TWINNING CONTRACT

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Support to the State and Entity Statistical Institutions, phase VI



MISSION REPORT

on

Activity 2.1.2 Business Demography I

Mission carried out by Dalia Maciuitiene, Statistics Lithuania Jaakko Salmela, Statistics Finland 23-27 Feb 2015

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Table of contents

1. General comments		
2. Assessment and results		
2.1 Presentation of Business Demography principles by experts		
2.2 Presentation and discussion of the present status on Business Demography		
2.3 Discussion of relevant data items according to the Annex IX of SBS Regulation (EC	c) No 295/2008 5	
2.4 Discussion on development of methodology for linking SBR with the compilation of	f SBS business	
demography		
2.4.1 Sharing of work within Bosnia and Herzegovina	5	
2.4.2 Creating enterprise populations	5	
2.4.3 Matching and elimination of other creations	6	
2.5 Assessment of technical preconditions	6	
2.6 Next mission		
3. Conclusions and recommendations		
Annex 1. Terms of Reference		
Annex 2. Persons met		

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
RS	Republika Srpska
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 Twinning Project "Support to the State and Entity Statistical Institutions, phase VI". It was the first mission to be devoted to Business Demography (BD) within Component 2.1 of the project.

The purposes of the mission were:

- Presentation of BD principles in Lithuania and Finland
- Presentation and discussion of present status on BD in Republika Srpska, Federation of BiH and Brcko District
- Presentation of relevant data elements in the Annex IX of SBS Regulation (EC) No 295/2008
- Discussion on the methodology for linking SBR with the compilation of business demography
- Assessment of technical preconditions for production of business demography
- Preparation of topics for next mission

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 and Herzegovina and which highly facilitated the work of the consultants.

This 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, Statistics Finland or Statistics Lithuania.

2. Assessment and results

The assessment and results are structured according to the bullet list of expected activities in the Terms of Reference.

2.1 Presentation of Business Demography principles by experts

Presentations on business demography production in Lithuania and Finland were given. Both countries have adopted different ways to produce the BD data, which in itself presents different examples on how to organize the work.

2.2 Presentation and discussion of the present status on Business Demography

BHAS, FIS and RSIS presented the demographic variables, data sources and practices in their SBR. The SBRs do contain data on reorganizations which are relevant for BD production. This data originates from administrative sources, which can be considered advantageous. The variables most directly related to business demography are those, which give information about the birth (creation), death (deletion) of a legal unit or relationships between legal units (splitting, merging, take-over, etc.). All of these variables are of interest when deleting other creations from the population of births and in similarly deleting "false" deletions from the population of deaths.

Address data is not stored in a standard form in the SBR of Bosnia and Herzegovina. This is to say, that the same address may be stored in more than one way in the SBR. As enterprises are matched using the address, this can limit the effectiveness of matching using this variable. This situation emphasizes the importance of data on demographic events based on administrative data in SBR.

Business demography production will therefore benefit from the development of SBR to store all addresses in a uniform fashion.

It was noted that enterprises moving from one entity to another may prove problematic. This, however, involves annually only a small number of enterprises. The amount was estimated to be about a hundred. Therefore, it is unlikely to affect the country level aggregates of active enterprises, births or deaths.

The SBR contains a date variable only for the date of registration for each legal unit. This variable is not practical in the production of BD because it does not refer to the actual start of activities, which can take place considerable time after the registration. Also the BD manual does not recommend using it. For business demography purposes, it is enough to determine the starting year of activity using turnover and employment. Enterprise is considered to be active when it has turnover and/or employment. Enterprise birth (start of activity) occurs in the year which is preceded by at least two years of inactivity. Similarly, enterprise death occurs in the year which is followed by at least two years of inactivity.

2.3 Discussion of relevant data items according to the Annex IX of SBS Regulation (EC) No 295/2008

Most relevant data items regarding BD production and the contents of transmission were discussed during the week. Regarding the SBS regulation, especially the legal form classification was brought forward. As both Finland and Lithuania have many, between 20 and 40, legal forms each, it was discussed how to summarize all the legal forms to the classes required in the SBS regulation Annex IX. This should be done by assessing how each national legal form corresponds to each class in the transmission format. Therefore, it requires a little knowledge of tax regulation. Data may not necessarily have to be transmitted to Eurostat regarding every available legal form.

2.4 Discussion on development of methodology for linking SBR with the compilation of SBS business demography

The following topics regarding this activity were discussed:

2.4.1 Sharing of work within Bosnia and Herzegovina

It was discussed how to organize the work in Bosnia and Herzegovina. During the week it was concluded that in the development phase, the methodology is tested in BHAS. In this step, the data will be exact for the Brcko district and for enterprises from other areas the data will have the employment measured in size classes. After the development, RSIS and FIS will test the methodology using data with exact employment figures. In the future, it is probable that the regular production will have to be done in all three organizations: RSIS, FIS and BHAS (for Brcko). Each would produce data which BHAS would then summarize to the Eurostat transmission format.

