TWINNING CONTRACT

BA 15 IPA SR 01 17

Support to the reform of the statistics system in Bosnia and Herzegovina

MISSION REPORT

Activity 2.1.9:
Follow-up on achievements and recommendations for the future

Component 2: Business Statistics
Sub-component 2.1: Statistical Business Register

Mission carried out by
Steen Eiberg Jørgensen, Statistics Denmark
Mari Rantanen, Statistics Finland

04 - 07 February 2020

Version: Final

Expert contact information

Steen Eiberg Jørgensen
Statistics Denmark
Copenhagen, Denmark
Tel:
Email: sej@dst.dk

Mari Rantanen
Statistics Finland
Helsinki, Finland
Tel:
Email: mari.rantanen@stat.fi

Table of contents

List of Abbreviations

BC	Beneficiary country
BHAS	Agency for Statistics of Bosnia and Herzegovina
BiH	Bosnia and Herzegovina
CBBH	Central Bank of Bosnia and Herzegovina
EC	European Commission
EG	Enterprise group
EGR	EuroGroups Register
EU	European Union
FATS	Foreign Affiliates Statistics; OFATS for outward, IFATS for inward
FBiH	Federation of Bosnia and Herzegovina
FDI	Foreign Direct Investments
FIS	Institute for Statistics of Federation of Bosnia and Herzegovina
IPA MB	Instrument for Pre-Accession Assistance, Multi-Beneficiary
KAU	Kind-of-Activity Unit
LEU	Legal Unit
LU	Local Unit
MS	EU Member State
NSI	National Statistical Institute
RSIS	Institute for Statistics of Republika Srpska
RTA	Resident Twinning Adviser
SBR	Statistical Business Register
SBS	Structural Business Statistics
ToR	Terms of Reference
UCI	Ultimate Controlling Institutional Unit, the term for the group head used in FATS

1. General comments

This mission report was prepared within the EU Twinning Project "Support to the reform of the statistics system in Bosnia and Herzegovina". It was the ninth (9) mission to be devoted to the Statistical Business Register within Component 2 of the project.

The purposes of the mission were:
- Updating of the 5-year development plan
- Clarification of outstanding issues
- Identification and sustainability of achievements and project results
- Identification of needs for additional support
- Discussions and recommendations for future work

The consultants would like to express their thanks to all officials and individuals met for the kind support and valuable information which they received during the stay in Bosnia-Herzegovina and which highly facilitated their work.

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

2. Status at the beginning of the project

Status of the SBR
Based on the SBR team's presentation during the first mission and the following discussions it was concluded that the SBR was moving forward and continuously improving.

Revision of the 5-year plan
Since the commencement of the Twinning cooperation, the SBR team has been working with 5-year plans. By the start of the current Twinning project many topics had been finalized. The first task of the SBR component of the current Twinning project was to assess and update the 5-year plan for years 2018 - 2022.

Enterprise groups
The previous project completed the test on delineation of enterprise groups in BiH. Only the first direct relationships between legal units were observed with 50+% ownership. As a result, approximately 1.100 enterprise groups were formed in BiH. Two enterprise groups out of three, 735 groups altogether, were directly owned by a legal unit residing abroad. More than half of these foreign enterprise groups had only one legal unit in BiH. The general impression was that a majority of foreign enterprise groups were from Croatia or Serbia but the ownership chains led also to other countries, e.g. Austria.

The analysis of the enterprise groups required a considerable amount of manual work. Administrative data exist but are not available to the institutes. The databases available to the institutes contain incomplete data. Before starting the formation of EGs, it is necessary to analyse and clean data, as well as manually add missing data. The outcome of the analysis was not incorporated into the SBR. Instead, an Access database was prepared by the IT department.

Croatia has proposed to Eurostat that all Balkan countries should have access to the EGR.

Profiling of enterprise groups
At the start of the current project, the SBR team had little knowledge of profiling.

