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 4.3.A

Activity Title: Target state production process for SBS

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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23-26 November 2021

On-site mission at the premises of the State Statistical Committee of the Republic of Azerbaijan

Version: Final

"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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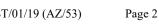
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Table of contents

| General comments | 4 |
|--|---|
| Status at the beginning of the mission | 4 |
| Status of mission results | |
| Sustainability of the achievements | |
| Recommendations for the future (short and long term) | 5 |
| Identification of needs for additional support | |
| Outstanding issues | |
| nnex 1. Terms of Reference | |

List of Abbreviations

| AD | Administrative Data |
|------|--|
| ASAN | State Agency for Public Services to Citizens of Azerbaijan |
| AZ | Azerbaijan |
| BC | Beneficiary Country |

BC Beneficiary Country

EBS European Business Statistics

EC European Commission

ESS European Statistical System

EU European Union

MLSP Ministry of Labour and Social Policy

MS EU Member State

NACE Nomenclature générale des Activités économiques dans le Communautés européennes

NACE is the industrial classification of units dealing in economic activities

NSI National Statistical Institute

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













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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 fourth mission to be devoted to result 4 within Component 2 of the project.

This was the first hybrid mission with one expert onsite and the other one online. By making use of a Miro board that was run by the online person this worked out surprisingly well.

The purposes of the mission were:

- Planning a standardized production process for SBS in Azerbaijan making more use of available administrative
 - o Planning the production process and drawing a process chart
 - o Evaluating need for imputation phase
 - o Identifying main differences compared to the current processes
 - o Interest group analysis (inside and outside SSC)
- Recommendations for tools
 - o Standardization of tools: Recommendations for software to be used in different process steps

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 Azerbaijan (or Remote Sessions) and which highly facilitated the work of the consultant.

This views and observations stated in this report are those of the consultants 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

Based on the results of the previous mission, it had been concluded, that AD based on tax data from STS, is a reliable source for some variables in SBS.

3. Status of mission results

- At the beginning of the mission, the participants started up by recapping the previous mission results, since the project had been paused for several months.
- The STE's facilitated a process, which produced an interest group analysis, which showed the main parties interested in the outcome of the business statistics, and what their main interests are in terms of indicators, breakdowns and level of detail.
- During the mission the participants worked together on creating a TO-BE process chart for the production of business statistics, in the frame of the international standard for process modelling in the statistical world; GSBPM (Generic Statistical Business Process Model).
- On the basis of the process modelling, the SSC shared their views on the production process, and compared it to the current situation, thereby highlighting the benefits and potential pitfalls of shifting production systems.
- The STE's presented a variety of imputation methods, and shared their thoughts on the pros and cons of the different methods. They also showed examples on how this could be implemented, to give an idea on the process moving forward. In light of this they suggested ways to alter the production system in the short and long term, to gradually implement an improved statically sound method.













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- The STE's shared their views of how to use new software tools, e.g. R to improve different aspects of the production system.
- 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 (short and long term)

Recommendations:

- The STE's recommend, that the SSC start imputing missing observations for legal units, in the shorter term. To manage this tax data from the STS should be used as auxiliary information to make these imputations.
- Also look at imputation methods for non-legal units and check if using AD can help to improve the quality of these imputations.
- Reduce sample sizes. Currently 100% of legal units is in sample. Once a good imputation method is available, this can gradually be reduced. This will reduce both handling costs in SSC, and cost in terms of burden for respondents. The STE's recommend that a large scale test, which mimics a sample reduction, can be conducted along side a normal production cycle, to showcase the effects of replacing current reporting units, with units based on imputations on top of the AD.
- Putting a system in place could be a better way to examine which units are the cause of big developments in aggregates, e.g. a score function that ranks units.
- Make sure SSC output fulfils rules for statistical disclosure. The sdcMicro package in the R-library CRAN might be used for this.
- For all recommendations it is the view of the STE's that a pilot should be made to see that the new method works.
- To limit data flows, the recommendation of the STE's is to work with delta files for the tax data. So first delivery has all available units and afterwards only changes are reported. The importance of this recommendation depends on the size and frequency of the received files.
- It is recommended that the SSC considers to what extent R software would be suitable to improve the productionsystem for the business statistics, after the necessary training exercise has taken place within the Twinning Project. R is very useful to do statistical calculations. The data you do the calculations on should still be in a proper database like SQL.