2.4.2 Creating enterprise populations

The first activities in producing the business demography data were discussed. The work on business demography should start from creating the three enterprise populations: population of active enterprises, population of enterprise births and population of enterprise deaths.

Two options for this work were presented. Initially time was spent examining the example cases from Finland, where a panel data is created and births and deaths are deducted by comparing annual row to previous ones. This method may not suit Bosnia-Herzegovina the best, because the countries use different tools. The examples, however, were useful in demonstrating the principles of enterprise birth, death and reactivation.

As BHAS, FIS and RSIS are likely to use SQL in their work, other approach may prove more useful. Chapter 5.1 in the OECD-Eurostat Business Demography Manual presents a good step-by-step approach which may suit tools and conditions in Bosnia-Herzegovina the best. Here, a separate table for each annual population of active enterprises is created. After this, annual tables for enterprise births are created by checking for each active enterprise for each year, whether these enterprises are in the population of active enterprises for the two previous years. Enterprise deaths can be similarly derived by looking each enterprise in the active populations for the next two years.

2.4.3 Matching and elimination of other creations

The principles of matching enterprises by name, location and activity were discussed. These methods may not prove most useful in the case of Bosnia-Herzegovina, but they remain a topic for the future mission. To remove false births and other creations, more emphasis should be put on using the data on type of enterprise birth stored in the SBR, which initially seems of good quality. This can be done as soon as the enterprise populations are created (described above) by merging this data from SBR into each birth.

2.5 Assessment of technical preconditions

No technical preconditions were brought forward which would prevent the production of BD. However, some questions remain regarding the address data. Also, due to the exact employment variable not being available for all enterprises at BHAS, part of the work will have to be shared to FIS and RSIS.

There were no existing procedures for the production of business demography, and therefore the work will start from the beginning. The SBR, however, contains information which has laid a foundation for the production of BD.

The number of years for which BD data can be produced depends on the data available from the business register. The SBR data is available from 2008 onwards, with natural persons available from 2014 on. Therefore, enterprise births can be calculated from 2010 onwards and for natural persons from statistical year 2016. Populations of active enterprises and deaths can be calculated from 2008 on (2014 for natural persons). As long as the natural persons are unavailable, the methodology and data should be developed for the enterprises for which SBR data is available.

2.6 Next mission

It was agreed that next SBR mission for BD, is to take place in November 2015 and it should include both components (SBR and SBS). There was SBS mission scheduled at the same time, but that mission will take place in spring of 2016. The next mission should take place when the experts at Bosnia and Herzegovina have produced the populations of enterprise deaths, births and active enterprises according to the BD manual. These populations should be created for all years for which it is possible. Support to the State and Entity Statistical Institutions, phase VI 11

It is strongly advised, that the populations of births and deaths are combined with the demographic variables from SBR. This is important to see if problems arise and how they will affect the population of "real" births and deaths. For example, in the population of births, it would be of interest to mark those enterprise births where the underlying legal unit has been born as a result of a merger, break-up or a split-off. From this basis, rules for processing the enterprise births could be decided, and thus other creations from the population of births could be automatically removed.

The next step would be to see how to implement the matching process and how it would affect the number of enterprise births and deaths. As other creations and other deaths are removed from the populations, in the next mission more emphasis can be put to employer enterprises, survival and reporting in general.

3. Conclusions and recommendations

It can be concluded that the SBR in Bosnia and Herzegovina has the elements to produce BD data. The practical work must be shared between all three statistical organizations, in both development and regular production phase.

The next step forwards is the creation of the three enterprise populations for each possible year. It is strongly advised, that the demographic variables in SBR are combined with the annual populations of births and deaths.

Action	Deadline	Responsible person
Decide who will be responsible	As soon as possible	Management of BHAS, RSIS,
for BD production,		FIS
development of methodology,		
programming.		
Produce the population of	Before the next mission	Staff of BHAS, RSIS, FIS
active enterprises according to		
BD methodology for each		
possible reference year		
Produce the population of	Before the next mission	Staff of BHAS, RSIS, FIS
newly born enterprises for each		
possible reference year		
Produce the population of	Before the next mission	Staff of BHAS, RSIS, FIS
enterprise deaths for each		
possible reference year		

Annex 1. Terms of Reference

EU Twinning Project BA-12-IB-ST-01 <u>Terms of Reference</u> Component: 2.1. Statistical Business Register 23 – 27.02.2015.

