

# TWINNING CONTRACT

2023/447-234



## EU for Further Development of Statistics System in BiH



## MISSION REPORT

**Activity 3C: Follow up and Assessment of the First Round of CAWI Data Collection**

**Component 3 – Information Society Statistics**

Mission carried out by:

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03-05 June 2025

Version: Final

EU FOR FURTHER DEVELOPMENT OF STATISTICS SYSTEM IN BIH



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STATISTICS  
DENMARK



STATISTICAL OFFICE

Statistics Finland

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## Table of contents

Executive Summary .....	4
1. General comments.....	4
2. Assessment and results .....	4
3. Conclusions and recommendations .....	5
4. What to do before the next mission .....	6
Annex 2. (input for the) Terms of Reference for the next mission .....	8
Annex 3. Persons met.....	8



## List of Abbreviations

BC	Beneficiary Country (Bosnia and Herzegovina)
BHAS	Agency for Statistics of Bosnia and Herzegovina
BiH	Bosnia and Herzegovina
CBBH	Central Bank of Bosnia and Herzegovina
EU	European Union
EUD	European Union Delegation to Bosnia and Herzegovina
FIS	Institute for Statistics of the Federation of Bosnia and Herzegovina
LA	Language Assistant
MS	EU Member State
RSIS	Institute for Statistics of Republika Srpska
RTA	Resident Twinning Advisor
RTAA	Resident Twinning Advisor Assistant
ToR	Terms of Reference



## Executive Summary

ICT use and e-commerce in enterprises (ICT ENT) data collection was implemented in the first half of 2025 in Bosnia and Herzegovina. Web survey was introduced for the first time as optional and recommended possibility of submitting answers. The introduction of the web-survey was successful, resulting in 67% of responses received via web-collection in the country. The newly developed web-survey worked well, resulting in increased data quality and savings in resources. Initial experiences indicate that the overall cost of collecting and processing data can be reduced as a result of using web-survey for data collection.

Systematic collection and documentation of experiences and lessons learned would be helpful in further work. The mission has identified several issues to be considered before the next round of data collection. Quality checks of the collected data were discussed in detail.

The successful execution of web-survey in ICT ENT could be used as an encouraging example for other statistics where moving to web-based collection could be considered.

## 1. General comments

This Mission Report was prepared within the EU Twinning Project "Further Development of the Statistics System in Bosnia and Herzegovina". It was the 3rd mission devoted to the Information Society Statistics component of the Project.

The purposes of the mission were:

- Assessment of the first round of web-based data collection: Issues encountered during the first round (e.g. related to routing of questions, filters, availability of definitions, contacts from respondents, the technical functioning of the web survey, etc.)
- Share of responses collected by CAWI /CATI - what can be learned from the analysis of data collection 2025

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 consultants.

These views and observations stated in this report are those of the consultants and the RTA and do not necessarily correspond to the views of EU, BHAS, FIS, RSIS, CBBH, Statistics Denmark, Statistics Finland, Statistical Office of the Republic of Slovenia or The Italian National Institute of Statistics.

## 2. Assessment and results

ICT use and e-commerce in enterprises (ICT ENT) data collection was implemented, introducing the recommended possibility of submitting answers via a web-survey. BiH colleagues presented their experiences from the survey round 2025, especially targeting the web-survey. The overall conclusion from all institutions was that the first round of web-based data collection succeeded quite well. On the country level around 67% of responses were received via web.

The data collected through the web survey is of better quality than collection via CATI. The introduction of web survey resulted in some savings related to postal and interviewer costs. Better data also means reduced amount of time used in the further work on the data.

Experiences from the first round of the web survey were discussed in detail to achieve a good understanding of experiences and identify lessons learned.

Some reluctance to answer to the web-based survey was met, which resulted also to increased number of telephone calls from respondents but this was successfully treated with reminders and responses to enquiries from the respondents' side.

The beneficiaries have identified several lessons learned. Some updates on technical aspects of the survey need to be considered for the next rounds of data collection. The process needs also to be made quicker, possibly with automated reminders. An effort is needed to find the right respondents as often the survey is now sent to accountants who are not able to answer ICT surveys properly. In the future rounds of the ICT survey contact letters (e-mails) could mention that the target person should be the IT-manager or similar, or possibly mention as an alternative the managing director, thinking about smaller companies.

The necessity of including the Question A1 (access to internet) in future web surveys was discussed and the beneficiaries stated that they certainly consider dropping the question in further rounds. There is a controversy to ask about having internet access when the respondent is responding in web.

Paper questionnaires were sent to all reporting units in the Federation of BH – this proved to be unnecessary.

The length of the reporting period of two weeks could be longer next time.

Another discussion was related to the quality checks of the answers, including new ways of quality checks resulting from web-surveys.

