

# **TWINNING CONTRACT**

**AZ/16/ENI/ST/01/19 (AZ/53)**

**Support to the State Statistical Committee and the State Tax Service under  
the Ministry of Economy to  
strengthen collection, harmonization, analysis, publishing and  
dissemination of business statistics**



## **MISSION REPORT**

**Activity 4.2.B**

**Activity Title: Utilizing administrative data in SBS part 2**

**Component 2: The production of business statistics/ SME statistics in terms of content and organization is upgraded**

Mission carried out by

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**2-30 June 2021**

Via: Online Activity: Webex videoconferencing app

Version: FINAL

**Twinning Project: AZ/16/ENI/ST/01/19 (AZ/53)**

**“Support to the State Statistical Committee and the State Tax Service under the Ministry of Economy to strengthen collection, harmonization, analysis, publishing and dissemination of business statistics”**

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## List of Abbreviations

AZ	Azerbaijan
BC	Beneficiary Country
EBS	European Business Statistics
EC	European Commission
EU	European Union
MS	Member State
NACE	Nomenclature générale des Activités économiques dans le Communautés européennes NACE is the industrial classification of units dealing in economic activities
RS	Remote Sessions
RTA	Resident Twinning Adviser
SRSU	State Register of Statistical Units
SSC	State Statistical Committee
STS	State Tax Service under the Ministry of Economy
ToR	Terms of Reference



## **1. General comments**

This mission report was prepared within the EU Twinning Project “Support to the State Statistical Committee and the State Tax Service under the Ministry of Economy to strengthen collection, harmonization, analysis, publishing and dissemination of business statistics”. It was the second mission to be devoted to redesigning the structural business statistics (SBS) within Component 2, Result 4 within Activity 4.2 of the project.

The purpose of the mission was:

- Result 4: Business Statistics (BS) in Azerbaijan redesigned.

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 Remote Sessions and which highly facilitated the work of the consultants.

The views and observations stated in this report are those of the consultant and do not necessarily correspond to the views of EU, SSC, STS, SME-Agency, Statistics Finland, Statistics Lithuania, Statistics Netherlands, Statistics Denmark and HAUS.

## **2. Status at the beginning of the mission**

Activity 4.2.B was carried out on four Remote Sessions (RS - WebEx meetings). The SSC does not use any administrative data (AD) in enterprise statistics excluding some for business register. The main potential AD source is the STS. In the SSC, information collected on legal persons is based mainly on the survey questionnaires.

## **3. Status of mission results**

- The activity started with pilot (test) data on about 300 enterprises and physical persons received from STS. A set of Business Statistics (BS) variables were mapped with the STS variables selected from four types of tax declarations: VAT declaration, profit tax declaration, income tax declaration, and simplified tax declaration. The SSC prepared the data for the analysis and performed some initial data checks that showed big similarities between SSC data and AD. Since the data cannot be shared with the STEs due to confidentiality reasons, it was agreed how the data should be further analyzed by SSC.
- The SSC representatives analyzed the pilot data from methodological and from purely statistical perspectives. The experts of SSC identified several reasons why there are larger differences for some variables. It appears that significant systematic differences exist only for a few variables (from 20 variables analyzed), for example, for electrical energy costs and turnover in section L. Other differences in data are rare events or can be treated as measurement errors, as simple statistical and graphical analysis show. Moreover, the latter differences are more often due to less accurate data delivered by enterprises to SSC.
- The regression analysis combined with a comparison of aggregates shows that, for many variables, the dependence between SSC and STS is almost one-to-one. That is, the intercepts of the simple linear regression models do not differ statistically significantly from zero and the slopes are close to one. In addition, the estimated coefficients of correlation and the ratios of totals between the variables are quite close to one.
- A visual (graphical) inspection of the data showed that there are only up to 5% of observations that can be treated as outliers and needed to be checked, for example, by contacting the enterprises. In the current situation, only artificial corrections to the most influential outliers were applied to see their impact on the aggregates.
- The pilot analysis of natural persons shows.(will be supplemented)
- It was agreed that administrative STS data are very close to SSC data and can be used for improving the data quality of SSC surveys. It also should be discussed that STS data should be used for replacing SSC survey data.



- The SSC prepared the Analysis report on the SSC and STS data comparison analysis done.
- At the end of the mission, the participants agreed on the Mission report.

#### **4. Sustainability of the achievements**

The project has a strong intention, to start using administrative data in the production of SBS statistics and will work on a sustainable production system throughout the component. The pilot data analysis confirms this intention.