Prerequisits:

- The data exchange agreement between STS and SSC needs to be finalised with regard to profit tax, income tax and simplified tax declaration. Delivery is necessary 60 working days after the end of March and should then be updated each month till the end of August.
- SSC needs to have a system in place to receive the tax data and likewise STS needs to have a system to deliver the tax data.
- For next mission on imputations (4.4.b) we need to know the structure of the data for SBS, preferably delivered this year. More specific this information is needed:
 - o variablenames / indicators
 - o relationship between variables (computational rules, like in software of online survey)
 - o which variables per unit
 - o 1 translated questionnaire
 - o information from business register on number of units per NACE, sizeclass, region for legal units
 - o links of STS-variables to SBS-variables, as in the results from previous study in 4.2.B. and the problems noted on these relations. (We will try to improve the relations between STS and SBS variables during the next mission.)













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O Clarification of how to work on data from SSC.

6. Identification of needs for additional support

Mission 4.4.b might look further into the details of imputing for SBS based on tax data. How to link variables from tax and survey and how to complement the survey for variables that are not in tax.

7. Outstanding issues

Delays in getting access to full datasets of STS for profit tax, income tax and simplified tax declaration is still a concern, which could risk progress in this component.















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Annex 1. Terms of Reference

Terms of Reference

EU 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

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

23-26 November 2021 - Hosting institution: SSC

Activity 4.3.A: Target state production process for SBS

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

4.1.3 Data collection processes simplified and standardized to improve the timelines.

Prerequisite: 4.2.B

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

- Planning standardized process for SBS production
 - o Planning the production process and drawing a process chart
 - o Evaluating need for imputation phase
 - o Identifying main differences compared to the current processes
 - Interest group analysis (inside and outside SSC)
- Recommendations for tools
 - Standardization of tools: Recommendations for software to be used in different process steps
- Mission report

Resources

State Statistical Committee (SSC)

- Mr. Nuru Suleymanov, Department of National Accounts and Macroeconomic Indicators Statistics, Head of Department
- Ms. Sevini Fattahova, Enterprise statistics sector, sector manager
- Ms. Ilaha Babayeva, Chief Advisor, Department of National Accounts and Macroeconomic Indicators **Statistics**
- Mr. Turgut Shahmarli, Leading Advisor, Department of National Accounts and Macroeconomic Indicators Statistics

State Tax Service under the Ministry of Economy (STS)

- Mr. Telman Mammadov, Chief State Tax Inspector of Economic Analysis Main Department
- Mr. Elvin Alizada, State Tax Inspector of Economic Analysis Main Department
- Ms. Aytan Shahmarova, State Tax Inspector, International Relations Main Department

Small and Medium-Sized Enterprises Development Agency















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- Mr. Elmar Isayev, Head of Secretary of SME-A
- Ms. Samaya Allahverdizada, Chief Advisor of Strategy and Development Department

MS Experts

- Mr. Jesper Moltrup Nielsen, Chief Adviser, Statistics Denmark
- Mr. Guus v1n de Burgt, Statistics Researcher, Statistics Netherlands

Twinning Project Administration

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

Agenda

| Day/Time | Place | Event | Purpose / Details |
|----------------------------------|-------|-----------|---|
| 23.11.2021 Tuesday 10-17 | SSC | Session 1 | Planning the production process and drawing a process chart Evaluating imputation phase needs Agreement of tasks by participants for next Session |
| 24.11.2021 Wednesday 10-17 | SSC | Session 2 | Identifying main differences compared to the current processes Interest group analysis (inside and outside SSC) Agreement of tasks by participants for next Session |
| 25.11.2021 Thursday 10-17 | SSC | Session 3 | Standardization of tools: Recommendations for software to be used in different process steps Agreement of tasks by participants for next Session |
| 26.11.2021 Friday 10-17 | SSC | Session 4 | Identifying next steps Tasks to be completed before next activity Next activity content Main findings to an activity report |











