



TWINNING CONTRACT

GE 21 NDICI ST 01 23

Further Strengthening of the Georgian Statistical System

MISSION REPORT

on

Component 2:

Demographic and population statistics developed.

Activity 2.1.3:

Population Register – Further development and assessment of data sources

Mission carried out by
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Further Strengthening of the Georgian Statistical System

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List of Abbreviations

- AD = Administrative data
- EU = European Union
- BC = Beneficiary Country (Georgia)
- MR = Mandatory results
- MS = EU Member State (Finland, Germany, Italy)
- PL = Project Leader
- RTA = Resident Twinning Advisor
- SR = Sub-results
- STE = Short-term Expert

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1. General comments

The activity contributed to significant progress in the quality assessment of administrative sources. Significant advancements were achieved, particularly in consolidating the questionnaire for surveys with data providers and in outlining the structure of a catalogue of available administrative data sources.

The first interview/bilateral meeting with a data provider proved to be extremely valuable, offering concrete insights that led to meaningful improvements to the questionnaire prepared by Geostat in March. The exchange of experiences with the Member States (MS) further enriched the discussion, providing useful input on quality dimensions and possible approaches for structuring the first draft of the catalogue of administrative data sources.

During the mission, the team also further reviewed quality aspects by focusing on indicators and processes related to data linkage. This exploration was crucial in identifying specific methodological and operational challenges that need to be addressed when developing population statistics based on administrative data.

The catalogue also serves as a bridge to the work being carried out under Component 3 of the same project. It may act as a shared tool for establishing a common repository of quality indicators on administrative sources. While Component 3 focuses more broadly on quality aspects across administrative data, the Population Register component is expected to concentrate on developing indicators specifically related to the quality of population outputs.

Finally, the mission provided an opportunity to continue discussions on developing a roadmap for the Population Register and to explore potential options for its institutional ownership and long-term governance.

The consultants would like to thank all officials and individuals they met for their kind support and valuable information received during the mission, which greatly facilitated their work.

These views and observations stated in this report are those of the consultants and do not necessarily reflect to the views of the EU, the Statistical Office of Georgia, Statistics Finland, DESTATIS, or ISTAT.

2. Status at the beginning of the mission

This was the third mission of the Twinning project's Component 2. The main focus of the mission was quality assessment and how to ensure it through the use of indicators, tools, and experiments. International best practices and standards had to be taken into account, while also continuing the work initiated during the previous mission, particularly refining the questionnaire for data providers that Geostat prepared in March. A meeting with Geostat members involved in Component 3 of the project (Use of Administrative Data) was planned to start building a shared repository with basic information on the quality of administrative sources.

Just before the mission began, an important meeting was held with the Social Agency, a key data provider and potential partner in the project to integrate sources for the statistical register. The feedback from this meeting needed to be analyzed and discussed both to improve the questionnaire

and catalogue and to better understand how to share the vision and benefits of using a population register with stakeholders. A more detailed description of the data sources that public administration could offer was also necessary. These issues were expected to be addressed during the meeting with the data provider.

Finally, the mission aimed to continue analyzing of possible options for the development and maintenance of the Population Register.

3. Status of mission results

The mission fully achieved the objectives outlined in the Terms of Reference, with significant progress in both staff training at GEOSTAT and in raising awareness of the importance of the Population Register (MR of project). A key message throughout the week was that quality is a multistage (input, process, output) and multidimensional concept (relevance, accuracy, timeliness, etc.). To ensure robust results, it is essential to work in parallel on three fronts: institutional and legal context, data experimentation, and improvement of statistical processes. Feedback loops are crucial. The meeting with a data provider enhanced awareness of the Population Register's importance and stimulated debate. Staff training, particularly for Geostat staff, led to a more concrete reconsideration of statistical processes, especially those concerning the procedure of record linkage for integrating different data sources, through discussions with MS experts.

