

TWINNING CONTRACT

BA 17 IPA ST 01 20



Further Support to the Reform of Statistics System in Bosnia and Herzegovina



MISSION REPORT

Activity 1.3.2D Index of Service Production IV
Component 1.3.2 Index of Services Production (ISP) and Services Producer Price Index (SPPI)

Mission carried out by
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25 - 27 January 2023

Version: Final

Expert contact information

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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
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
RTA	Resident Twinning Adviser
ToR	Terms of Reference

Executive Summary

This mission was the second on-site mission on Index of Service Production within Subcomponent 1.3.2 of the Twinning project Further Support to the Reform of Statistics System in Bosnia and Herzegovina. The mission started with a brief recap of the results from the previous study visit at Statistics Denmark. Then the focus was on important NACE activities in terms of value added for the indices in the ISP. The second main subject was on the forecast model combined with going from quarterly data to monthly data. The rest of the mission focused on metadata requirements and preparations of a first draft version hereof. At the end of the mission the working plan for the sub-component was adjusted and preparations for the next mission was made.

1. General comments

This mission report was prepared within the EU Twinning Project "Further Support to the Reform of the Statistics System in Bosnia and Herzegovina". It was the fourth mission to be devoted to the Index of Service Production (ISP) /Service Producer Price Index (SPPI) of the Project, the third to the work on ISP.

The purposes of the mission were:

- Presentation of updated Inventory of available/potential data sources for preparation of ISP deflators in BiH
- Presentation of the experimental calculation of ISP for NACE division/group levels for H49, I55 and I56
- Preparation of weighting structure/system for construction of deflators
- Proposal of methods to be used for ISP calculation (indirect/direct method)
- Presentation of exercise on use of Excel model for forecasting and interpolation of quarterly to monthly data
- Introduction to the activities carried out on Activity 3E: Use of administrative VAT turnover data for production of STS turnover indices in Bosnia and Herzegovina
- Preparation of structure for draft methodology and metadata for the ISP (Example of Danish metadata)
- Adjustment of working plan for ISP
- Preparation of ToR for next activity

The experts would like to express their thanks to all officials and individuals from BiH for meeting us with kind support and valuable information which highly facilitated the work.

These views and observations stated in this report are those of the experts and do not necessarily correspond to the views of EU, BHAS, FIS, RSIS, CBBH, Statistics Denmark, Statistics Finland, Statistics Sweden or the Italian National Institute of Statistics.

2. Assessment and results

BiH presented an updated inventory of potential data sources for deflators to be used in the ISP. Since the study visit BiH has done a great effort in finding and listing potential deflators either SPPI's or CPIs to be used in calculation the ISP indices. The presented analysis gives an excellent overview. It shows where BiH has to substitute SPPIs with CPIs and also where BiH should investigate the possible of further price indices. The MS experts acknowledge the great work of this analysis knowing that it is resource heavy now and, in the work ahead.

BiH presented an analysis of the weighting structure of NACE activities covered by the ISP in terms of value added. Since the study visit BiH has conducted an analysis of the importance of the NACE activities covered by the ISP. This has been done looking at the share of value added of the different NACE activities taking from the Structural Business Statistics. This analysis shows which NACE activities are of the most importance. Together with the updated inventory on deflators BiH can use this to work ahead. BiH has already on this basis decided on four NACE activities (62, 69, 70.2 and 73) they should develop SPPIs for. The MS experts agree with the findings.

BiH gave the MS experts an overview of the findings from the two missions carried out on SPPIs and on the use of administrative VAT data. The work and progress on these two areas are of most importance for the development of an ISP. This is due to the fact that these are the building blocks of the ISP. The MS experts acknowledge the work that BiH has put into it knowing that it takes a lot of resources. It is the MS experts' opinion however that it will benefit BiH in the future when implementing the EBS regulation.

BiH presented an analysis of using direct or indirect method when using CPIs as deflator. BiH has put in a lot of effort in investigating whether it is better to use the direct or indirect method. Their findings gave the conclusion that using indirect method gives the most accurate deflator.

There was a discussion on metadata and the EU requirements. The MS experts gave a presentation on the EU requirements for metadata and the single integrated metadata structure (SIMS). In the discussion we agreed on making separate metadata for ISP, turnover and SPPIs since it is three different statistics. There was a discussion on a first draft of metadata for the ISP. BiH continues the work on metadata for the next mission.

BiH presented their work on forecasting and going from quarterly to monthly data. With the Excel model provided at the study visit, BiH has continued the work and presented their findings on this mission.

