TWINNING CONTRACT

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EU FOR FURTHER
DEVELOPMENT OF
STATISTICS SYSTEM IN BIH

EU for Further Development of Statistics System in BiH

MISSION REPORT

Activity 1.2B: Implementing the statistical unit "Enterprise" in SBS

Subcomponent 1.2 – Structural Business Statistics
Component 1 – Business Statistics

Mission carried out by:

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Jon Mortensen, Statistics Denmark

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EU FOR FURTHER DEVELOPMENT OF STATISTICS SYSTEM IN BIH

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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

The mission focused on implementing the statistical unit "Enterprise" in SBS, highlighting the challenge of consolidating enterprise-level data, which requires the elimination of internal flows between legal units in complex enterprises (enterprises consisting of more than one legal unit). The MS experts presented a variety of methods for producing SBS using complex enterprises.

Currently, the BC Statistical Business Register (SBR) includes only simple enterprises (one legal unit per enterprise), making the incorporation of complex enterprises in the SBR a prerequisite for the implementation of complex enterprises in SBR. MS experts presented methods for compiling complex enterprises, including direct surveys, automated models, and hybrid approaches, adapted to different country contexts.

Key discussions covered profiling enterprise structures and aligning local unit classifications with enterprise classifications. Examples from the Danish model illustrated how complex enterprises are consolidated and the resulting impact on industrial classifications at both enterprise and local unit levels, following EBS operational rules.

The MS experts recommend that BC experts collaborate with SBR colleagues to determine the most suitable method for their context and ensure compliance with EBS regulations. The next mission will focus on developing Section K variables, taking a hands-on approach to address specific cases.

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 2nd mission devoted to the Structural Business Statistics Subcomponent of the Project.

The purposes of the mission were:

*   Work on the implementation of the statistical unit enterprise in SBS
*   Consultation on potential Section K issues
*   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 consultants.

Views and observations stated in this report are those of the consultant(s) 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

The mission began by introducing the statistical unit known as the enterprise. The enterprise is the cornerstone of most European Business Statistics (EBS), including Structural Business Statistics (SBS). However, SBS should also be produced at the local unit level. The presentation focused on explaining the concept of the enterprise and its relationship to legal units.

A key idea behind the enterprise is to harmonize the diverse business structures within the economy. An enterprise group may organize its activities across multiple legal units or concentrate them within a

single legal unit. Statistically, both arrangements should be treated equivalently. To achieve this, complex enterprises are created to consolidate arrangements involving multiple legal units into a single statistical unit. Each complex enterprise is assigned a main activity, enabling comparison with enterprises that concentrate all activities within a single legal unit. The creation of complex enterprises requires expertise in identifying and understanding these arrangements—a process referred to as profiling. Profiling was only briefly discussed during the mission, and MS experts referred participants to Chapter 19 of the Business Register Manual for further guidance. Overall guidelines and references to various official manuals and documents can be found in the EBS Manual (Chapter 6 on Profiling and Chapter 7 on Statistical Units).

MS participants inquired about distinguishing legal units within the same enterprise group as either part of or separate from the complex enterprise. A general rule of thumb is applied: if more than 50% of a unit's revenue or costs are internal (i.e., transactions with other units within the complex enterprise), it is considered part of the complex enterprise.

The session also covered the operational rules for local units when constructing complex enterprises. Some local units inherit the main activity of the complex enterprise, while others retain their own activity codes if their functions are not classified as ancillary. This typically applies to activities such as manufacturing, retailing, research and development, and similar operations.

