

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 G - Index of Production in Construction VII Component 1.3.1 - Index of Production in Construction

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
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 seventh mission to be devoted to the Index of Production in Construction Component (IPC) of the Project.

The purposes of the mission were:

- Analysis of prepared micro data from annual SBS survey (2019 – 2021) and STS survey (2019 – 2022); treatment of zero and missing values
- Meeting of MS experts with STS, SBS and NA staff on data quality, differences in IPC results obtained by using value of performed construction works and hours worked
- Detailed analysis and checking of prepared annual and quarterly deflators for construction sector (total construction, building construction and civil engineering works)
- Presentation of completed R code for comparison of micro STS, SBS and NA data for construction sector
- Making a final decision on calculation method for IPC
- Preliminary calculation of IPC for FBiH, RS, BD BiH and BiH levels based on agreed methodology and prepared updated data
- Back-casting of quarterly IPC time series for the period Q1 2006 – Q4 2022
- Preliminary calculation of IPC for FBiH, RS, BD BiH and BiH levels on the new base year 2021
- Preliminary calculation of calendar and seasonal adjustment of IPC for FBiH, RS, BD BiH and BiH levels and discussion of results
- Preparation of the content for the new methodological document for IPC
- Preparation of ToR for next activity

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, 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, Statistics Finland, Statistics Sweden or The Italian National Institute of Statistics.

2. Assessment and results

The main aim of the mission was a detailed analysis of microdata on construction sector on STS and SBS domain in order to:

1. To check for systematic bias between SBS and STS data on hours worked, employees and values of work done and value of production.
2. To compare data on total value of production and hour worked.
3. To learn more about the past to be safe for the future.
4. To create a panel of firm for IPC calculations

At the beginning of the mission a detailed analysis of the variables sent from entities on the sample of firms in SBS and STS domains has been carried out to create the input file for a R code to compare data and compile IPC. Then a meeting with FIS NA department has been organised to understand how data on IPC can be used in the compilation of the main aggregates in NA. All the procedures have been described using a production and income approach for the annual GDP and a production approach for quarterly GDP. Mainly financial statements are used for the annual GDP and indicators relevant from STS and administrative data for the quarterly GDP. Given the low volatility of IPC at the moment this indicator is not used in quarterly GDP calculation.

Regarding the comparison between SBS and STS data, the experts presented the R code (that will be delivered as output of the mission). The results have been discussed and on the basis of them it was decided that in order to arrive to a first IPC compilation all the values in the record with zeroes should be considered as missing values, a threshold of 10 employees should be used (the same used in the cut-off sample in STS) and value of production in SBS should be the best proxy for the values of work done in STS. Moreover, the deflator for IPC have been delivered by both the entities.

As a final result of the mission the MS experts presented a first approach for the calculation of IPC according to all the points agreed earlier. In particular, all the criteria chosen for a selection of a subsample of firms have been described in order to arrive the creation of panel. The main criteria were based on zeroes values were removed, employees higher than 9 and ratio between employees in STS and SBS bigger than 0.5. In such way a panel of 163 for entity 1 and 65 firms for entity 2 have been created for which the sum of values of work done has been deflated to get a first estimation of growth rate of IPC for the period from Q1.2020 to Q4.2021 (Q4.2022 for entity 2).

3. Conclusions and recommendations

Data to be provided:

- BHAS will provide microdata for BRCKO district related both to STS and SBS 2019-2021
- The MS experts will update the R code according to the new data
- All the three statistical office will provide microdata STS and SBS for the period 2015-2018 together with the producer price index for F41 (quarterly) and F42 (annual) starting from 2018
- All the three statistical institutions will provide the SBS value added for F41 and F42
- The MS experts will elaborate the new data presenting a proposal for the new quarterly index along the next mission discussing together with the three statistical institutions the main steps
- The next mission is scheduled for 8-10 May in Sarajevo

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

See above under Conclusions and recommendations

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 - Index of Production in Construction (IPC)

20th (10-16), 21th (9-16) and 22th (9-12) March 2023

On-site meeting

Venue: Agency for Statistics of Bosnia and Herzegovina, Zelenih beretki 26, Sarajevo

Room: 1st Floor

Activity 1.3.1.G: Index of Production in Construction VII

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

- Analysis of prepared micro data from annual SBS survey (2019 – 2021) and STS survey (2019 – 2022); treatment of zero and missing values
- Meeting of MS experts with STS, SBS and NA staff on data quality, differences in IPC results obtained by using value of performed construction works and hours worked
- Detailed analysis and checking of prepared annual and quarterly deflators for construction sector (total construction, building construction and civil engineering works)

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- Preparation of the content for the new methodological document for IPC
- Preparation of ToR for next activity

3. Expected output of the activity

- Micro data from STS and SBS surveys prepared
- Methodological issues in calculation of IPC discussed with SBS and NA representatives
- R code for data comparison on micro level completed
- Final decision on new calculation method for IPC made
- Preliminary calculation of IPC for FBiH, RS, BD BiH and BiH levels by using new calculation method done
- Preliminary back-casted and rebased IPC series for FBiH, RS, BD BiH and BiH levels calculated
- Preliminary seasonally and calendar adjusted IPC for FBiH, RS, BD BiH and BiH levels produced
- Content of new methodological document for IPC agreed
- Mission report prepared
- ToR and the list of activities for the next mission defined

Annex 2. Persons met

MS Experts:

Roberto Iannaccone, ISTAT
Fabio Bacchini, ISTAT

BHAS:

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

FIS:

Nusreta Imamović, Head of Department for Industry, Construction and Energy Statistics
Edina Dulić, Senior Advisor for Construction Statistics

RSIS:

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

Representatives of National Accounts Department from FIS and RSIS

RTA Team:

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



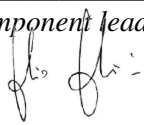
Component leader, FIS




Component leader, RSIS



RTA



MS Expert



MS Expert