



ევროკავშირი  
საქართველოსთვის  
The European Union for Georgia



# Twinning Project

Contract: GE 16 ENI ST 06 18

## Strengthening the Capacity of the Georgian Statistical System

**Component 2: “Enhancing Methodological Soundness in the National Accounts in line with EU standards”**

**Sub-component 2.2: “Compilation method of Supply – Use (SUT) tables and Input Output (I/O) Tables”**

### MISSION REPORT

**Activity: 2. 2.E (RS) “Balancing of products in SUTs”**

Mission carried out by  
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1<sup>st</sup> – 19<sup>th</sup> February 2021

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## 1. General comments

This mission report was prepared within the EU Twinning Project "Strengthening the Capacity of Georgian Statistical System". This was the fourth mission within the sub-component 2.2: "Compilation method of Supply – Use (SUT) tables and Input Output (I/O) Tables". Like the previous missions in June, September and December the mission was, due to COVID-19, carried out as a Remote Session during the period from February 1<sup>st</sup> to 19<sup>th</sup>. The mission was devoted to balancing of product balances in the SUT tables.

The purposes of the mission were:

- To discuss proposals made by the Georgian staff for individual product balances.
- Continue balancing of supply and use of products within the SUT framework using the Excel macros prepared by the Danish experts.
- Training on how to adjust values from data sources in those cases where imbalances are best explained by differences in coding of supply and use.
- Initialize adjustment of industry-totals to target values from source data.

The consultants would like to express their gratitude to the Geostat staff who participated in the mission, for the kind support and valuable information received before and during the mission.

The views and observations stated in this report are those of the consultants and do not necessarily correspond to the views of the European Union, Geostat, Statistics Denmark, or other statistical institutions involved in the implementation of the project.

## 2. Assessment and results

This mission was carried out as Remote Sessions in the period from February 1<sup>th</sup> to 19<sup>th</sup> 2021. Originally, three Zoom meetings were planned, but Geostat found time for a fourth meeting at the beginning of February. COVID19 precautions still required that the Danish experts worked from their respective homes during the entire mission.

Before this mission, the workbook used to store the SUTs for 2018 had been populated with figures from the various data sources using the system of Excel macros for entering and adjusting data. However, these initial figures contain differences between supply and use for most products and the column totals for uses differ from the targets for industry inputs and the various final uses.

A first attempt to remove differences between supply and uses was made by the Geostat staff before the present mission. It produced usable balances for many products, but for other products, the solutions involved changes to output or foreign trade that would contradict reliable source data. The Danish experts summarised a set of rules for balancing that preserve reliable totals. Hence, a closer examination of each product balance still had to be carried out. During the mission, a selection of product balances were discussed and the use of tools for extraction and correction of products was demonstrated and explained.

The present mission concentrated on practical balancing of supply and use of products within specific areas of the SUTs. The Geostat staff had prepared a number of questions on how to balance specific products, and the Danish experts presented examples of solutions for discussion.

The second and third session divided the participants into two groups, each with a separate "breakout-room".

The first group looked at questions on outstanding problems received by the Danish experts before the meeting. It covered product-balances for cars, electricity and gas, construction, IT, news agencies, broadcasting, telecommunication, architects, engineering, arts and entertainment.

In the second group, products related to food and agriculture was the main subject. The Geostat staff had balanced the food-products and prepared some questions. The first session was used to discuss the principles for balancing of products and applying the rules in practice. The Geostat staff showed some products were production and export needed to be changed during the balancing and the Danish Experts helped with applying the rules for balancing and assisted with corresponding changes in other food-products. The importance of looking at complexes of products was discussed and a large part of the first session was dedicated to live animals and production of meat. The Geostat staff presented some issues related to live animals and the Danish Experts assisted with the balancing and discussed that the intermediate consumption of live animals in manufacturing of food products has to be plausible when looking at the production of meat and that the non-observed part for food-products needs to be considered.