Adjustment of the working plan. We had a discussion of the work ahead and hereby an adjustment of the working plan for this sub-component.

Preparation of ToR for next activity. The BiH and the MS experts agreed on the following before the next activity:

- BiH should focus on development of SPPIs for the NACE activities (62, 69, 70.2 and 73)
- BiH should consult National accounts in the development of deflators

- BiH should continue the work on the first draft of metadata
- BiH should continue to follow the working plan agreed on

3. Conclusions and recommendations

Once again, the MS experts would like to acknowledge our BiH counterpart. BiH has shown good analysis what to focus on. As a foundation for the ISP, BiH has chosen SPPI and in some cases CPI as an approximation combined with turnover data from administrative sources with VAT data. BiH has therefore participated in additional two missions, on SPPI and administrative data sources.

The experts recommend that BiH continues with the work plan for compiling SPPIs with the focus on the 4 most important NACE activities (62, 69, 70.2, 73), and that BiH exploits the opportunity to use the deflators used by National Accounts.

The MS experts recommend that BiH continues the work according to the work plan on this sub-component with tasks already agreed on - e.g. the draft of metadata and the continuation of developing ISP.

4. What to do before the next mission for the BC Counterpart

Action	Deadline	Responsible person
BiH should focus on development of SPPIs for the NACE activities (62, 69, 70.2 and 73)	Status on next mission in June 2023	BiH
BiH should consult National accounts in the development of deflators	Status on next mission in June 2023	BiH
BiH should continue the work on the first draft of metadata	Send a draft version before next mission in June 2023	BiH

Annex 1. Terms of Reference for this mission

Terms of Reference

EU Twinning Project BA 17 IPA ST 01 20

**Component 1.3.2 D - Index of Service Production
25th January 10 a.m. – 27th January noon 2023**

**Venue: BHAS - Zelenih beretki 26, Sarajevo
Room: 1st Floor**

Activity 1.3.2D: Index of Service Production

1. Mandatory result

Sub-result 1.3 Short Term Statistics (STS) enhanced

The component 1.3.2.1 – Index of Service Production (ISP) is currently not calculated in BiH. It is therefore a major priority in the project to be able to publish and deliver Index of Service Production to Eurostat at the of the project period.

Indicator / Relevant Milestones / Internal deadlines:

- Indicators ISP published and delivered to Eurostat

2. Purpose of the activity

- Presentation of updated Inventory of available/potential data sources for preparation of ISP deflators in BiH
- Presentation of the experimental calculation of ISP for NACE division/group levels for H49, I55 and I56
- Preparation of weighting structure/system for construction of deflators
- Proposal of methods to be used for ISP calculation (indirect/direct method)
- Presentation of exercise on use of Excel model for forecasting and interpolation of quarterly to monthly data
- Introduction to the activities carried out on Activity 3E: Use of administrative VAT turnover data for production of STS turnover indices in Bosnia and Herzegovina

- Preparation of structure for draft methodology and metadata for the ISP (Example of Danish metadata)
- Adjustment of working plan for ISP
- Preparation of ToR for next activity

3. Expected output of the activity

- Inventory of available/potential data sources for preparation of ISP deflators in BiH updated
- Experimental calculation of ISP for NACE divisions/group level for H49, I55 and I56 done
- Weighting structure/system for construction of deflators prepared
- Methods to be used for ISP calculation (indirect/direct method) agreed
- Exercise on use of Excel model for forecasting and interpolation of quarterly to monthly data presented
- Activities carried out on Activity 3E: Use of administrative VAT turnover data for production of STS turnover indices in Bosnia and Herzegovina introduced
- Structure for draft methodology and metadata for the ISP discussed and adopted
- Adjustment of working plan for ISP made
- **Main output is a plan / road map to ensure at least pilot calculations of Index of Service Production available Q2 2023**
- Mission report and ToR for the next mission prepared

Agenda

Location: BHAS- Zelenih beretki 26, Sarajevo

Time	Day	Place	Event	Purpose / Details
9:00-10:00	25 th January	Hotel	RTA and MS experts	Preparation of activity
10:00-15:30	25 th January	BHAS		Follow up from the previous mission: To be presented by the BC Counterpart