FRIBS – Framework Regulation in Business Statistics
The FRIBS agreement was only finalized in autumn 2019.

3. Status of project results

All originally planned missions for the component 2 were completed. As a total, there were eight (8) missions in the country and a study visit to Denmark.

5-year plan
In the course of the current Twinning project, two updates of the 5-year plan have been prepared, the first of which in 2018 and the latest in 2020.

The format of the plan was changed in order to better describe the actual initiatives. The current format is identical to that of the Danish SBR strategy for 2022.

The 5-year plan consists of seven subheadings:
1. European Union regulations
2. International cooperation – Eurostat
3. Internal cooperation – administrative sources
4. Data quality improvement in the SBR
5. Development of the SBR
6. SBR methodologies
7. Technology and processes

For the present activity 2.1.9 the MS experts viewed the latest update of the 5-year plan. In their opinion the plan succeeded in giving an exhaustive and appropriately detailed overview of the ongoing development activities and envisaged projects. A BC expert suggested adding a brief risk assessment to each initiative, which the MS experts welcomed. The objective would be to describe the situation in case the initiative was not undertaken; what would be the impact on the SBR.

For each initiative, also the cost aspect was given attention. A perfectionist 100% attainment of all objectives described in the plan would require at the very least doubling of the current SBR staff. However, often even up to 80% of the objectives may be met by incurring mere 40% of costs. Naturally, this is not the case for the most complex and extensive development initiatives.

MS experts from Statistics Denmark have presented a model for cost estimation of development initiatives to the BC SBR team. First, the experts are asked to make educated guesses of the time necessary to undertake the initiative. Each expert gives three estimates: one for an optimistic scenario, one for pessimistic and one for a realistic scenario. In the end, the average of the time estimates is worked out and it is considered to be the best educated guess for the costs of the initiative.

At its best, the 5-year plan serves as a strategic tool for a continuous and target-oriented development of the SBR. The plan should support a realistic goal setting for the development work.

Profiling of Enterprise Groups
In the current Twinning project, the SBR staff from all three institutions have been trained in the profiling methods. The staff have acquired understanding of the methodology and they have completed first test profiles of enterprises.

Enterprise groups in SBR
The SBR data model has been created. Procedures are written in "pseudo code", programmed separately each (each step separately) and checked to work. The model is not completed because the basic assumption for the existence of all input data in electronic form has not been realized. Data are available for companies with headquarters in the RS, and data from the Central Bank for companies whose founders are foreign entities and for domestic companies that are founders of entities abroad. It is necessary to decide whether the model will be completed and the missing input data will be entered manually, or only available data will be entered into the model until the missing input data are provided electronically.

Enterprise groups with natural persons as owners, either as group heads or lower down the control chain, will be excluded from the treatment to avoid any unnecessary complications at this early stage.

Preceding the current Twinning project, during years 2017 and 2018, an Access database was created for data on relationships between legal units. The data may now be used to identify the biggest groups. Naturally, the data need be updated before being transferred to the SBR.

Improved use of administrative data
The RSIS receives monthly the administrative data from the APIF. The data include information on owners of each legal unit, which is indispensable for delineating enterprise groups.

The FIS receives quarterly data from the Tax authority. The data include information on the direct owner of each legal unit.

The BHAS receives annually the FDI (both inward and outward) data from the Central bank. Furthermore, the BHAS has taken an initiative to get data from the High Judicial and Prosecutorial Council of BiH. The negotiations on the access are ongoing.

SBR Survey
The SBR survey has been conducted annually since 2012. In addition, an SBR survey with the focus on entrepreneurs and enterprises was conducted on the NACE section A – Agriculture in 2018. The SBR data quality has increased regarding the NACE action A.

Appointment for assigning codes of activities for specific cases
The BC experts informed that the work on activity codes for specific cases is ongoing. The SBR includes the information on possible secondary activities on the enterprise, which later on may be helpful in delineation of KAU. There is a need for more information from STS and SBS statistics to fulfil the task.

