

# TWINNING CONTRACT

BA 15 IPA SR 01 17

## Support to the reform of the statistics system in Bosnia and Herzegovina



## MISSION REPORT

**Activity 2.3.6:**  
**Preparation of regular survey on CPPI for Civil Engineering II**

**Component 2: Business Statistics**  
**Sub-component 2.3: Construction Producer Prices Index**

Mission carried out by  
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## List of Abbreviations

BHAS	Agency for Statistics of Bosnia and Herzegovina
BiH	Bosnia and Herzegovina
CBBH	Central Bank of Bosnia and Herzegovina
DB	District of Brčko
EC	European Commission
EU	European Union
FBiH	Federation of Bosnia and Herzegovina
FIS	Institute for Statistics of Federation of Bosnia and Herzegovina
MS	EU Member State
RSIS	Institute for Statistics of Republika Srpska
SIMS	Single Integrated Metadata Structure
RTA	Resident Twinning Adviser
ToR	Terms of Reference

## 1. General comments

This mission report was prepared within the EU Twinning Project “Support to the reform of the statistics system in Bosnia and Herzegovina”. It was the fifth mission to be devoted to sub-component 2.3 within Component 2 of the project.

The purposes of the mission were:

- Follow up from the previous mission:
  - **To be prepared by the BC counterpart**
  - Fill out relevant metadata tables
  - Investigate new item descriptions
  - Include weights in IT-application and check that the computation of indices works in the IT-application
- Preparation of weighting system
- Calculation of output results from the pilot survey for 2017 and 2018
- Preparation of detailed report on conducted pilot survey
- Presentation of MS on output tables (publication forms, transmission formats, etc.)
- Revision policy

The consultant would like to express his/her thanks to all officials and individuals met for the kind support and valuable information which he/she received during the stay in Bosnia-Herzegovina and which highly facilitated the work of the consultant.

This views and observations stated in this report are those of the consultant and do not necessarily correspond to the views of EU, BHAS, FIS, RSIS, CBBH, Statistics Denmark, INSEE, Statistics Finland and Croatian Bureau of Statistics.

## 2. Assessment and results

### Follow up from the last mission

The last mission under this sub-component took place in Banja Luka in March 2019. At the last mission it was concluded that the “pilot” survey for the years 2017 and 2018 is sufficient regarding collection of data for these two years. The next regular survey for the year 2019 is therefore not to be conducted before the beginning of 2020.

Since the last mission all three statistical institutions have therefore worked with the collected data from the “pilot” survey for the years 2017 and 2018. The data from the paper questionnaires have been entered into the new IT-application together with the weights.

Since the last mission, the weights were sent to the MS experts and agreed upon.

The new IT-application is working and the participants from BHAS, FIS and RSIS are all satisfied with it so far. They are still working with small adjustments for the system as they discover errors and inconveniences.

Before this mission, the elementary indices and total indices have been calculated.

### Data validation issues

The three statistical institutions have all carried out some basic data validation that has led to some questions to be discussed at this mission.

#### 1. Large price changes between reporting units

The local experts have observed some large price differences between reporting units for the same items. This is however not necessarily an issue. The index calculations are done based on price changes and not price levels. Therefore it is not a problem that the price levels differ between reporting unit, unless the prices differ significantly from year to year or if it means that the reporting units have misunderstood what they should report. In order to examine this, the local experts needs to contact the reporting units and ask questions about the price changes. It is recommended that this is done in the near future.

#### 2. New items

Some reporting units have reported new items that are not included in the bill of quantities. The question is if these should be included as new items or as sub-items under existing items or not included at all. Due to the choice of using weights at the most detailed level, that is, at the item level, it is not possible to include new items without a having weight. That is the downside of using weights at this level. Therefore these 14 new items must be included as sub-items under the existing items. It must be decided for each of these units where they can be included. This should be done in cooperation with the reporting units, as they have the expertise to know, when it is a reasonable assumption, that a new item is the same as one of the items from the questionnaire. This solution avoids creating a new category and estimating new weight.

