### TWINNING CONTRACT

# **Support to Statistics**

## Kosovo



# **MISSION REPORT**

on

## Improved structural business statistics II

Component no 3.2.1.1 Business Statistics

Mission carried out by Antanina Valiulienė, Statistics Lithuania and Bronislava Kaminskienė 15 – 19 September, 2014

Author's name, address, e-mail

Bronislava Kaminskienė Private expert Architektu 212-14 LT-01500, Vilnius Lithuania

Tel: +370 5 263 0849

Email: bronislava.kaminskiene@gmail.com

Antanina Valiulienė Statistics Lithuania 29 Gedimino Avenue LT-01500, Vilnius Lithuania

*Tel:* +370 5 236 4858

 ${\it Email: antanina.valiuliene@stat.gov.lt}$ 

## **Table of contents**

Executive Summary	Fejl! Bogmærke er ikke defineret.
1. General comments	
2. Assessment and results	4
3. Conclusions and recommendations	6
Annex 1. Terms of Reference	8
Annex 2. Persons met	

## **List of Abbreviations**

AD	Administrative Data
KAS	Kosovo Agency for Statistics
ToR	Terms of Reference
SL	Statistics Lithuania
SBS	Structural Business Statistics
BR	Business Register
NA	Notional Accounts

.

#### 1. General comments

This mission report was prepared within the Twinning Project "Support to Statistics". It was the second mission devoted to Business statistics within Component 3.2.1 of the project. The mission was aimed at further reduction of production time and improving quality of SBS.

The concrete objectives of the mission were:

To consult and work with KAS professionals giving general support to improve Structural Business Statistics in Kosovo

Consultants (expert from Statistics Lithuania and private expert) would like to express their thanks to all officials and individuals met for the kind support and valuable information received during the stay in Kosovo, which highly facilitated the work of the consultants.

This views and observations stated in this report are those of the consultant and do not necessarily correspond to the views of EU, KAS or Statistics Lithuania.

#### 2. Assessment and results

Starting point is the list of activities mentioned in the ToR.

Description and assessment of the situation as basis for conclusions and recommendations in 3.

What have been achieved during the mission. Problems, delays.

#### 1. Discussions with KAS participants on suggested SBS realization plan

SBS realization plan was prepared and submitted to KAS before the mission. The plan has been based on the implementation of GSBPM model, main actions and results of every sub process are described, responsible positions is indicated as well as deadlines for each process – prescribed. During the mission the SBS survey realization plan was discussed and approved. Its implementation was agreed for the reference year 2014. The plan is added to the mission report Annex 1. It was also discussed the deadline for the preparation of sample frame. For the improvement of better timelines it was suggested making a sample for the reference year using the list of active enterprises with data of the previous year.

### 2. Overview of editing and imputation methods

KAS specialists presented the state of play (existing situation) and problems related with the data editing and imputation. Experience on editing and imputation methods used for primary and secondary editing in SL was presented and editing and imputation process was clarified. After discussions it was recommended to perform a visual review of questionnaires by data collectors. It was recommended that KAS specialists have to prepare instructions for visual data checking and that data collectors have to be trained. For the better timelines, it is recommended and reasonable to use the heads-down mode for data entry – data entry with non-error detection occurring in the time of entry. Then the list of records which do not satisfy the editing rules have to be prepared for further analysis. It was agreed that the primary editing procedures ensure required timelines and quality of preliminary data for NA. In order to prepare the final SBS results, statistical data has to be adjusted with AD and editing methods in macro level have to be introduced. KAS specialists have to determine rules and methods which will be used. To ensure the high quality of the SBS results it is suggested performing the analysis of comparability and coherence.

#### 3. Practical exercises on use of editing and imputation methods

Usually for the data editing and imputation special software is used (SAS, R or other). If the number of records is not big Excel functions can be used. The excel file with various kind of different editing methods was prepared before the mission. Using this tool during the practical exercises various methods were applied for editing KAS data for 2012. It was recommended for KAS specialists to determine which rules and methods could be used in the future. To ensure the high quality of the SBS results the analysis of comparability and coherence has to be performed using multidimensional methods and Eurostat recommendations on quality validation checks.

### 4. Workshop on use of Administrative data in SBS in KAS and SL.

All available and possible Administrative data (AD) sources were discussed. SL introduced its own practice on using different AD sources and benefit of using reduction of response burden, evaluation of missing values and improving the quality of results. KAS has access to many administrative data including data from Annual Financial Statements. These data have to be analysed and widely used in the production of SBS statistics. For the more effectively use of AD it will be purposeful to reach an agreement for on-line data access from TAX authority and to organise data flows in a way to pre-fill the statistical questionnaires.