Improvement of cooperation with internal users
All three institutions have made agreements with internal users. The agreements describe how and when attributes in SBR database will be updated; and how to use SBR application.

Improvement of cooperation with the internal users has thus been achieved. Each of the three institutions has discussed its cooperation with the internal users and, as a result, has written a document that specifies deadlines for sampling, frames, data produced by surveys in different statistical domains, which data and when will be fed back to enrich the SBR – and, as a side product, a list of variables maintained in the SBR. The first document has been produced and updates will follow.

Quality Report on SBR
It was found that the ESS Handbook for quality reporting can be applied more straightforward to statistics production than to the SBR performance. The BC experts will draft the first quality

report on the SBR performance with the help from an IPA MB project. The objective is to complete the report by the end of the IPA MB project.

Improvement of data on local units
The focus has been on two essential variables for the local unit level, namely, (1) the number of employees and (2) the activity code. During the current Twinning project, it became clear that the number of employees is not easily attainable due to technical reasons. Neither is it easy to incorporate the number of employees on the local unit into the present SBR model. The BC SBR experts will continue the work on the number of employees. At the same time, determination of the activity code is being prepared for the local unit level.

Sector Coding
Registration of the institutional sector in the SBR has been implemented for the reference year 2015. The SBR is expecting to get input from the national accounts in order to accomplish the coding for 2016 and 2017. The SBR has prepared the technical prerequisites for sector coding.

Methodological description
The description of the SBR data model, covering the SBR variables, units and data sources, has been compiled in one methodological manual. Updating the manual will remain an ongoing work at the BC SBR.

Business Demography
Business demography has been a topic for the IPA Twinning 2012. During the current mission 2.1.9 it was confirmed that the business demography will be produced for the reference year 2020 with the data available in the SBR and possibly few new sources. A description of the quality shall be done.

Overall result
The component has benefited from the dedicated SBR and IT staff from all three statistical institutions, target-oriented cooperation especially among the IT staff from all three institutions, as well as from MS experts' prompt and appropriate contributions to the achievement of the objectives. Progress has been significant, and all benchmarks are expected to be fully achieved.

4. Sustainability of the achievements

The 5-year plan will be revised in the future in the same way as up till now. The BC experts have solid experience from writing the 5-year plan by now, as well as its regular updates. The planning activity could be synchronized with general planning of the SBR activities and the SBR data model updates.

The profiling will not be a priority in the short term. Instead, the objective is to first identify enterprise groups and to incorporate data on them into the SBR. Only after these preconditions are met and both the SBR data model and the IT solutions sufficiently support the action, a more extensive profiling becomes meaningful.

The data on the SBR will be regularly updated also in the future. Data updates on enterprise groups are described in the report of the mission 2.1.8. The BC experts will follow the description for data updates.

5. Recommendations for the future (short and long term)

The MS and BC experts agreed on the following list of the recommended actions for the short and medium term:
-   to involve the main users of the SBR in the selection of development activities (initiatives) that the SBR should put into action. All initiatives are described in the 5-year plan but no explicit priorities are set in the plan itself.
-   to synchronise the update of the 5-year plan with the preparation of the annual statistical plan. This would guarantee that the 5-year plan gets updated regularly and periodically. Also, the 5-year plan could be used to inform the management on number of person-hours required for each development objective to help them to draft as realistic as possible annual statistical plan.
-   to continue the search for data on enterprise groups and to negotiate further for the access to the administrative data on enterprise groups.
-   to prioritise the creation of enterprise groups in the SBR and postpone profiling until enterprise groups are defined in the SBR.
-   to acquire IT training for possible new IT solutions.
-   to revise and, if necessary, propose a new model for the enterprise group.

The MS experts noted with satisfaction that many recommendations for the future work were included in the 5-year plan. The initiatives and activities described in the plan are subject to change as the challenges of today are met and new goals will be set, reflecting new workflows or data introduced.