### Publication and confidentiality

It has been decided, to postpone the publication of these indices, which means that they will be published for the first time in February 2020 together with indices for Residential buildings.

During the last mission some issues regarding publication level and confidentiality was discussed. Therefore it was decided that the following metadata tables should be filled out.

The first table was filled in during the last mission. It shows the number of questionnaires received for each type of activity.

Number of questionnaires <sup>1</sup>	DB	FIS	RSIS	BHAS (total)
Total population (enterprises)	18	95	61	174
Roads - questionnaires received	12	34	9	54
Motorways - questionnaires received	2	16	4	22
Tunnels - questionnaires received	3	6	0	9
Bridges - questionnaires received	5	17	3	24

Before and during this mission the second table was filled out. This table shows the number of items by activity with less than three prices (confidential), three prices (maybe confidential) and more than three prices (can be published).

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1

In red appear data with less than three questionnaires

Number of reported prices for each item <sup>2</sup>	DB	FIS	RSIS	BHAS (total)
Roads (items with less than 3 prices)	1	0	0	0
Roads (items with 3 prices)	0	0	0	0
Roads (items with more than 3 prices)	9	10	10	10
Motorways (items with less than 3 prices)	17	0	5	0
Motorways (items with 3 prices)	0	0	3	0
Motorways (items with more than 3 prices)	0	17	9	17
Tunnels (items with less than 3 prices)	6	0	0	0
Tunnels (items with 3 prices)	1	4	0	4
Tunnels (items with more than 3 prices)	0	22	0	22
Bridges (items with less than 3 prices)	8	0	10	0
Bridges (items with 3 prices)	1	0	8	0
Bridges (items with more than 3 prices)	0	26	0	26
<b>Total (items with less than 3 prices)</b>	<b>32</b>	<b>0</b>	<b>15</b>	<b>0</b>
<b>Total (items with 3 prices)</b>	<b>2</b>	<b>4</b>	<b>11</b>	<b>4</b>
<b>Total (items with more than 3 prices)</b>	<b>9</b>	<b>75</b>	<b>19</b>	<b>75</b>

The first table shows that motorways and tunnels for the District of Brčko and bridges and tunnels for RSIS should not be published due to confidentiality issues. In these cases there are three or less than three questionnaires, which means less than three reporting units. This can cause problems in relation to confidentiality for the individual reporting unit.

The second table shows that some items especially for the Brčko district, but also for RSIS have less than three prices which means that these items cannot be disseminated. This however is not a problem, as BiH does not plan to publish indices at this detailed level.

In relation to the general confidentiality policy in both France and Denmark, the following rules apply:

- No indices should be published based on less than three prices or with less than three reporting units.
- No indices should be published based on prices from a reporting unit with a dominant market share. A dominant market share is defined as 85% market share or more.

The confidentiality analysis should be made at the level of planned publication. That is how it is done in both Denmark and France.

The plan is to publish indices at the following levels for BHAS:

- Total Civil engineering
- Roads
- Motorways
- Tunnels
- Bridges

For FIS:

- Total Civil engineering
- Roads
- Motorways
- Tunnels
- Bridges

For RSIS:

- Total Civil engineering
- Roads
- Motorways

From tables one and two this does not seem to be a problem in relation to the first confidentiality criteria (number of prices and reporting units). For RSIS it must be examined further if there is a problem with Bridges in relation to this first confidentiality criteria. In order to overcome this possible issue, it is also recommended that RSIS makes an additional effort to collect the missing prices for bridges and tunnels as well as prices from the reference year 2017, by contacting the reporting units that has not yet responded to the questionnaires.

For both FIS and RSIS the second confidentiality criteria concerning dominant market shares must be examined further. If an issue regarding this criteria occurs, BHAS must also take this into consideration in the publication of the overall indices.

No dissemination is planned to be carried out for the Brčko district alone.

