statistical surveys.

#### 9.3 Measures taken in order to reduce the costs and workload

Since the workload of the reporting units is minor while they bear no costs whatsoever, no measures have been undertaken to reduce the costs.

#### 10 Confidentiality, transparency and protection

#### 10.1 Confidentiality

Statistical data confidentiality is required by law, while the staff in charge of the statistical survey is also, according to the same legislation, bound to protect that confidentiality. Thus the Article 27 of the Law on Statistics of BiH states that »All measures of organisational, regulatory, administrative and technical nature necessary to protect Confidential Data against unauthorised access, disclosure and use, shall be taken by the Competent Authorities in collecting, processing, transmitting and dissemination of Statistics of Bosnia and Herzegovina including at the Entity level«, while the Article 28 of the same Law states that »Persons having access to Confidential Data in the performance of their tasks shall be subject to compliance with the provisions of this law, even after the cessation of their functions«.

In addition, the document called the *Rulebook on the Protection of Statistical Data at the Agency for Statistics* states the procedures to secure confidentiality during collection, processing and dissemination – including protocols to safeguard individual accessible data, rules to define confidential cells in output tables as well as procedures to detect and prevent disclosure and the access to microdata by external users for research purposes.

#### 10.2 Transparency

Users are informed of the way of how to use the data from the Consumer Price Index statistical survey.

Statements at the press conference related to survey results are absolutely impartial and politically neutral.

No errors have been detected in the CPI publications, thus there was no need for any corrections and for the publishing of such changes.

#### 10.3 Protection

Listed in Chapter 10.1.

#### 11 Conclusion

In the forthcoming period, the Agency for Statistic of BiH plans to start the development of the new central application for the price entry and processing (the application will be a result of the statistical institutions in BiH) in order to provide for the full independence in work and to improve the data quality. In addition, we are aiming to implement the newly adopted regulations related to HICP in order to align them to European regulations to the highest possible degree.