#### 5. Workshop and discussion on implementation of NACE rev 2 in business statistics

SL experience on back casting of business statistics data from NACE rev. 1.1 to NACE rev. 2 was presented additionally. In SL data recalculation was performed using the micro or macro data. The time series of indicators were back casted step by step. The coefficients of concordance were calculated using data from double survey. During the mission KAS situation was analysed and it was agreed that business statistics indicators might be recalculated by coefficients of concordance which can be calculated using data from double survey 2013.

All documents and presentations related with discussed issues were presented for KAS specialists in files.

#### 3. Conclusions and recommendations

List conclusions and recommendations related to the activities mentioned in the ToR.

- 1. For improvement of better timelines it is recommended to prepare the sample frame at the end of the reference year using data available in Business register (turnover and number of employees for the year t-1).
- 2. Starting from 2014 it is recommended to carry out SBS survey according to the approved realization plan. For the successful realization of the defined activities it could be recommended to ensure required administrative capacity specialist for data editing, imputation and analysis and half time specialist for work with administrative data would be required for these tasks.
- 3. The visual control of paper questionnaires could be realized by interviewing company. KAS specialists have to prepare instructions for visual data checking and data collectors have to be trained.
- 4. For the improvement of data collection process KAS it could be proposed to start work on the implementation of electronic questionnaires, to organise getting data flows from TAX authority to pre-fill statistical questionnaires.
- 5. To ensure high entering speed it is recommended to implement the heads-down mode: when data are entered the list of records with errors has to be prepared for further data analysis.

- 6. It is recommended to implement the methods for primary and secondary editing and imputation. KAS specialists have to determine rules and methods which to be used. To ensure required timelines and quality of the preliminary data for NA the primary editing procedures have to be introduced. To ensure the high quality of the SBS final results statistical data has to be adjusted with AD and analysis of comparability and coherence has to be performed.
- 7. Many indicators are included in the statistical questionnaire while published only few. It might be the reason of the low response rate and high number of missing values. It is recommended to provide for users more statistical indicators.
- 8. It is suggested calculating the SBS indicators and after a few years of deep analysis starting their publication.
- 9. KAS has access to the wide range of AD including data from Annual Financial Statements. It is recommended to analyse these data and to define the strategy for their use in the production of SBS statistics. This strategy could be implemented step by step.
- 10. Special software gives possibility to use automatic procedures for data management. It is proposed to search the possibility to obtain the adequate equipment.
- 11. Back casting of business statistics indicators by NACE rev. 2 might be carried out using conversion coefficients evaluated on the double survey for 2013.

### **Annex 1. Terms of Reference**

#### **Terms of Reference:**

**Component 3:** Business Statistics

Activity 3.2.1.1: Further reduction of production time and improving

quality of SBS

**Scheduling:** 

ToR –ready date: 01 September 2014 Start / end of activity: 15-19 September 2014 Reporting time: 26 September 2014

**Mandatory result of the component:** 

	wiandatory result of the component:				
Mandatory Result	Intervention logic	Benchmarks	Sources of information	Assumptions	
Mandatory Result 3.2	Structural Business Statistics (SBS) Reducing of production time and improving quality of SBS	Mission report     describing work done     and work further to     be completed by     KAS before next     activities related to     Structural Business     Statistics uploaded     on project homepage	<ul> <li>Twinning         Quarterly reports</li> <li>Mission reports</li> </ul>	<ul> <li>Sufficient         absorption         capacity</li> <li>Access to         administrative         and survey data</li> <li>Low turn-over of         staff involved in         implementation</li> <li>Staff works on         project related         tasks in between         missions</li> </ul>	

#### **Subject / purpose of activity 3.2.1.1:**

To consult and work with KAS professionals giving general support to improving Structural Business Statistics in Kosovo

#### **Expected output of activity 3.2.1.1:**

Mission report with recommendations on how to reduce Structural Business Statistics Survey from 150 days to 113 days in 2017. Report should also propose action to be taken at KAS before next mission on this issue.

#### **KAS** resources:

Mr. Ismail Sahiti, Head of Division, ismail.sahiti@rks-gov.net (Component Leader)

Mr. Hysni Elshani, Head of sector, hysni.elshani@rks-gov.net

Mr. Muhamet Kastrati, Manager of database, <a href="muhamet.kastrati@rks-gov.net">muhamet.kastrati@rks-gov.net</a>

Ms. ValdeteNavakazi, Senior Officer for STS, valdete.navakazi@rks-gov.net

Ms. Luljeta Krasniqi, Senior Officer for SBS, <u>luljeta.krasniqi@rks-gov.net</u>

Mr. BekimBojku, Senior Officer for energy statistics, bekim.bojku@rks-gov.net

#### **KAS** Twinning team:

Project Leader Mr. Ilir T. Berisha, Director of Economic Statistics and National Accounts, <a href="mailto:lir.T.Berisha@rks-gov.net">lir.T.Berisha@rks-gov.net</a>