The Law of statistics in BiH states that statistical data must not be published if there are less than three units and reporting units or in the case where a single unit excess 85 percent of the market. This resembles the confidentiality policies in both France and Denmark. It is recommended that BiH formalize this in an actual confidentiality policy. For inspiration MS experts will provide the BC experts with examples of the confidentiality policies from Statistics Denmark and INSEE.

#### **Detailed report on conducted survey**

No detailed report on the conducted survey was prepared. It was agreed that the detailed mission reports contain detailed descriptions of activities carried out and the results obtained through conducted pilot survey on CPPI for civil engineering works in BiH. These reports will serve as report on the conducted “pilot” survey.

#### **Computation of indices in the new IT application**

Prices have been entered and indices calculated in the new IT application for DB and FIS. RSIS will do the same in the near future and will provide output from IT application to BHAS in the right format in order to enable BHAS to calculate CPPI indices for civil engineering works for BiH using the IT application that still needs some modifications. There were cases with empty items, *i.e.* items with no prices provided by reporting units. In this moment, the IT application cannot handle this situation as it is not possible to delete an item and for the system to recalculate the weights automatically. The conclusion is that the IT application still needs some modifications, and this issue has been sent to Søren.

A total index at BHAS level has not yet been defined in the IT application. Therefore BHAS has calculated the total indices with prices from all three statistical institutions in Excel.

When looking at the index levels, the local experts are wondering why the index for civil engineering is higher than the index for new residential buildings. First, they don't have the same base period. The index for new residential building has as base period the last quarter of 2015, whereas the index for civil

engineering has as base period the year 2017. Second, it is difficult to validate this index development without any specific industry knowledge.

The recommendation of how to validate these index numbers for civil engineering is to talk to an industry organization or the company who did the bill of quantities, that is, someone who has a specific knowledge about the industry and knows how the prices are expected to develop. Another possibility is to compare the changes of the indices with another European country who produce and publish these indices.

### **Imputations**

The use of imputations must be split in the following problems:

- The lack of prices in one period
- The lack of prices for an entire item

If a price is missing in one period, one option is to copy the previous price and use the unchanged price. Another option is to impute the average price change from the item or from the entire product *e.g.* roads, motorways, tunnels or bridges.

If prices are missing for an entire item and this is a permanent situation, the item should be excluded from the index calculation and the weights should be recalculated.

For RSIS 8 of 26 items had no prices at all. The missing prices in this case concerned 3 or 4 firms. For FIS all items have at least one price. Therefore, BHAS has at least one price for all items at BiH level so the index calculation can be done for BiH level.

### **Revision Policy**

G rard Vittek has presented French revision policy and gave an example of dissemination in producer price index in order to illustrate revision data in publication ([www.insee.fr/en/statistiques/4133265](http://www.insee.fr/en/statistiques/4133265)).

We must distinguish revision from correction of error.

In France, revision and redesigns are announced in advance to users and documentation is available in order to appreciate the impact of the modification.

All three statistical institutions revise their statistics but do not signal the status with a letter before the figure. It is indicated in the footnote that "preliminary results footnotes will become final with the publication of the next publication". In case of revision or correction a new release with the corrected or revised data is disseminate to pay attention of the user; modified data are marked with an asterisk.

INSEE signals with a sign before the figure the status of the data: provisional (P), revised (R), semi-definitive (SD) and definitive (nothing). Maybe this codification is used by National Accounts.

### **Quality Report**

The quality report is defined as a report respecting the SIMS format. A template has been made to be used by BHAS, FIS and RSIS and can be seen in annex 2. This template should be used to produce a quality report for Producer price Index for Civil Engineering. It has been determined that it should be filled out during the next mission in corporation with local experts from FIS, RSIS, BHAS and MS experts.

If local experts find it necessary to also produce a metadata report, which resembles the quality report, this could be done at a later state, but should not be a part of this activity.

### **Methodology document**

A methodology document has been produced with methodological guidelines for producer price index in construction of new residential buildings. This document can be used as a template for a methodology document for civil engineering. A draft of this document should be prepared and send to the MS experts in advance for the next mission.

