# TWINNING CONTRACT

## BA 17 IPA ST 01 20



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



# MISSION REPORT

**Activity 4.1A: Structure of earnings pilot survey - Sampling**
**Subcomponent 4.1 Auxiliary activities to Labour Market Statistics**
**Component 4 – Labour Market Statistics**

Mission carried out by
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19 – 22 September 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 |

# 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 second mission to be devoted to Subcomponent 4.1 - Auxiliary activities to Labour Market Statistics, within Component 4 - Labour Market Statistics.

The purpose of the mission was:

Training course on:

- o Sampling design,
- o Sample allocation in strata and their definition,
- o Total non-response prevention and treatment,
- o Weight calibration and estimation,
- o Results and errors evaluation and presentation.

The consultants would like to thank all officials and individuals from Bosnia and Herzegovina for the kind support and valuable information, which highly facilitated the consultant's work.

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

# 2. Assessment and results

A training course on the subjects mentioned above (sampling design, sample allocation in strata and their definition, total non-response prevention and treatment, weight calibration and estimation, results and errors evaluation and presentation) was carried out.

The training course was conducted with a strong emphasis on interactivity and active participation, mirroring a workshop-style approach, alternating presentations and interesting discussion sessions. Moreover, the agenda integrated practical examples and statistical investigation exercises into the curriculum, allowing learners to apply their knowledge effectively.

The Italian Structure of Earning Survey (SES) was presented, mainly from a sampling and methodological point of view, talking about the European Quality Standard to focus on.

During the last two days of the visit, the theoretical concepts and statistical methodologies covered, and the software (ReGenesees and R2BEAT) skills acquired by participants, were put into practical use in the context of a real-world scenario, specifically, the BiH SES: participants and trainers actively collaborating for designing, allocating, and selecting a sample for the survey, using Labour Force Survey (LFS) variables in the design phase.

Furthermore, software and methodologies for the calibration and estimation phase were introduced.

The mission resulted in a highly engaging and participatory cooperating experience. Although the participants were facing the issue of missing previous estimates being the first occasion of the survey,

they seemed to leave the course equipped with not only theoretical knowledge but also the practical skills..

One particularly noteworthy achievement was the solution found for the lack of previous estimates, as this survey marked the first time such an endeavour had been conducted in Bosnia.

# 3. Conclusions and recommendations

In light of the training program's success and the unique Bosnia context, we recommend the following:

- Explore different scenarios for input parameters of R2BEAT for the sample allocation;
- Sample Integration: Use the selected sample as a starting basis for the SES. If incorporating additional larger enterprises not initially sampled, ensure allocation optimality and error constraints are upheld;
- Budget Transparency: Clearly define budget constraints to guide decisions on sample size, data collection methods, and other survey variables, mainly considering the pilot survey.
- Implementation of correction weights techniques: apply techniques such as data weighting, non-response treatment, calibration, and estimation for accurate and reliable survey results.

# Annex 1. Terms of Reference for the current mission

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## Terms of Reference

## EU Twinning Project BA 17 IPA ST 01 20

## Component 4 – Labour Market Statistics
## Tuesday 19 (10 a.m.) – Friday 22 (noon) September

### Venue: Sarajevo, Agency for Statistics of Bosnia and Herzegovina

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**Activity 4.1A: Structure of earnings pilot survey - Sampling**

1. **Mandatory result**

The component on Labour Market Statistics has the following objectives and Indicator / Relevant Milestones / Internal deadlines:

| Component 4: Labour markets statistics: Structure of earnings Pilot survey conducted and respective indicators produced | | |
|---|---|---|
| **Objective as in Twinning Fiche:** | **Indicator / Relevant Milestones / Internal deadlines** | **Status** |
| 4.1 Questionnaire and methodology for implementing Structure of earnings Pilot survey prepared (including preparation of sample survey) | Questionnaire is to be ready by the end of 2021 | Work completed |
| 4.2 Developed application for entering data for the needs of BH institutions | February 2022 | Work completed |
| 4.3 Pilot survey conducted and data entered | Data is expected to be collected during April 2022 and be entered in June 2022 | Work completed |

| | | |
|---|---|---|
| 4.4 Results of Pilot survey analysed | September 2022 *(Delayed due to lack of MS experts)* | Work completed |
| 4.5 New indicators of the Labour market statistics based on the Structure of Earnings Pilot Survey such as: gross and hour wages by age, sex, occupation, duration of the working hours and type of contract services produced | December 2022 *(Delayed due to lack of MS experts)* | Work completed |
| 4.6 Staff of the Labour market statistics trained for implementing full Structure of Earning Survey | February 2023/ End of project | Work completed for the subject statisticians. BC assistance on sampling procedures related to SES remains |

2. **Purpose of the activity:**

- Training course on

  - sampling design,
  - sample allocation in strata and their definition,
  - total non-response prevention and treatment,
  - Weight calibration and estimation,
  - Results and errors evaluation and presentation.

- Presentation of Italian Structure of Earning Survey details, from a sampling and methodological point of view.
- Exercise and practical examples regarding the topics above, presented during the training.

  *Specific data situation in Bosnia-Hercegovina will be taken into consideration as agreed on online ToR preparation meeting on Monday 4 September 2023*

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

To prepare the BC methodologist for sampling procedures related to a full structure of earnings survey planned to be conducted from October 20th, 2023, on.

## Annex 2. Persons met

BHAS:
Jasna Isakovic, Head of Department for Sample Design and Methodology
Aida Zukanovic, Senior Advisor for Sample Design and Methodology

FIS:
Edina Mehidic, Junior Associate for Sampling and Statistical Analysis
Asmira Selimovic, Head of Section for Statistical Methods and Coordination

RSIS:
Vedrana Dejanovic, Application Designer for CATI and CAPI

RTA Team:
Niels Madsen, RTA
Larisa Muslimovic, RTAA

The content of this report is approved by: (sign and date)
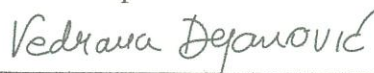
MS Expert

MS Expert

BHAS Component leader

FIS Component leader

RSIS Component leader

RTA