

# 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 2.5: “Seasonally adjusted quarterly time series of National Accounts”**

### MISSION REPORT

**Activity: 2.5.B (RS) “Models of seasonal adjustment and options for ensuring accounting and time consistency”**

Mission carried out by  
Jan Benedikt, Czech Statistical Office  
Karel Šafr, Czech Statistical Office

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## Expert contact information

*Mr. Jan Benedikt*

*Institution*

*Prague, Czech Republic*

*Tel: +420 274054230*

*Email: jan.benedikt@czso.cz*

*Mr. Karel Šafr*

*Institution*

*Prague, Czech Republic*

*Tel: +420 274054148*

*Email: karel.safr@czso.cz*

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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 first mission within the sub-component 2.5: "Seasonally adjusted quarterly time series of National Accounts" and was mainly devoted to introduction to current situation of seasonal adjustment and other specific issues related to quarterly national accounts.

The purposes of the mission were:

- To discuss the below mentioned subjects:
  - to agree on a framework for seasonal adjustment
  - to evaluate the tasks performed by Geostat
  - to agree on the tasks to be accomplished towards a new framework

The consultants would like to express their gratitude to all officials and individuals met for the kind support and valuable information which they received during the session and which highly facilitated the work of the consultant.

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

Day 1: Colleagues from the Geostat presented the results of the seasonal adjustment to date. The consultants presented the basic techniques and stages of seasonal adjustment in the Czech Republic. The calendar adjustment procedure precedes the seasonal adjustment itself.

Day 2: Description of the construction of a regression variable, which is used to identify the dependence of time series on working days. Consultants presented the practical example of calendar adjustment on Geostat data. As the calendar effect is often not shown (e.g. in industry), it was recommended to model monthly time series of output, where the dependence on working days would be better shown. It was also recommended to do calendar adjustment on more detailed level of time series. The problem of non-additivity of chain-linked volumes time series was emphasized.

Day 3: Practical example of splitting up the differences between seasonally adjusted aggregates and its components according to the type of method. Constant price procedure, including the issue of converting chain-linked constant prices to the average prices of the previous year and vice versa. The entire calendar and seasonal adjustment procedure is shown on Geostat data in a comprehensive, simplified framework. Revisions and different approaches to seasonal adjustment. The procedure of seasonal adjustment in the JDemetra+ program was shown, including detailed diagnostics of models.

## 3. Conclusions and follow up

The calendar and seasonal adjustment procedure used in the CZSO was shown on Geostat data in a simplified framework in an Excel file. As the calendar effect is often not shown (e.g. in industry), it was recommended to model monthly time series of output, where the correlation between working days and variable (output) would be better shown. It was also recommended to do calendar adjustment on more detailed level of time series. Within the seasonal adjustment, several aspects are important, such as the setting of outliers, the length of the time series and the selection of a suitable model. As part of seasonal adjustment, try the direct and indirect method and choose a better approach based on the evaluation of the results according to statistical criteria.

Actions needed for moving forward:

Action	Deadline	Responsible person
Use monthly production statistics (Industrial production index) with use of benchmark with the constraint of quarterly values (output).	1 week before next mission (in May 2021). The result is send to the experts	Geostat
Proceed calendar adjustment on monthly TS at more detailed level.	1 week before next mission (in May 2021). The result is send to the experts	Geostat
Compare SA results of direct and indirect method.	1 week before next mission (in May 2021). The result is send to the experts	Geostat
Decide whether and how to split out the differences between the aggregate and the components according to the particular method of GDP calculation.	Before next mission (May 2021)	Geostat

## Annex 1. Terms of Reference

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

18<sup>th</sup> – 21<sup>st</sup> January 2021

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

##### Sub-component 2.5: Seasonally adjusted quarterly time series of National Accounts

##### Mandatory results and benchmarks for sub-component 2.5:

- Seasonally adjusted quarterly time series of National Accounts disseminated

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

- Availability of seasonally adjusted Quarterly National Accounts (QNA) according to SNA08 as a statistical product
  - **Baseline:** 2019 – Seasonally adjusted QNA are available but not according to SNA08
  - **Target:** May 2021 – Seasonally adjusted QNA according to SNA08

##### Activity 2.5.B (RS) “Models of seasonal adjustment and options for ensuring accounting and time consistency”

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

- To agree on a framework for seasonal adjustment
- To evaluate the tasks performed by Geostat
- To agree on the tasks to be accomplished towards a new framework

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

- Current situation is further introduced
- Work prepared has been discussed
- Framework for seasonal adjustment has been agreed upon
- Further tasks to be completed has been agreed upon
- Mission report written
- ToR for next mission prepared

## Annex 2. Persons met

### **Geostat**

Mr. Levan Karsaulidze, Head of National Accounts Department

Ms. Tinatin Papiashvili, Head of Quarterly Accounts Division

Mr. Irakli Kartvelishvili, Chief Specialist, Quarterly Accounts Division

Mr. Alik Bitsadze, Senior Specialist, Quarterly Accounts Division

Ms. Natia Merebashvili, Senior Specialist, Annual Accounts Division

Ms. Venera Tsertsvadze, Specialist, Quarterly Accounts Division

Ms. Inga benashvili, Senior Specialist, Quarterly Accounts Division

### **RTA Twinning Team**

Mr. Steen Bielefeldt Pedersen, Resident Twinning Advisor