RTA Counterpart Ms. Teuta Zyberi, International Relations Officer, <a href="teuta.zyberi@rks-gov.net">teuta.zyberi@rks-gov.net</a>

#### **Member state resources:**

Ms. Bronislava Kaminskiene, Head of Methodology and Quality Division, Statistics Lithuania, bronislava.kaminskiene@stat.gov.lt

Ms. Antanina Valiuliene, Head of Enterprise statistics division, Statistics Lithuania, <a href="mailto:Antanina.Valiuliene@stat.gov.lt">Antanina.Valiuliene@stat.gov.lt</a>

#### **Twinning ressources:**

Mr Per Knudsen, RTA, <u>pkn@dst.dk</u>
Ms Nora Zogaj, RTA Assistent, <u>nzogaj@yahoo.com</u>

#### Description of the background for the activity

This is the second mission on reducement of production time and improving the quality on SBS. In the report from the first mission "Improved structural business statistics I. Kaminskienė & Valiulienė" had several recommendations and also a plan for what should be fulfilled before this second mission.

- 1. Consultants suggest using the last version of the questionnaire modifying only part of chapters and after testing it to implement a new one for the next reference year;
- 2. The current recourses do not ensure production of good quality data in terms of timeliness, accuracy and comparability.
- 3. NA needs data earlier the preliminary data may be prepared for their needs or SBS survey has to be organized according to the suggested SBS realization plan.
- 4. Specialists of KAS have to prepare instructions for visual data checking and data collectors have to be trained.
- 5. The data entering in to data basis has to be started as soon as the questionnaires are received but not after the all questionnaires are completed/ collected. It is necessary to use more automatic procedures for data checking, editing and imputation.
- 6. The optimal survey realization plan helps to ensure the punctuality of results for every sub-process. The automated procedures for editing ensure better timeliness without loses of data accuracy. The implementation of more additional editing rules will ensure better data comparability and accuracy.
- 7. During the next mission the editing and imputation methods will be discussed

Actions needed for preparing the next mission

Action	Deadline	Responsible person
Plan of SBS survey used in	14 May	KAS
KAS		
Editing rules used in KAS	end of May	KAS
Extended SBS survey plan	by the next mission	SL
Description of editing rules	by the next mission	SL
Next mission	15-19 September	KAS and SL

#### Activities to be undertaken in preparation for the mission:

List of attached documents

Improved structural business statistics I. Kaminskienė & Valiulienė

### The expected activities are:

## **Expected output:**

- Mission report according to template
- Detailed plan for further activities to be completed in component 3.2 by the twinning program

## Annex 1. Program, September 2014

Day	Place	Time	Event
-			
1	KAS	09.00	Introductory remarks to this part of component 3
		09:15	KAS: Overview of the work (including implemented
			recommendations and achievements) with SBS in Kosovo since
		10.20	last mission
		10:30	Coffee break
		11:00	Program for the week to be agreed upon
		12:00	Lunch break
		13:15	SBS realization plan
		14:30	Coffee break
		15:00	Discussion on the suggested plan
		16:00	Final version of SBS realization plan
2	KAS	09:00	Data editing and imputation methods
		10:30	Coffee break
		11:00	SBS data editing and imputation in SL
		12:00	Lunch break
		13:15	Practical exercises on editing and imputation with the SBS data
		14.30	Coffee break
		15:00-	Editing rules for SBS indicators
		16.30	
3	KAS	09:00	Output from practical exercises
		10:30	Coffee break
		11:00	Use of Administrative data in SBS in KAS
		12:00	Lunch break
		13:15	Use of Administrative data in SBS in SL
		14:30	Coffee break
		15:00-	Discussion on wider use of administrative data in SBS in
		16.30	KAS
4	KAS	09:00	Ad-hoc and hands-on meetings: Wrapping up
		10:30	Coffee break
		10:45	Workshop: Agreement on recommendations and time plan
		12:00	Lunch
		15:00	Debriefing with BC Project Leader and RTA: Recommendations,
			time plan and implied work program for BC
5	KAS	09:00	Report writing

	10:30	Coffee break
	10:00	Report writing
	12:00	Lunch break

## **Annex 2. Persons met**

### KAS:

Mr. Hysni Elshani, Head of sector, <a href="https://hysni.elshani@rks-gov.net">hysni.elshani@rks-gov.net</a> Ms. ValdeteNavakazi, Senior Officer for STS, <a href="mailto:valdete.navakazi@rks-gov.net">valdete.navakazi@rks-gov.net</a> Ms. Luljeta Krasniqi, Senior Officer for SBS, <a href="mailto:luljeta.krasniqi@rks-gov.net">luljeta.krasniqi@rks-gov.net</a>

#### RTA Team:

Per Knudsen, RTA Nora Zogaj, RTA Assistant Interpreter (some missions)