### 3. Conclusions and follow up

- New calculations of imports CIF and exports FOB by products have been produced based on detailed data from the National Bank of Georgia. Geostats observed figures are here supplemented by estimated non-observed trade and corrected for “other adjustments”, transit of goods, shown in the compilation of balance of payments. It turns up that the share of non-observed exports is relatively high for most products. As the product-distribution of non-observed trade by products must be assumed to be less reliable than Geostat’s distribution of export figures, this should be taken into account when products are balanced.
- At the uses side, the Excel workbook that contains the SUT environment is now updated with initial values and formulas used to calculate trade margins, net taxes on products and VAT for all cells. As the totals for use of margins and VAT may change significantly during the balancing process, it is yet too early to make comparisons with their corresponding supplies from the source data.
- The distribution by products of inventory changes is now calculated in a way that provides a good starting point for further balancing.
- Where values without grossing up for non-observed are available for output, input and final uses, they have been entered into the SUT-workbook’s layer for primary statistics values as information to those who are balancing the products.
- At the end of the present mission, differences between supply and use had been removed from a number of goods and services including outputs from NPISHs and general government. It was also demonstrated how simple cases could be solved by automatic proportional adjustments within the use-table.
- At the end of the mission, there were also suggestions for removal of differences between supply and use for most of the food-products. The staff at Geostat will use the suggestions to remove the differences before the next mission.
- Before further balancing can take place, differences between supply and use must be eliminated for each product. This is necessary to get an impression of the remaining distances between target values and actual totals for the columns containing industry inputs and final uses as well as the distance between supply and use of trade margins and VAT.
- The Danish experts recommend that remaining balancing of products is split into balancing of a number of complexes, each containing a number of related products. The responsibility for each complex can be assigned to a person (or a small team) from the Geostat staff together with one of the Danish experts. These people can exchange their arguments and proposals for corrections by e-mail in the form of worksheets in the standardized input-format.
- It is furthermore recommended that this balancing shall be carried out in phases, each covering between a week and ten days. Within each phase, balancing of products belonging to some specific complexes

shall be finished. The schedule for balancing shall ensure that all products are balanced before the start of next mission (April 19<sup>th</sup> 2021).

Next mission in April will be dedicated to adjustment of total use within each column of the use table to its corresponding target-value by moving products between columns. Columns with reliable target values shall - as far as possible - end up having totals equal to their targets; other totals should be brought within an acceptable distance to their targets. Finally, total use of trade, transport and VAT must be adjusted to their respective supply values.

Actions needed for moving forward before next mission:

Action	Deadline	Responsible person
Send a copy of the SUT-worksheet now used as initial tables for the balancing of product balances. To ensure that the Danish experts are looking at a version of the data that is identical to the one used by the Geostat staff.	As soon as possible	Geostat
Update the list of complexes containing related products	Now!	Danish experts.
Provide an updated proposal for assignment of responsibility for complexes of product balances.	As soon as possible	Geostat + Danish experts
A time schedule for removal of remaining differences between supply and use within each complex of product balances.	Proposal for deadlines for specific complexes: 1) March 16 <sup>th</sup> . 2) March 24 <sup>th</sup> . 3) March 31 <sup>st</sup> . 4) April 14 <sup>th</sup> .	Danish experts, Confirmation by Geostat



## Annex 1. Terms of Reference

### EU Twinning Project GE 16 ENI ST 06 18

1<sup>st</sup> – 19<sup>th</sup> February 2021

#### Component 2: Enhancing methodological soundness in the National Accounts in line with the EU standards

##### Sub-component 2.2: Compilation method of Supply – Use (SUT) tables and Input Output (I/O) Tables

###### Mandatory results and benchmarks for sub-component 2.2:

- Compilation method of Supply-Use (SUT) tables improved and Input-Output (I/O) tables implemented

###### Indicators of Achievement (baseline and targets):

- Availability of Supply Use Tables (SUT) as a statistical product according to SNA08
  - **Baseline:** 2019 – SUT is produced in current prices
  - **Target:** March 2021 – SUT produced in current and constant prices according to SNA08
- Availability of I/O Tables as a statistical product
  - **Baseline:** 2019 – I/O tables are not available
  - **Target:** March 2021 – I/O tables available

###### Activity 2.2.E (RS) “Balancing of products in SUT”

###### 1. Purpose of the activity

- The process of product balancing is introduced
- Presentation of VBA-tools for balancing
- Exercises in product balances
- Introduction to Balancing industries and final use

###### 2. Expected output of the activity

- Progress made in the purpose items
- Input provided to the ToR of next activity
- Mission report written
- Updated road map for sub component 2.2



## Annex 2. Persons met

### **Geostat**

Mr. Levan Karsaulidze, Head of National Accounts Department

Ms. Tinatin Papiashvili, Head of Quarterly Accounts Division

Ms. Meri Shaburishvili, Chief Specialist at Annual Accounts Division

Ms. Nino Shukakidze, Chief Specialist at Annual Accounts Division  
Ms. Natia Merebashvili, Senior Specialist, Annual Accounts Division

Ms. Khatuna Jibladze, Specialist at Annual Accounts Division

### **RTA Twinning Team**

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