The MS experts stressed that it may be reasonable to break extensive development initiatives into smaller and more manageable parts. If it does not make sense to take an initiative to pieces, its activities could be organised into a development project with special project management to follow the progress and finalise the project respecting the given constraints (person-hours, data available, …). The importance of project management was discussed during the study visit to Statistics Denmark.

For all development work on the SBR data, it is of utmost importance that the new data may be saved, extracted and updated easily and that the end-users of the data are satisfied. Therefore, it is highly recommendable to cooperate with the end-users from different statistical domains in setting priorities to the development work and in defining its objectives. For example, the national accounts should become interested in the use of the enterprise group data and therefore help in prioritising acquiring data on groups and creating group structures in the SBR. Also, the institutional sector codes will be updated annually in the SBR only if the national accounts genuinely need such frequent updates – and are able to provide the required input.

Now that the SBR data model has been described, the MS experts recommend the BC SBR experts to undertake the work of documenting also the SBR technical model. The objective should be to start off with the documentation in the coming 1-2 years, at the latest.

In the longer term, the cooperation among Balkan countries should be considered as a way of improving the quality of data on enterprise groups as well as of reducing the response burden. The cooperation could take many forms: it could result in a "Balkan group register" as a result of common efforts of the SBRs in all Balkan countries, or it could materialise in sharing information on the group heads or even sharing confidential data on SBS and FATS. The MS experts brought up an encouraging example of Baltic cooperation on FATS production: for more than ten years, Estonia Latvia and Lithuania have shared information on enterprise group heads, both legal units

and natural persons. In 2018, an agreement had been signed to allow the exchange of confidential SBS data for FATS production. See Annex 1 for more details.

6. Identification of needs for additional support

The MS experts find the SBR team qualified and devoted. In the future, external expertise may be useful
- to motivate the team to describe development initiatives systematically to the 5-year plan;
- to break down large initiatives to smaller more manageable parts; and
- to follow up the sustainability of the achieved development objectives, in other words to help integrating the results of the development work in the regular SBR work.

7. Outstanding issues

The MS and BC experts agreed that the outstanding issues remain the following:
- The data model on enterprise groups seems clear and workable but the data base has not been tested yet for entering changes on relationships between legal units.
- More data sources for enterprise groups are needed in electronic form. The availability of staff for treatment of the enterprise group data is a question mark.
- Profiling in any extensive scale is not feasible before the SBR contains data sufficiently on enterprise groups. More experience is needed from profiling in practice.
- The SBR is involved in a few projects with external funding at a time. These projects have a lot of impact on prioritisation of the SBR development as each project has its own focus.

Annex 1. Baltic cooperation on enterprise group data

Merike Põldsaar (Merike.Poldsaar@stat.ee) from Statistics Estonia describes the cooperation between three Baltic countries, Estonia Latvia and Lithuania, in her e-mail reply to Mari Rantanen on the 7th February 2020 as follows:

"

Baltic cooperation in the field of FATS started around the same time as the FATS itself began. We have been exchanging data for about 10 years. The Baltic cooperation meetings of FATS (and SBS) are held regularly (every second year).

At that time, the EGR was only about the largest European groups (was it started with top500?). But companies in Estonia, Latvia and Estonia were mostly owned by much smaller groups and often from neighbouring countries. So, we did not receive much help from EGR, but we were concerned about the quality of IFATS data. First we exchanged the information to produce IFATS about the UCI country. The UCI country is not confidential information in all three countries, so we exchanged the microdata via e-mail.

For example, I sent to my Latvian colleagues a list of Estonian companies that were, according to our information, controlled by Latvian companies (UCI unit) or individuals. They confirmed the information or made necessary corrections about the UCI countries.