### 3. Conclusions and recommendations

It was concluded that the price changes can be consistent even if the price levels differ between reporting units. Only the price change is used in the index calculations.

It is recommended that the local experts phone the reporting units and ask questions regarding price levels and price changes when they observe large variations.

It is recommended to include the 14 new items as sub-items under the existing items to avoid creating new weights. This should be done in cooperation with the reporting units

It is recommended that a confidentiality analysis should be made at the level of planned publication, using the following criteria:

- No indices should be published based on less than three prices or with less than three reporting units.
- No indices should be published based on prices from a reporting unit with a dominant market share. A dominant market share is defined as 85% market share or more.

Based on the first criteria it was concluded that FIS, RSIS and BHAS are able to calculate and to disseminate CPPI at the level of the four questionnaires: Roads, Motorways, Tunnels (except RSIS) and Bridges (except RSIS).

It is recommended that BHAS, FIS and RSIS develop an official confidentiality policy in line with the law of Statistics for all three statistical institutions and the Code of practice.

It was concluded that the IT system still needs some modifications. Especially it should be possible to delete items and recalculate weights. It should also be possible to calculate the overall BHAS indices.

It is recommended that FIS, RSIS and BHAS analyse the computed producer price indices for civil engineering. In order to interpret the price changes, FIS, RSIS and BHAS should contact the reporting units with the largest price changes, industry organisations and the ministry in charge of construction.

It is recommended to impute the average price change from the item or from the entire product *e.g.* roads, motorways, tunnels or bridges when a price is missing in one period. It will heighten the consistency of the data collection.

It is recommended to exclude an item from the index calculation and recalculate the weights when prices are missing for an entire item and this is a permanent situation.

It is recommended to improve revision policy by implementing a codification of status of data, mentioning in the normal dissemination support which data have been revised since the previous release and announcing in advance revisions and redesigns. This will allow to suppress extra-release dedicated to revision.

It is recommended to produce a quality report based on the template in annex 2.

It is recommended to start working on a draft methodological document.

It was concluded that the methodological document regarding civil engineering should use a template from the already existing methodological document regarding construction of new residential buildings.

The next mission should take place in September or the beginning of October 2019 and should focus on filling out the quality report in corporation between local experts from FIS, RSIS, BHAS and MS experts.

*Actions needed for moving forward as well as for preparing the next mission –add rows as needed.*

<b>Action</b>	<b>Deadline</b>	<b>Responsible person</b>
Compute indices using the new It application for all three statistical institutions and one overall index for the BiH level	Before the next mission	BC experts
Analyse computed index numbers	Before the next mission	BC experts
Perform confidentiality analysis at the level of planned publication	Before the next mission	BC experts
Determine and coordinate the level of dissemination	Before the next mission	BC experts
Start working on the methodological document and send draft for MS experts	Before the next mission	BC experts
Fill out quality report	At the next mission	BC and MS experts
Present a draft for the methodological document.	At the next mission	BC experts

**Annex 1. Terms of Reference****Terms of Reference****EU Twinning Project BA 15 IPA ST 01 17**

**Component 2: Business Statistics**  
**Sub-component 2.3: Construction Producer Price Index**  
**13-16 May 2019**

**Hosting institution: BHAS – Zelenih beretki 26, Sarajevo****Activity 2.3.6: Preparation of regular survey on CPPI for Civil Engineering II****1. Mandatory result and benchmarks for the component**

Mandatory result:

- Construction producer price index for division F42 – Civil engineering works produced by 8<sup>th</sup> project quarter

Benchmarks:

- Plan for development of producer price index produced by 1<sup>st</sup> project quarter
- Draft questionnaire and supporting documents for pilot survey prepared by 1<sup>st</sup> project quarter
- Pilot survey conducted by 2<sup>nd</sup> project quarter
- Results of pilot survey analysed by 2<sup>nd</sup> project quarter
- Criteria for an IT application defined by 2<sup>nd</sup> project quarter
- Plan for regular production developed by 4<sup>th</sup> project quarter
- Index compiled by 5<sup>th</sup> project quarter
- Index made available to users by 6<sup>th</sup> project quarter
- Methodological document on producer prices in construction developed by 8<sup>th</sup> project quarter
- Quality report for producer prices in construction developed by 8<sup>th</sup> project quarter