The MS STE's presented the Danish model for implementing complex enterprises in SBS. In Denmark, the profiling and creation of enterprises are managed by the Large Cases Unit, which is also responsible for compiling SBS for its assigned cases (enterprises). A key challenge in compiling statistics at the enterprise level in Denmark is the absence of a legal framework requiring individual legal units to report data at the enterprise level. Instead, each legal unit within a complex enterprise must be surveyed to provide data on internal flows for non-additive variables. This data is then consolidated to produce statistics at the enterprise level. This process is both resource-intensive and costly. As a result, the Danish model focuses on directly surveying a relatively small number of large complex enterprises, which account for a significant share of the total volume. The MS experts also showcased the methods and IT tools used to compile and produce SBS for these complex enterprises.

Following the presentation of the Danish model, a session was held to explore how other MS implement the enterprise in SBR. The MS experts provided an overview of current practices across these countries. Some members have implemented a large number of complex enterprises in their SBRs, while others adopt models more closely aligned with the Danish approach, involving fewer complex enterprises. A common characteristic of MS with many complex enterprises, is their reliance on automated algorithms to identify complex enterprises and estimate internal flows between legal units within complex enterprises. These methods use profiling results to classify legal units into categories such as the main unit (the unit with the most value added), vertically integrated units, ancillary services, and others. Assumptions are then applied within these models to estimate internal flows between the categories, ultimately consolidating them into a single complex enterprise. Additionally, the MS experts introduced a hybrid approach that blends survey-based and automated methods. For example, some MS survey a small subset of non-additive SBS variables and use the resulting internal flow ratios to estimate other non-surveyed non-additive variables.

A session was held with colleagues from the Statistical Business Register (SBR) to demonstrate how the enterprise is implemented in the Danish SBR. The MS presented how the Danish SBR connects administrative keys (e.g., legal units, VAT numbers) to statistical units, including enterprises (groups), local units, and kind of activity units. Several examples were discussed to illustrate the implementation in practice. One example involved an enterprise group with various segments that required the creation of more than one complex enterprise within the group. Another example featured an enterprise group that had organized its employees in one legal unit while another legal unit owned the group's output. This arrangement resulted in one unit having high turnover but few employees. A more meaningful statistical unit was formed by combining these two units into a complex enterprise, as it included both

employees and turnover. The examples also explored how the creation of a complex enterprise affected the industry classification of local units within the complex enterprise. In some cases, all local units were reclassified to align with the enterprise's industry classification. In other cases, operational rules outlined in the manual meant that certain local units retained their original classifications. The purpose of the session was to inspire SBR colleagues as they prepare for a future mission focused on profiling and creating complex enterprises within the SBR. Currently, no complex enterprises exist in the BC SBRs, meaning that each legal unit corresponds to an enterprise.

The mission concluded with a consultation session reflecting on the previous mission, which focused on estimating Section K SBS variables. BC experts consulted with MS experts regarding special units in the financial sector that perform supervisory activities. A key point of discussion was that regulatory units should not automatically be classified under Section K, even if they regulate the financial sector. The central question was whether their activities constitute ancillary financial services (K66) or are administrative in nature (and therefore outside of Section K). It was agreed that the next mission will focus on the development of Section K variables and will take a more hands-on approach to address specific cases related to Section K.

The mission was shortened to two days due to the cancellation of MS inbound flights, which resulted in the loss of one day. While the entire agenda was covered, discussions and presentations had to be condensed to fit the revised schedule.

3. Conclusions and recommendations

The mission successfully addressed various aspects of implementing enterprises in SBS. A key issue identified is the need to incorporate complex enterprises into the SBR. Currently, the SBR only includes simple enterprises (one legal unit per enterprise), meaning the implementation of complex enterprises in SBS will have to wait until the SBR introduces complex enterprises.

The mission primarily focused on the methodology for generating enterprises and compiling them in SBS. A crucial point highlighted was that creating a complex enterprise does not necessarily simplify the compilation of SBS. NSIs may be prohibited from directly asking legal units about enterprise-level activities. Instead, they can only inquire about a legal unit's own activity and its internal flows with other legal units in the enterprise. This limitation necessitates developing a strategy to compile, estimate, or survey internal flows between legal units in a complex enterprise to produce enterprise-level statistics for SBS.