In 2018, the Director-Generals of the Baltic countries signed an agreement between NSIs on Exchange of Micro Data on Structural Business Statistics for Foreign Affiliates Statistics data production. The agreement was signed in accordance with Article 21 of the Regulation (EC) No 223/2009 The European Parliament and of the Council of 11 March 2009 on European statistics and repealing Regulation (EC, Euratom) No 1101/2008 of the European Parliament and of the Council on the transmission of data subject to statistical confidentiality to the Statistical Office of the European Communities, Council Regulation (EC) No 322/97 on Community Statistics, and Council Decision 89/382/EEC, Euratom establishing a Committee on the Statistical Programmes of the European Communities.

The SBS data of the foreign controlled enterprise in the country of its residence are the OFATS data in controlling country. To avoid the double data collection about the same enterprise i.e. for SBS and IFATS in country of residence and for OFATs in the controlling country, the data were exchanged. The SBS data on the micro level are confidential and for data exchanges an sFTP server was set up with SSH2 protocol protected with username and password. All data files uploaded to server are encrypted beforehand (using AES-256 encryption method). The variables required for OFATS (UCI country, kind of activity (NACE), turnover, number of persons employed, number of employees, personnel costs, gross investment in tangible goods) are exchanged.
"

Annex 2. Terms of Reference

<div style="border:1px solid black;padding:1em;text-align:center">

Terms of Reference
EU Twinning Project BA 15 IPA ST 01 17

Component 2: Business Statistics
Sub-component 2.1: Statistical Business Register
04 - 07 February 2020
Hosting Institution: FIS

</div>

Activity 2.1.9: Follow-up on achievements and recommendations for the future

1. **Mandatory result and benchmarks for the component**

Mandatory result:
- Volume of characteristics in the Statistical Business Register increased and quality of data improved in line with EU standards by 8th project quarter

Benchmarks:
- 5-year development plan for the statistical business register updated and adopted by 2nd project quarter
- Staff trained in profiling methods by 5th project quarter
- First test profiling created by 5th project quarter
- 5-year development plan for the statistical business register updated and adopted by 8th project quarter
- Enterprise groups data integrated into the statistical business register by 8th project quarter
- Plan developed for updating the statistical business register data model by 8th project quarter

2. **Purpose of the activity**
- Updating of 5-years development plan
- Clarification of outstanding issues
- Identification and sustainability of achievements and project results
- Identification of needs for additional support
- Discussions and recommendations for future work

3. **Expected output of the activity**
- 5-years development plan for SBR updated and agreed
- Achieved results of the respective component analysed and assessed
- Recommendations for future work made (exit strategy)
- Sustainability of the achievements
- Identification of needs for additional support
- Outstanding issues

4. Participants

<u>**Agency for Statistics of BiH (BHAS)**</u>

- Dzenita Mustafic, SBR Coordinator

- Mevlija Odobasic, SBR

- Ivana Tavra Colo, SBR

- Branislava Cvijetic, IT BHAS

- Senija Facic, Branch Office Brcko District

<u>**Institute for Statistics of Federation of BiH (FIS)**</u>

- Emira Beširević, SBR Coordinator

- Envera Hurić, Senior Advisor in SBR and Economic Classifications Department

- Amar Bisić, Senior Associate for Registers

- Elvir Mušinović,

- Razija Bičakčić, IT FIS

<u>**Institute for Statistics of Republika Srpska (RSIS)**</u>

- Nada Malinović, SBR Coordinator

- Stevan Marjanović, Senior Statistician SBR

- Pero Kazanović, IT RSIS

<u>**MS Experts**</u>

- Steen Eiberg Jørgensen, Statistics Denmark

- Mari Rantanen, Statistics Finland

<u>**Twinning Project Administration**</u>

- Katja Møller Hjelvang, RTA

- Đemka Šahinpašić, RTA Assistant

- 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:

Date: 14th of February 2020

_____   _____
Component leader, BHAS   Component leader, FIS

_____   _____
Component leader, RSIS   RTA

_____   _____
MS Expert   MS Expert