**TWINNING CONTRACT** 

## BA 17 IPA ST 01 20



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



# **MISSION REPORT**

Activity 1.3.1 D- Index of Production in Construction Component 1.3.1 - Index of Production in Construction

> Mission carried out by Roberto Iannaccone, ISTAT Fabio Bacchini, ISTAT

> > 09-12 May 2022

Version: Final





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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		





# 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 Production in Construction Component of the Project.

The purposes of the mission were:

- Assessment on the differences on the microdata collected for STS purposes and SBS purposes;
- Exploring the feasible way for a New methodology for calculation of Index of Production in Construction / IPC developed by using value of production and CPPI as deflator

The consultants would like to express their thanks to all officials and individuals from Bosnia and Herzegovina met for the kind support and valuable information, which highly facilitated the work of the consultant.

These 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, Statistics Finland, Statistics Sweden and The Italian National Institute of Statistics.

## 2. Assessment and results

According to the ToR presented in Annex 1, two main issues has been faced along the mission. The first has referred to a deep analysis of the micro data stemming from STS and SBS. We have illustrated the differences discussing together the motivation behind the findings. Some explanation might be related to the selection process itself while for some unit a further investigation is required.

Then we have investigated the difference in the selection process of STS unit along the available quarters. This point also refers to the methodological approach adopted, as for example to cover the full target population or considering a sample selection. Also, the adoption of a procedure for the estimation of the missing values in a quarter might require further investigation.

The second main point that has been faced on referring to the exploration of a new methodology based on the quarterly value of production.

Using the selected STS microdata different hypothesis has been elaborated and a comparison with the present IPC has been provided. The main issue concerning the difference in the variability of the method based on the value of production versus the hours worked. This evidence could be referred to a sort of sticky reporting by the firm for this variable.

# 3. Conclusions and recommendations

At the end of the mission the consultants delivered different files (data and programmes) that will be extremely useful for the next activities:

In details the following files have been provided:

- Paper\_vo.docx that contains all the elaboration inside the structure of the final working paper
- Panel\_entity1/2.xlsx that contains the microdata for all the firms that answered to the all quarters of the available time span
- Results entity1-2\_panel.xlsx that contains the analysis for the new method together with the comparison of the present IPC based on hours worked
- Estimation.r the r program that replicates all the comparison on microdata



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

Action	Deadline	Responsible person
Check of the comparison of the	End of August	BHAS, FIS, RSIS
data		
Extending the proposed	End of August	F. Bacchini, R. Iannaccone
approach to hours worked		
Check of the selected SBS	End of August	BHAS, FIS, RSIS
micro data		
Short description of the	End of August	BHAS, FIS, RSIS
methodology used by national		
accounts to provide the		
quarterly value added for		
Construction		





## Annex 1. Terms of Reference for the current mission

## **Terms of Reference**

## EU Twinning Project BA 17 IPA ST 01 20

## Component 1.3.1. D - Index of Production in Construction (IPC) 09 - 12 May 2022

On-site mission Venue: Agency for Statistics of Bosnia and Herzegovina, Zelenih beretki 26 Room: 1<sup>st</sup> Floor

### Activity 1.3.1.D: Index for Production in Construction IV

#### 1. Mandatory results

IPC produced according to the FRIBS (current EU regulation STS No 1165/98)

New methodology for calculation of Index of Production in Construction / IPC developed (by using value data and CPPI as deflator)

IPC produced and delivered to Eurostat (Non-Adjusted (NSA), Working-Day Adjusted (WDA) and Working-Day and Seasonally Adjusted (SA))

#### Indicator / Relevant Milestones / Internal deadlines:

Indicators for IPC published and delivered to Eurostat

#### 2. Purpose of the activity

- Detailed analysis and checking of data coherence (micro and macro level) for selected variables from STS, SBS and National Accounts for Federation of BiH relevant for construction activity and production of IPC practical work
- Detailed analysis and checking of data coherence (micro and macro level) for selected variables from STS, SBS and National Accounts for Republika Srpska relevant for construction activity and production of IPC practical work

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STATISTICS SCB Statistics Finland

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- Detailed analysis and checking of data coherence (micro and macro level) for selected variables from STS, SBS and National Accounts for Brčko District BiH relevant for construction activity and production of IPC practical work
- Consultations (as needed) with subject matter statisticians from SBS and NA
- Discussion on methodology for calculation of IPC based on performed data analyses
- Decision on calculation method for IPC and use of relevant deflator or productivity correction factor
- Simulation of calculation of IPC for FBiH, RS, BD BiH and BiH levels based on selected method
- Discussion on back casting and SA and WDA adjustment of IPC time series issues
- Preparation of ToR for next activity

### 3. Expected output of the activity

- Detailed data analyses for construction activity performed
- Decision on calculation method for IPC made
- Simulation of IPC calculation for FBIH, RS, BD BiH and BiH done
- Issues on back casting, SA and WDA adjustment discussed
- Mission report prepared
- Updated road map
- ToR for the next mission/activity



## Annex 2. Topics for the next mission

- Detailed STS micro data analyses on hours worked
- Preliminary assessment on the methodology able to manage both the missing data and the panel of the target population
- Comparing the performance of the index based on the hours worked and the one related to the value of production
- Looking at the similarity/dissimilarity of the short-term profile of the indicators at the entity level
- Timeliness of the required data for the methodology based on the deflated value of production and their implication for a revision policy
- Timeliness for the implementation of the new IPC based on the deflated value of production.





# Annex 3. Persons met

### BHAS:

Fahir Kanlić, Head of Department for Industry and Construction Statistics Dženita Babić, Senior Advisor for Construction Statistics Anita Brković, Senior Advisor for Construction Statistics

### FIS:

Edina Dulić, Senior Advisor for Construction Statistics Nusreta Imamovic, Head of Department for Industry, Construction and Energy Statistics Adis Mizdrak, Data Entry Officer

### RSIS:

Želimir Radišić, Senior Officer for Construction Statistics Danica Babić, Senior Officer for Structural Business Statistics

<u>RTA Team:</u> Niels Madsen, RTA Larisa Muslimovic, RTAA Haris Imamovic, Interpreter





# 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:

Component leader, BHAS

Radišić Želimir

Component leader, RSIS

Source 6

MS Expert

Dulić Edina

Component leader, FIS

hiels Mode RTA

MS Expert