Institute for Statistics of Federation of BiH, Zelenih beretki 26, Sarajevo

Activity

2.1.2 Business Demography I

Benchmarks

- 5-year development plan updated by 1st project quarter and by 8th project quarter
- Methodology for linking SBR with the compilation of SBS business demography characteristics available by 4th project quarter
- Methodology for enterprise groups in SBR available by 8th project quarter
- Institutional sectors code assigned to the SBR units by 8th project quarter
- SBR is ready to be used for analysis of business demography by 8th project quarter

Purpose of activity

The expected activities are:

- Introductory speech on Business Demography preparing by experts
- Presentation of Business Demography principles, by experts:
 - Presentation of Lithuanian BD principles
 - Presentation of Finland BD principles
- Presentation and discussion of the present status on Business Demography:
 - Presentation on relevant data elements on BD in Republika Srpska
 - Presentation on relevant data elements on BD in Federation of BiH
 - Presentation on relevant data elements on BD in Brcko District
- Presentation on relevant data elements on BD in Structural Business Statistics according to the Anex IX of SBS Regulation (EC) No 295/2008
- Discussion on development of methodology for linking SBR with the compilation of SBS business demography
 - Use of SBR for compilation of BD statistics
 - Define of responsibilities and tasks for SBR and SBS
- Assessment of technical preconditions on introductions of BD in SBR
 - Presentation of existing procedures

- Discussion on existing procedures and establishment of the new ones
- Next mission
 - Preparation of the list of activities to be done before the next mission

Expected output

- General overview on Lithuanian and Finland Business Demography procedures
- Commitment between SBR and SBS on ways and plans for practical cooperation on Business Demography agreed
 - Understanding among SBR and SBS staff of principles for Business Demography and using of SBR for this purpose
 - Linkages SBR with SBS on business demography agreed
 - Plan for regular updating defined
 - Input to draft methodology made Methodology for linking SBR with the compilation of SBS business demography characteristics
- Technical preconditions on introductions of Business Demography in SBR assessed
- The list of activities to be done before the next mission on Business Demography (planned for June 2015), as well as the person responsible for the realization of specific activities, prepared and agreed by all partners (BHAS-BD/ FIS/RSIS participants, SBS participants, experts and RTA)
- Draft ToR for the next mission prepared and agreed by all partners (BHAS-BD/ FIS/RSIS participants, experts and RTA)

Agenda

Location: <u>Institute for Statistics of Federation of BiH</u>, Zelenih beretki 26, Sarajevo Conference room of the Institute for Statistics of Federation of BiH, at the first floor.

Time	Day	Place	Event	Purpose / Detail of event
10:00-11:30	Monday, morning		MS experts briefing with the RTA	To discuss the mission, introduce the experts to each other, discuss previous experience
12:00-15:30	Monday, afternoon		Experts Workshop, SBR and	Introductory speech and adopting of Agenda Presentation of Business Demography model in Lithuania and Finland
			SBS Staff with MS Experts	Discussion Presentation of the present status on Business Demography in BiH
8:30-15:30	Tuesday, morning		SBR and SBS Staff	Presentation on relevant data elements on BD in Structural Business Statistics
	Tuesday, afternoon		Workshop, SBR and SBS Staff with MS Experts	Development of methodology for linking SBR with the compilation of SBS business demography characteristics
8:30-15:30	Wednesday, morning		Workshop, SBR and SBS Staff with MS Experts	Development of methodology for linking SBR with the compilation of SBS business demography characteristics
W	Wednesday, afternoon		Workshop, SBR and SBS Staff with MS Experts	Development of methodology for linking SBR with the compilation of SBS business demography characteristics
8:30-15:30	Thursday, morning		Workshop, SBR, SBS and IT Staff with MS Experts	Discussion of technical preconditions on introductions of BD in SBR
Thursday, afternoon		Workshop, SBR, SBS and IT Staff with MS Experts	Final agreement on introduction of BD into SBR and development of methodology for business demography	
8:30-13:00	Friday, morning		SBR, SBS and IT Staff with MS Experts	Presentation of results, agreement on mission report, homework for the next mission, implications for the next activities

Annex 2. Persons met

Agency for Statistics of BiH

Statistical Business Register:

Dubravka Husić	Head of Unit for SBR
Dzenita Mustafić	Specialist for SBR
Mevlija Odobasić	Senior Advisor for SBR
Senija Fačić	Head of Branch Office in Brčko District
Branislava Cvijetić	Senior Advisor for IT

Structural Business Statistics:

Tima Karačić	Head of Unit for SBS
Bojana Cicović	Senior Official for SBS

Institute for Statistics of Federation of BiH (FIS)

Statistical Business Register:

Enisa Rastić	Head of Unit for SBR
Emira Beširević	Senior Official for SBS
Nidžara Zahiragić	Specialist for SBR
Razija Bičakčić	Senior Advisor for IT

Structural Business Statistics:

Aida Ljuca Senior Official for SBS

Institute for Statistics of Republika Srpska (RSIS)

Statistical Business Register: Slavica Josipović Specialist for SBR

Structural Business Statistics:Danica BabićSpecialist for SBS

Twinning Project Administration

Søren Leth-Sørensen	RTA
Djemka Šahinpašic	RTA Assistant
Haris Imamović	Interpreter