**2. Purpose of the activity**

- Follow up from the previous mission:
  - **To be prepared by the BC counterpart**
    - Fill out relevant metadata tables
    - Investigate new item descriptions

- Include weights in IT-application and check that the computation of indices works in the IT-application
- Preparation of weighting system
- Calculation of output results from the pilot survey for four quarters of 2018
- Preparation of detailed report on conducted pilot survey
- Presentation of MS on output tables (publication forms, transmission formats, etc.);
- Revision policy

### **3. Expected output of the activity**

- Weighting system including calculation of deflators prepared
- Results from pilot survey calculated
- Detailed report on pilot survey prepared
- Revision policy agreed
- Input provided to the ToR of next activity

### **4. Participants**

#### **Agency for Statistics of BiH (BHAS)**

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#### **Institute for Statistics of Federation of BiH (FIS)**

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#### **Institute for Statistics of Republika Srpska (RSIS)**

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## Annex 2. Template for Quality Reports in BiH

### INTRODUCTION

#### 1 STATISTICAL PROCESS AND STATISTICAL OUTPUTS

#### 2 RELEVANCE

##### 2.1 The users of statistical survey data

###### 2.1.1 The users of statistical data

###### 2.1.2 Assessment of the users needs

###### 2.1.3 Assessment of the perception and user satisfaction

##### 2.2 Completeness of data

###### 2.2.1 Quality and performance indicators - Data completeness rate (R1)

#### 3 THE ACCURACY AND RELIABILITY

##### 3.1 The sampling errors

###### 3.1.1 Quality and performance indicators - Sampling error (A1)

###### 3.1.2 Activities to reduce the sampling errors

##### 3.2 Non-sampling errors

###### 3.2.1 Non-sampling errors - Coverage errors

###### 3.2.1.1 Quality and performance indicators - Over-coverage rate (A2)

###### 3.2.1.2 Quality and performance indicators - Joint units share (A3)

###### 3.2.1.3 Errors of under-coverage

###### 3.2.1.4 Measures to reduce coverage errors

###### 3.2.2 Non-sampling errors - Errors of measurement

###### 3.2.2.1 The reasons for the occurrence of errors of measurement

###### 3.2.2.2 Measures to reduce the number of errors of measurement

###### 3.2.3 Non-sampling errors – Non-response errors

###### 3.2.3.1 Non-sampling errors – Non-response errors

###### 3.2.3.2 Quality and performance indicators - Item non-response rate (A5)

###### 3.2.3.3 Procedures in the case of non-response

###### 3.2.3.4 Methods for reducing of non-response rate

###### 3.2.4 Imputation

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###### 3.2.5.1 Quality and performance indicators - Average size of data revision (A6)

#### 4 TIMELINESS AND PUNCTUALITY

##### 4.1 Timeliness of publishing

###### 4.1.1 Quality and performance indicators - Time lag of first results (TP1)

###### 4.1.2 Quality and performance indicators - Time lag of final results (TP2)

##### 4.2 Publishing punctuality

###### 4.2.1 Quality and performance indicators – Publishing punctuality (TP3)

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## 1. STATISTICAL PROCESS AND STATISTICAL OUTPUTS

### 1.1 The purpose of the survey

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 1.2 Legal basis and responsibility of statistical institutions

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 1.3 Classifications used

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 1.4 Reporting unit

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 1.5 Statistical observation unit

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 1.6 Coverage

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 1.7 Statistical concepts and definitions

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

## 2 RELEVANCE

### 2.1 Users of statistical survey data

#### 2.1.1 Key users of statistical survey data

Key users of statistical survey data are:

#### 2.1.2 Assessment of users needs

The main user requests for data are:

#### 2.1.3 Assessment of the perception and user satisfaction

User satisfaction of this survey is measured:

(If you don't use any method of measuring user satisfaction - write)

The measurement of satisfaction and perceptions of users is not conducted.