The MS experts presented a variety of methods for producing SBS using complex enterprises. If the legal framework permits, MSs can survey complex enterprises directly for consolidated data. However, many MSs are legally prohibited to ask one legal unit about data for other legal units and, thus, need to use other consolidation methods. Some MS directly survey a limited number of complex enterprises to gather data on internal flows. Others use automated algorithmic models to manage large numbers of complex enterprises, estimating internal flows based on assumptions. Some employ a hybrid model combining these approaches. The MS experts recommend that BC experts engage in internal discussions with colleagues from the SBR and other relevant departments to identify the method that best suits their conditions and needs.

The next mission will focus on the activity "Development of Section K Variables." It will serve as a follow-up to the previous mission on the same topic, adopting a more hands-on approach to address local cases and their specific challenges. This mission assumes that the forthcoming edition of the EBS manual, expected in December 2024, will not significantly change the estimation rules discussed in the

previous mission. Additionally, it may include theoretical sessions on estimating Section K variables for other industries within Section K.

4. What to do before the next mission

Action	Deadline	Responsible person
Get practical experience with estimating section K for selected industries	Before mission	BC
Send a list of practical cases to MS experts	2 weeks before mission	BC
Consider approach on other units in section K that isn't banking and insurance and potentially send questions to MS experts	Before mission	BC
Keep up to date with new EBS regulation	Before next mission	MS experts

Annex 1. Terms of Reference for the current mission

EU Twinning Project BA 19 IPA ST 01 23

Component 1 - Business Statistics
Subcomponent 1.2 – Structural Business Statistics

Timing: 26 (at 10 a.m.)-28 November (12:00) 2024

Venue: FBiH Institute of Statistics, Zelenih beretki 26, Sarajevo

Bosnia and Herzegovina

Activity 1.2B: Implementing the statistical unit "Enterprise" in SBS

The mission will prioritize addressing the project result: the implementation of the statistical unit 'enterprise.' Additionally, the mission will include a session dedicated to Section K, offering an opportunity for consultation with MS experts.

1. **Mandatory result**

SBS variables for Section K developed according to the EBS regulation.

Methodology for the implementation of statistical unit "enterprise" in structural business statistics developed in line with new EBS regulation.

2. **Purpose of the activity:**

- Work on the implementation of the statistical unit enterprise in SBS
- Consultation on potential Section K issues
- Preparation of ToR for next activity

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

- Work on the implementation of the statistical enterprise in SBS started
- Issues on Section K discussed
- Mission report
- ToR (including time frame) for next activity

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

Activity 1.2C	SBS variables for Section K developed according to the EBS regulation
Budget section	III. Components Mandatory Results – Component X
Subject	• Examples from real BiH data and how they estimate section K variables from them • Preparation of ToR for next activity
Methods	STE mission in BiH
Resources	MS: Mads Tygesen (DK) and to be decided (DK), RTA, RTAA and LA BC: Relevant staff expected to be involved in the component 1.2
Duration	2 STEs x 2.5-3.5 working days for MS staff
Output	• Examples from real BiH data and how they estimate section K variables from them discussed • Mission report • ToR (including time (frame)) for next activity
Time schedule	Late May / Early June 2025

Annex 3. Persons met

<u>BHAS:</u>
Bojana Cicovic, Head of Department for Structural Business Statistics
Haris Buljugic, Junior Statistician, SBS Department
Tanja Miovcic, Head of Statistical Business Register and Economic Classifications Department

<u>FIS:</u>
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Nataša Teinovic, Senior Statistician SBR

<u>RTA Team:</u>
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Larisa Muslimovic, RTA Assistant
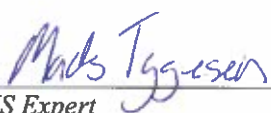Senka Ahmetovic-Palic, RTA Language Assistant

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:

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