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			Meeting with BC Experts	<ul style="list-style-type: none"> ➤ Presentation of updated Inventory of available/potential data sources for preparation of ISP deflators in BiH ➤ Presentation of the experimental calculation of ISP for NACE divisions/group level for H49, I55 and I56 ➤ Preparation of weighting structure/system for construction of deflators ➤ Proposal of methods to be used for ISP calculation (indirect/direct method)
9:00-15:30	26th January	BHAS	Meeting with BC Experts	<ul style="list-style-type: none"> ➤ Presentation of exercise on use of Excel model for forecasting and interpolation of quarterly to monthly data (BC experts) ➤ Introduction to the activities carried out on I mission on use of Administrative VAT data for STS indicators (BC experts) ➤ Preparation of structure for draft methodology and metadata for the ISP (MS experts)
9:00-12:00	27th January	BHAS	Meeting with BC Experts	<ul style="list-style-type: none"> ➤ Adjustment of working plan for ISP <p>Agreement on findings/conclusions and summary mission report and ToR for the next mission</p>

Annex 2. Topics for the next mission

On the next mission the focus will be on:

- Follow up on development of SPPIs for the NACE activities (62, 69, 70.2 and 73)
- BiH should give the results of the consultation with National Accounts regarding deflators
- Follow up on the draft of metadata
- Status on the working plan

Annex 3. Persons met

BHAS:

Maja Hadži-Stojanov, Senior Officer for Producer Prices in Services
Alen Bajramović, Head of Department for Services Statistics

RSIS:

Aleksandra Donlaga, Senior Officer for Producer Prices in Services

FIS:

Merima Beganovic, Senior Advisor for Business Services

MS:

Mathias Blume, Statistics Denmark
Lina Pedersen, Statistics Denmark

RTA TEAM:

Niels Madsen, RTA
Larisa Muslimovic, RTAA

Interpreter:

Haris Imamovic

Annex 4: Work Plan

IPA 2017 TWINNING PROJECT - WORKING PLAN FOR INDEX OF SERVICES PRODUCTION (ISP)

No.	MAIN ACTIVITY	COMPONENTS OF MAIN ACTIVITY*	DATE OF IMPLEMENTATION**	STATUS OF ACTIVITY	RESPONSIBLE INSTITUTIONS	MS EXPERT SUPPORT NEEDED
1	INVENTORY OF STATISTICAL AND ADMINISTRATIVE DATA SOURCES FOR DEFLATORS	Current status of availability and potential use of statistical data (prices) and other data. Draft inventory list prepared.	End of November 2021	First draft list prepared and regularly updated	BHAS, RSIS, FIS	
		Preliminary data analysis for calculation of deflators made.	End of November 2021	Partly achieved. BiH has done a lot of progress.	BHAS, RSIS, FIS, MS experts	YES
		Training of staff on how to evaluate quality of available data sources	End of September 2023	Work in progress during the mission and the twinning project as a whole.	BHAS, RSIS, FIS, MS experts	YES
2	METHODOLOGY FOR DEFLATORS AND INDEX OF SERVICES PRODUCTION	Weighting structure for construction of deflators prepared	End of January 2023	Achieved	BHAS, RSIS, FIS, MS experts	YES
		Experimental production of deflators at group level (3-digit NACE)	End of the project (minus three months)	Partly achieved	BHAS, RSIS, FIS, MS experts	YES

		Temporal disaggregation methods for quarterly deflators	End of 2022	Achieved	BHAS, RSIS, FIS, MS experts	YES (from statistical methodologist)
		Methods for calculation of ISP agreed	End of 2022	Partly achieved	BHAS, RSIS, FIS, MS experts	YES
		Experimental calculation for available ISP's	End of the project (minus three months)	Partly achieved	BHAS, RSIS, FIS, MS experts	YES
		Revision policy	September 2023	Work initiated	BHAS, RSIS, FIS, MS experts	YES
		Seasonal adjustment method	September 2023	Not started	BHAS, RSIS, FIS, MS experts	YES (from statistical methodologist)
		Draft methodological document for ISP	September 2023	Work initiated. First draft version ready	BHAS, RSIS, FIS, MS experts	YES
3	EXPERIMENTAL CALCULATION OF INDEX OF SERVICES PRODUCTION	Experimental calculation of available ISP gross series	End of project	Work initiated	BHAS, RSIS, FIS, MS experts	YES
		SA and WDA series prepared	End of project	Not started	BHAS, RSIS, FIS, MS experts	YES (from statistical methodologist)
		First version of methodological document/metadata developed	End of project	Work initiated. First draft version ready.	BHAS, RSIS, FIS, MS experts	YES
		Preparation of new data format flows to Eurostat	End of project	Not started	BHAS, RSIS, FIS, MS experts	YES

*Activities proposed in this Plan could be changed during the IPA Project implementation ** Proposed dates are provisional


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:




Component leader, BHAS




Component leader, RSIS



MS Expert



Component leader, FIS



RTA



MS Expert