## 2.2 Completeness of data

### 2.2.1 Data completeness rate (R1)

Data completeness rate is ..... %

## 3 THE ACCURACY AND CLARITY

### 3.1 Sampling errors

#### 3.1.1 Sampling error (A1)

(In the table below indicate the coefficient of variation and / or confidence interval for the most important statistics and the most important variables of the statistical survey)

(If you don't conduct a statistical survey based on a sample - write)

Sampling error can't be calculated because the survey is not based on a random sample.

#### 3.1.2 Activities to reduce the sampling errors

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 3.2 Non-sampling errors

#### 3.2.1 Non-sampling errors - Coverage errors

##### 3.2.1.1 Over- coverage rate (A2)

(Specify the the average unweighted and / or weighted rate or write:

Over- coverage rate is ..... %.

... % units does not belong to the target population. (average)

(If you conduct monthly or quarterly survey, please give the data in the table )

Reference period	Month or I quartal	n-month or n-quartal	Annual average
Number of units in sample frame / address book	.....	.....	.....
Irrelevant units in sample frame / address book	.....	.....	.....
Over- coverage rate (%)	.....	.....	.....

(If you don't have the information of over-coverage rate, write:

We have no information that would allow us to calculate the over-coverage rate.

##### 3.2.1.2 Joint units share (A3)

Joint units share in this survey is ... %.

(If in this particular survey you don't use units from two different sources - write)

This survey does not combine data from two or more sources.

### 3.2.1.3 Errors of under-coverage

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 3.2.1.4 Measures to reduce coverage errors

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

## 3.2.2 Non-sampling errors - Errors of measurement

### 3.2.2.1 The reasons for the occurrence of errors of measurement

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 3.2.2.2 Measures to reduce the number of errors of measurement

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

## 3.2.3 Non-sampling errors – Non-response errors

### 3.2.3.1 Units non-response rate (A4)

(Specify the the average unweighted and / or weighted rate)

Units non-response rate is ..... %.

(If you conduct monthly or quarterly survey, please give the data in the table)

Reference period	Month or I quartal	n-month or n-quartal	Annual average
Number of relevant units	.....	.....	.....
Number of non-response			
Units non-response rate (%)			

(If you don't have the information of units non-response rate, write)

We have no information that would allow us to calculate the units non-response rate.

### 3.2.3.2 Item non-response rate (A5)

(Specify the the average unweighted and / or weighted rate)

Item non-response rate is ..... %.

**Note:** If there is only one variable, item non-response is equal to the unit non-response  
(If you conduct monthly or quarterly survey, please give the data in the table –item non-response rate must be calculated for all key variables).

Reference period	Month or I quartal	n-month or n-quartal	Annual average
Number of relevant units	.....	.....	.....
Number of non-response			
Item non-response rate (%)			

(If you don't have the information of item non-response, write)

We have no information that would allow us to calculate the item non-response rate.

### 3.2.3.3 Procedures in the case of non-response

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 3.2.3.4 Methods for reducing the rate of non-response

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

## 3.2.4 Imputation

### 3.2.4.1 Imputation rate (A7)

(Specify the the average unweighted and / or weighted rate)

Imputation rate is..... %.

(If you conduct monthly or quarterly survey, please give the data in the table – imputation rate must be calculated for all key variables)

Reference period	Month or I quartal	n-month or n-quartal	Annual average
Number of units for which the variable Y is imputed	.....	.....	.....
Number of units for which values of the variable Y remained unchanged			
Imputation rate (%)			

(If you don't have the information of imputation rate, write)

We have no information that would allow us to calculate the imputation rate.

### 3.2.5 Revisions

#### 3.2.5.1 Average size of data revisions (A6)

(Average size of data revisions –when you have relative data)

The total number..... in ..... releases at annual average has changed for.....