#### **5. Recommendations for the future**

- The analysis of the pilot data shows that STS administrative data should be used in the production of SBS. The AD should be applied to edit SSC survey data, reduce the sample sizes of SSC surveys, and reduce the response burden of enterprises by replacing the survey data with STS data. These applications of AD should be designed in the forthcoming activities.
- To discuss and identify the SBS survey’s population which might be replaced by STS data as well as a list of variables for further estimation and imputation considering the reasons of data differences identified and gaps founded.
- The pilot data set is sufficient to draw some general conclusions but is too limited to say something on specific economic activities, where one can find different conditions to apply AD. Therefore, larger data sets should be analysed and an agreement on a permanent data delivery should be reached as soon as possible.
- Using the pilot data set or a larger set obtained later from STS, the SSC survey data can be edited by contacting those outlying enterprises, which have the most influential values, as it was simulated with the pilot data. That simulation was a simple version of the so-called selective editing. Moreover, the contacts with enterprises will help to better understand the differences between SSC and STS data. Having a large data set, selective editing should be performed within NACE and size groups of enterprises or within publication domains.

#### **6. Identification of needs for additional support**

- The BC will work further on these recommendations in collaboration with the STEs on the coming activities of this component.

#### **7. Outstanding issues**

- There are no outstanding issues in light of the objectives of this particular activity.

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

### **Terms of Reference**

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**Component 2: The production of business statistics/ SME statistics in terms of content and organization is upgraded**

**2-30 June 2021 - Hosting institution: Remote Session via Webex**

### **Activity 4.2.B: Utilizing administrative data in SBS part 2**

**Result 4: Business Statistics (BS) in Azerbaijan redesigned**

**Indicator of Achievement:**

4.1.2 The roadmap on integration of business surveys into the new model as a methodological document with necessary amendments/proposals is drafted, adopted and disseminated

**Prerequisite: 4.2.A and Test data from STS available**

**This activity will be carried out in 4 Remote Sessions, replacing a 4 Working Day's mission.**

### **Purpose of the activity**

- Result 4: Business Statistics (BS) in Azerbaijan redesigned

### **Expected Outputs of the Activity**

- Report comparing current survey data and new administrative data at micro and aggregate levels of STS pilot data
- Analyzing and identifying reasons of differences
- Initial assessment of suitability of the administrative data for statistical production
- Identifying long term needs in administrative data exchange
- If necessary, identifying other AD data sources than STS (e.g. Central Bank)
- Mission report

### **Resources**

#### **State Statistical Committee (SSC)**

- Mr. Nuru Suleymanov, Head National Accounts and Microeconomic Indicators Statistics
- Ms. Sevinj Fattahova, Enterprise statistics sector, Sector Manager
- Ms. Parvin Huseynova, National Accounts and Microeconomic Indicators Statistics, Senior Advisor

#### **State Tax Service under the Ministry of Economy (STS)**

- Mr. Telman Mammadov, Chief State Tax Inspector of Economic Analysis Main Department

#### **MS Experts**

- Ms. Antanina Valiulienė, Statistics Lithuania



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- Mr. Andrius Čiginas, Statistics Lithuania
- Ms. Saara Roine, Statistics Finland (RS4 only)

### Twinning Project Administration

- Mr. Ville-Matti Pilviö, RTA
- Ms. Gultakin Babayeva, RTAA
- Mr. Tarlan Arzumanov, Language Assistant

### Agenda

Day/Time	Place	Event	Purpose / Details
2.6.2021 10:00-13:00 Baku	Webex	Remote Session 1	Questions and Answers session for the Analysis of STS pilot data. Agreement of tasks by participants for next RS Preparations for next RS (Homework)
14.6.2021 10:00-13:00 Baku	Webex	Remote Session 2	Analyzing and identifying reasons of identified differences Review of first version of Analysis Report Agreement of tasks by participants for next RS Preparations for next RS (Homework)
17.6.2021 10:00-13:00 Baku	Webex	Remote Session 3	Review of Final Report on the analysis of STS AD pilot data for use in statistical production Discussions on replacing survey data with STS AD. If necessary, identifying other AD data sources than STS (e.g. Central Bank) Agreement of tasks by participants for next RS Preparations for next RS (Homework)
30.6.2021 10:00-13:00 Baku	Webex	Remote Session 4	Identifying next steps Tasks to be completed before next activity Next activity content Main findings to an activity report



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