Some respondent contacts were made on the filling of the percentage questions where only integer figures were allowed, but respondents tried to answer including decimals. As a general conclusion, it can be advised that it is good to include guidance on what kind of figures are expected in web-surveys and consider guidance needed in the whole questionnaire to facilitate easy understanding for respondents.

STEs were given raw data from the data collection in Republika Srpska to analyze and give feedback. The initial findings were that the data seem to be in quite good shape, but normal controls need to be implemented. Attention is needed at least in correcting the data to be coherent regarding filter questions and the subsequent questions behind filter. Also, consistency between the questions needs to be controlled e.g. in case of cloud ERP (Enterprise Resource Planning) and cloud CRM (Customer Relationship Management) and separate ERP and CRM questions in data module.

### 3. Conclusions and recommendations

Introduction of ICT web-survey in BiH was successful, resulting in 67% of responses received via web-collection on the country level. The newly developed web-survey worked well, leading to increased data quality. Beneficiaries have gained valuable experiences from the first round of web-survey and could identify important lessons learned from further improvements in ICT data collection. The experiences indicate that using a web-survey may result in costs savings for example in postal costs, interviewer costs and saving on the work time due to increased data quality.

### Recommendations:

Systematic collection and documentation of experiences and lessons learned would be helpful in further work.

An effort is needed to find the right respondents as for example accountants are not able to answer ICT survey. In further rounds contact letters (e-mails) could mention that the target person should be IT-manager or similar, or possibly mention as an alternative managing director, thinking about smaller companies.

The necessity of including Question A1 (access to internet) in future web surveys need to be considered.

Paper questionnaires were sent to all reporting units in the Federation of BiH – this proved to be unnecessary and should be considered in future.

The length of reporting period of two weeks could be longer next time.

In web surveys certain guidance is needed that explains the respondents what is expected to fill in the survey. For example, in percentage questions instructions could be added regarding whether decimals are allowed or should integer figure be given. Consideration should be given on guidance needed in the whole questionnaire to facilitate easy understanding for respondents.

In further data treatment attention is needed at least in correcting the data to be coherent regarding filter questions and the subsequent questions behind filter. Also, consistency between questions needs to be controlled e.g. in case of cloud ERP and cloud CRM and separate ERP and CRM questions in data module.

Data collected by CAWI and CATI methods could be analysed to see if there are any differences on data, possibly explaining some potential changes in the results.

## **4. What to do before the next mission**

Since the BiH institutions already launched the first ICT web survey and it was quite successful, it has been agreed that there would be no more missions within this twinning project.



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

### **Terms of Reference**

**EU Twinning Project BA 19 IPA ST 01 23**

**Component 3 - Information Society Statistics**

**Timing:**

**03 (at 10 a.m.) - 05 Juni (12 p.m.) 2025**

**Venue: Federal Institute of Statistics**

**Zelenih beretki 26, Sarajevo**

**Bosnia and Herzegovina**

#### **Activity 3C: Follow up and Assessment of the First Round of CAWI Data Collection**

The objective of the component is to modernise the working methodology for ICT with emphasis on the data collection method – from physical surveys to web link surveying. The initial idea was therefore for the Project to assist on the creation of three web links for data collection - one for each statistical institution in BiH. However, as the amount of assistance the Project can offer can unlikely lead to the creation of three web links, it has been agreed that web links will be created outside the Project alongside with methodological support to the modernisation inside the Project.

Web links are already in use in other statistical areas. These links can be altered for the use of ICT data collection or new links can be created by BiH IT staff within the institutions.

#### **1. Mandatory result**

Working methodology for the ICT surveys (from data collection to dissemination) on households, individuals and enterprises modernised.

#### **2. Purpose of the activity:**

- Assessment of the first round of web-based data collection: How did the web-based data collection work? Issues encountered during the first round (e.g. related to routing of questions, filters, availability of definitions, contacts from respondents, the technical functioning of the web survey, etc.)
- Share of responses collected by CAWI /CATI - what can be learned from the analysis of data collection 2025
- Preparation of ToR for next activity

#### **3. Expected outputs of the activity:**

- Assessment of the first round of web-based data collection made

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- Issues during the above discussed and potentially solved
- Mission Report produced
- ToR (including time (frame)) for next activity prepared

## Annex 2. (input for the) Terms of Reference for the next mission

Since there will be no more missions, no Terms of Reference is necessary.

## Annex 3. Persons met

### BHAS:

Fahir Kanlic, Head of Department for Industry and Construction Statistics  
Dajana Mrgud, Senior Adviser for Industry and Construction Statistics

### FIS:

Elvir Juljevic, Expert Consultant for Communication Statistics and Information Society  
Natasa Radovic, Senior advisor for software engineering

### RSIS:

Aleksandra Djonlaga, Senior Officer for Consumer Prices in Services

### RTA Team:

Niels Madsen, RTA  
Larisa Muslimovic, RTA Assistant  
Senka Ahmetovic-Palic, RTA Language Assistant

## 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