(Average size of data revisions –when you have absolute data)

The total number..... in ..... releases at annual average has changed for..... %.

## 4 TIMELINESS AND PUNCTUALITY OF PUBLISHING

### 4.1 Timeliness

#### 4.1.1 Time lag of first results (TP1)

(If you conduct monthly survey please give the Time lag of first results data for each month in the table below)

Reference period	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Average
Date of publishing of the first results	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	/
Time gap (number of days or months)	T+...	T + ...											

Time lag of first results (annual average) is T + ...

(If you conduct quarterly survey please give the Time lag of first results data for each quarter, in the table below)

Reference period	I quarter	II quarter	III quarter	IV quarter	Average
Date of publishing of the first results	.....	.....	.....	.....	/
Time gap (number of days or months)	T+...	T+...	T+...	T+...	T + ...

Time lag of first results (annual average) is T + ...

(If you conduct annually survey the Time lag of first results is

Reference period	
Date of publishing of the first results	
Time gap (number of days or months)	T+....

Time lag of first results is T + ....

#### 4.1.2 Time lag of final results (TP2)

(Please use the same tables as in the 4.1.1, instead of »Date of publishing of the first results«, write »Date of publishing of the final results«)

(If the Time lag of first results is also and final results, you don't calculate this indicator just give the note and write the following text)

The Time lag of first results are in the same time the Time lag of final results.

## 4.2 Publishing punctuality

### 4.2.1 Publishing punctuality (TP3)

(The indicator is calculated in two ways - The calculation procedure of indicator for producers and The calculation procedure of indicator for users).

#### The calculation procedure of indicator for producers:

(If you conduct monthly survey please give the punctuality data for each month)

Reference period	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Average
Expected date of publishing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	/
Actual date of publishing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	/
Time gap (number of days)	T+...	T + ...											

Publishing punctuality is T + .... .

(If you conduct quarterly survey please give the punctuality data for each quarter)

Reference period	I quarter	II quarter	III quarter	IV quarter	Average
Expected date of publishing	.....	.....	.....	.....	/
Actual date of publishing					/
Time gap (number of days)	T+...	T+...	T+...	T+...	T + ...

Publishing punctuality is T + ....

(If you conduct annual survey -write)

Reference period	
Expected date of publishing	.....
Actual date of publishing	
Time gap (number of days)	T+...

Publishing punctuality is T + ....

**Note:** If there is not gap between expected and actual date of publishing - according to the Calendar of publication, in this case you write **0**.

If the results of certain statistics actually published before the expected date of publication of the results - according to the Calendar of publication, the indicator can also take a negative value, in which case we write **T - ...**

#### The calculation procedure of indicator for users

(The calculation of punctuality for group of statistics/results – Example: If 8 statistics/results are published on/ or before expected date of publishing, and by Calendar of publishing it is planned total of 12 statistics/results, the value of indicator equals to:  $8/(8+4)=0.67$  or 67%.)

Publishing punctuality is ..... %

4.3 The reasons for the major delays and measures to improve the timeliness and punctuality

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

(If there is no delay between expected and actual date of publication, write)

In publication of the results there was no delay.

## 5 COHERENCE AND COMPARABILITY

### 5.1 Coherence

#### 5.1.1 Coherence between different sources, coeff.(CH1)

(In the case of absolute amounts, coherence is shown in relative form)

..... (the name of statistics/variable)..... that is result of survey is ..... % bigger/ lesser than number of .....from..... (specify the name of the second reference survey/ source).....

(In the case with the relative data (ie.indices, percentages) coherence is expressed in absolute form)

..... (the name of statistics/variable)..... that is result of survey is bigger/ lesser for ..... indices than number of..... from..... (specify the name of the second reference survey/ source).....

#### 5.1.2 *The reasons for the major delays*

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 5.2 Comparability

#### 5.2.1 *Asymmetry for mirror flows statistics, coeff. (CC1)*

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

Note: This indicator is only applicable in the domains there is comparable statistics (eg. foreign trade statistics, migration statistics, tourism, FATS, balance of payments, etc.)

