TWINNING CONTRACT

2023/447-234

EU for Further Development of Statistics System in BiH

MISSION REPORT

Activity 3A: Information and Communication Technology (ICT) I
Component 3: Information Society Statistics

Mission carried out by

Aarno Airaksinen, Statistics Finland
Agnes Tassy, Statistics Denmark

04 – 06 June 2024

Version: Final

European Union Member State Expert (consultants) Contact Information

Aarno Airaksinen,
Statistics Finland
aarno.airaksinen@stat.fi

Agnes Tassy
Statistics Denmark
ata@dst.dk

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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
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 Adviser
RTAA	Resident Twinning Adviser Assistant
ToR	Terms of Reference

1. General comments

This mission report was prepared within the EU Twinning Project "EU for Further Development of the Statistics System in Bosnia and Herzegovina". It was the first mission to be devoted to the Information and Communication Technology (ICT) Component (within Information Society Statistics) of the Project.

The purposes of the mission were:

- Assessment of current method(s) for data collection, data processing and metadata
- Development of work plan
- Mission report
- Preparation of ToR for next activity

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

The 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, and The Italian National Institute of Statistics.

2. Assessment and results

During the mission, representatives from the three statistical institutions in Bosnia-Herzegovina presented the current methods for the production process of ICT statistics. The current methods varies between the three statistical institutions in Bosnia-Herzegovina. This includes paper survey and CATI (computer assisted telephone interview). The content of the questionnaire is harmonized in the statistical institutions. The data collected are sent in excel form for compilation at national level (BHAS).

The consultants assessed the current processes and together with the beneficiaries, the most important need for modernisation of ICT statistics in BIH was identified to be support to develop a methodology to create and execute web surveys for ICT ENT (Enterprise) data collection. Introducing a web application-based data collection, where answers are immediately entered into a database, would make the data collection process more effective. The transition would also have the potential to increase quality of the data.

After this identification, a work plan was made in cooperation with the beneficiaries and the consultants. The work plan is inserted as annex 4 in this report.

3. Conclusions and recommendations

The purpose of the mission was to assess the current situation on ICT in BiH and based on that create a work plan for an update of the methodology applied. Consequently, no conclusions or recommendations as such were made at this initial phase.

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

Action	Deadline	Responsible person
Define the platforms for web application in cooperation with IT experts.	September 2024	3 BiH institutions + IT experts
Prepare draft document(s) on building of the web survey	October 2024	3 BiH institutions
Translate the Eurostat questionnaire and decide national questions for the base to build web survey	July 2024	3 BiH institutions

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Annex 1. Terms of Reference for the current mission

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Terms of Reference

EU Twinning Project BA 19 IPA ST 01 23

Component 3 - Information Society Statistics

Timing: 04 (at 10 a.m.)- 06 June (3:30 p.m.) 2024

Venue: Republika Srpska Institute of Statistics – Vladike Platona bb, Banja Luka, Bosnia and Herzegovina

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Activity 3A: Information and Communication Technology (ICT) I

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 current method(s) for data collection, data processing and metadata
- Development of work plan
- Mission report
- Preparation of ToR for next activity

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

- Assessment of current method(s) for data collection, data processing and metadata made
- Work plan for the component drafted
- Mission report drafted
- ToR for next activity drafted

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

Activity 3B	ICT – methodology update
Budget section	III. Components Mandatory Results – Component X
Subject	- Presentations by STE´s on how web-based surveying/data collection are performed in DK and FI - Presentation by STE's on how to instruct IT experts to build web surveys - Presentation by STE's on the processes and platform on ICT HH survey - Consultancy on potential ICT - Content of the next in-person meeting will be defined at the online meeting - Mission report - Preparation of ToR for next activity
Methods	Online and onsite STE mission in BiH
Resources	MS: Aarno Airaksinen, Statistics Finland and Agnes Tassy, Statistics Denmark, RTA, RTAA and LA BC: Relevant staff expected to be involved in component 3
Duration	2 MS STEs x 4 working days
Output	- For the BC to gain a better understanding of the current situation of web-based data collection in BIH via presentations from DK and FI (self-evaluation) - Knowledge on how to draft documents to communicate the needs for the surveying tool for IT developers (specification of requirements) gained - Increased knowledge on the methodology on how to build web applications gained - Potential issues on ICT questionnaire updates clarified - Necessary information on how to launch web-based data collection in 2025 gained *(after in-person mission)* - Mission report - ToR (including time (frame)) for next activity
Time schedule	Online session(s) in September and in person mission in second week of December 2024 in Sarajevo

Annex 3. Persons met

<u>BHAS:</u>
- Fahir Kanlic, Head of Department for Industry and Construction Statistics (online)
- Dajana Mrgud, xxx (online)
- Dzenita Babic, Senior Adviser for Industry and Construction Statistics

<u>FIS:</u>
- Elvir Juljevic, Expert Consultant for Communication Statistics and Information Society

<u>RSIS:</u>
- Aleksandra Djonlaga. Senior Officer for Consumer Prices in Services
- Suzana Stanojevic, Senior Statistician

<u>RTA Team:</u>

- Niels Madsen, RTA
- Senka Ahmetovic-Palic, 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

Annex 4: Work plan for the component

- Sharing of experiences from DK and FI on the transition from CATI or paper surveys to data collection in web and on the annual execution of the web survey.

- Going through important aspects to consider when preparing web survey, e.g.

  - **Developing web applications**.

    - Where to start when web applications are developed for the first time.

    - Experiences with in-house development vs. outsourcing.

    - Information to give to developers? (text, definitions, examples, type of variables, routing, functionalities, time frame for development of web survey.

    - Possibility to reuse existing web data collections of other surveys.

    - Awareness of possible pitfalls and bottle necks in developing of the web survey

    - Roles and responsibilities

    - Testing of the questionnaires

  - **Adjusting web applications annually**.

    - Necessary information to developers re. 'old' and 'new' questions

    - Time frame

    - Prefill of previously collected information

    - Testing of the questionnaires

  - **Contact with respondents**.

    - How to establish and maintain contact with respondents?

    - Who should be the main contact for ICT ENT survey?

    - How to remind respondents (process/ channels)?

    - How to support respondents in answering web survey?

    - How to reduce non-response among less digitalized respondents?

  - **Operating the web survey**

    - Web survey/e-mail/ telephone/paper mail.

- **Quality assurance of the collected data.**
  - Built-in controls – advantages and disadvantages
  - Availability of raw data vs. corrected data
  - Quality control after data collection: micro and macro control methods, year-to-year checks, etc.
  - How to optimize the resources used for quality control: priority lists? Limiting the corrections to most important points?
  - Advantages and disadvantages of different ways of re-contacting respondents (mails/ telephone)
- **Resources and competencies.**
  - Experiences re. resources used before and after transition to web survey.
  - Need for new skills

- Presentation of web applications used in DK and FI (practical examples)
- Documents for developing/updating web survey questionnaires.
- Information about roles and responsibilities in the FI and DK data collections.