The coefficient of asymmetry (discrepancies) equals to ....., we conclude that discrepancy of these statistics is ..... %.

Note: If the coefficient equaled to zero, there would be a perfect symmetry (coincidence) of data (ie outgoing flows in this case were the egzect with comparable incoming flows).

#### 5.2.2 *Length of comparable time series (CC2)*

Length of comparable time series is .....

#### 5.2.3 *Interruptions in the time series*

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 5.3 Geographical comparability

#### 5.3.1 *Comparability with other members of the European Statistical System*

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

## 6 ACCESSIBILITY AND CLARITY, DISSEMINATION FORMAT

### 6.1 *Press releases with published data*

(List the names of regular and irregular press releases with a list of published data sets and on-line link to the press release)

### 6.2 *Publications with published data*

(List the names of regular and special publications with a list of published data sets and on-line link to the publication)

### 6.3 *On – line data base*

(Indicate the information about available on-line database to access the disseminated data with a link to it)

(If the on-line database is not available, write )

The on-line database is not available.

### 6.4 *Access to microdata*

(Specify the information if microdata is available, and if so briefly describe the rules of anonymization of microdata.)

(If the microdata is not available, write)

The microdata is not available.

### 6.5 *Accessibility of methodological documentation*

(Indicate information on the availability of reference metadata files, important methodological manuals (title, publisher, year and a link to the online document), etc.)

### 6.6 *Measures to improve the user-friendliness*

(Describe any activities that are planned in connection with improving of the user-friendliness of print and online publication)

### 6.7 *Data set consultations (AC1)*

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

Number of users consultations related to statistics of..... year equals ..... (web pages hits).

### 6.8 *Metadata consultations (AC2)*

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

Number of consultations of reference metadata (SIMS) in ..... year equals..... (web pages hits).

### 6.9 Metadata completeness rate (AC3)

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

Metadata completeness rate (SIMS) is ..... %.

## 7 COSTS AND BURDEN ON RESPONDENTS

### 7.1 Costs of statistical survey conduction

(Calculation of annual operating expenditure by major costs are presented in a standard table)

Number of labor hours	
Material costs (printing and sending the questionnaires to the field)	
The annual number of forms sent to the reporting units	

### 7.2 Respodents burden

(Calculation of the annual respodents burden is presented in the standard table)

Number of respodents that completed form	
The time required to complete a questionnaire (hours)	
Total used time (hours)	

### 7.3 Measures to reduce costs and burdens

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

## 8 CONFIDENTIALITY

### 8.1 Confidentiality - policy

(Please write the following text)

Confidentiality of statistical data is regulated by law and the personnel conducting statistical surveys has the legal obligation to protect confidentiality. Law on Statistics of BiH (Off. Gazette of BiH 26/04 and 42/04 - Chapter XI - Article 23.-29.) establishes the principle of confidentiality as one of the main principles. Agency for statistics of BiH distributes statistics in line with statistical principles of the European Statistics Code of Practice and in particular with the principle of statistical confidentiality.

### 8.2 Confidentiality – Data treatment

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

## **9 STATISTICAL PROCESSING**

### 9.1 Data source

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 9.2 Frequency of data collection

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 9.3 Data collection

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 9.4 Data validation

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 9.5 Data compilation

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### 9.6 Adjustments

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

#### 9.6.1 *Seasonal adjustment*

(See the instructions of the Guidelines for preparation quality report for statistical surveys)

### Signatures

For the approval of the contents of this report, representatives from BHAS, FIS and RSIS as well as MS experts and the RTA sign here:

Date: 16<sup>th</sup> of May 2019

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Component leader, BHAS

\_\_\_\_\_  
Component leader, FIS

\_\_\_\_\_  
Component leader, RSIS

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RTA

\_\_\_\_\_  
MS Expert

\_\_\_\_\_  
MS Expert