The mission started **on Tuesday** with the launch of activity 2.1.3, including a presentation of its objectives and work plan. Member State (MS) experts shared their experiences on how they assess the quality of administrative data to build a population register. The group then worked on defining a quality assessment approach tailored to the Georgian context. GEOSTAT had already contacted a data provider and tested a questionnaire designed in-house, which served as a basis in the following days to develop a strategy for quality management of data sources. Additionally, the participants received a list of data sources within GEOSTAT, with more detailed information about available statistics. Both internal and external descriptions of data sources were used in the following days to define a quality assessment management strategy.

On Wednesday, mission participants conducted an in-depth review of two questionnaires completed by the Social Service Agency. The discussion led to improvements in the questionnaire template, with several questions refined to address issues that emerged during the analysis of the responses. One of the questionnaires included a list of variables, which was also examined and discussed in detail. To support a clearer understanding and better communication of how to plan a quality assessment tailored to the Georgian context, a quality assessment management strategy was introduced, building on Tuesday's presentations. The completed questionnaire from the Social Service Agency served as the basis for simulating a multi-stage quality assessment process. Three key stages were identified and tested during the exercise.

Given current time constraints and limited access to data for experimental linkage, GEOSTAT requested expert advices on record linkage methodologies. Member State experts agreed to share advice on linkage strategies and documentation on the topic and to organize a follow-up webinar after the mission.

On Thursday morning, a meeting with the Social Service Agency provided a deeper understanding of a potential data source for the population register, data on pensions and social aid covering approximately 1.2 million individuals, or about one-third of the Georgian population. This makes it a particularly important source for integration and for building the population register. The data can

be linked to other sources through the use of a unique personal identification number (PIN), and the definition of "family" aligns with that used in official statistics, ensuring coherence in data integration.

The meeting highlighted the strategic value of the Social Service Agency as a key data provider, with its datasets covering over 30% of the resident population and offering high-quality address information for usual residence. Discussions also helped jointly identify the specific benefits of an integrated population data management system, such as the potential for significant cost savings through automated notifications of address changes.

In the afternoon, MS experts gave a brief presentation on examples from EU Member States regarding three possible organizational models for maintaining a population register and supporting its statistical use. This presentation contributed to the ongoing discussion on identifying the most suitable option for the Georgian context.

Another topic covered was a discussion about record linkage procedures, as GEOSTAT was using this method during the time of the mission for quality checks for the census and had some questions about the record linkage methodology. This method will also be a central aspect of the "Signs of Life" approach in the context of the population register. MS experts provided concrete advice on different methods and strategies to perform a record linkage procedure.

On Friday, the mission concluded with a wrap-up session summarizing the key outcomes of the week, with a particular focus on evaluating administrative sources for building the Georgian population register. The discussion revisited the importance of coordinating the various tools involved in quality assessment: the questionnaire as a first step, followed by the calculation of quality indicators, and the use of a dedicated repository to store and visualize this information. The session also emphasized the need to conduct data experimentation, starting with Census microdata and progressively integrating other administrative sources to develop new indicators to assess the quality of population estimates.

Looking ahead, it was agreed that the next mission will focus on experimenting with real data. GEOSTAT will work alongside MS experts to simulate processes of data integration and quality evaluation, using Georgian datasets such as those from the Social Service Agency. The work will include practical exercises on record linkage, derivation of useful variables, and quality assessment methodologies, supported by the tools and experiences shared by EU Member States. Prior to the next mission, GEOSTAT will also conduct a new interview with a data provider and begin implementing the first version of the data quality repository by uploading initial results collected through the questionnaire. It was further agreed to continue investigating the legal and organizational aspects of the register, to promote inter-agency collaborations, and to progressively refine the roadmap for establishing a functioning and sustainable population register.

4. Sustainability of the achievements

All parties agreed on the activity analysis. Should the need arise, adjustments can be made later through the rolling work plan.

5. Recommendations for the future (short and long term)

In the short term, several key activities should be prioritized to advance the integration of administrative data sources for the Georgian population register. First, **data experimentation** should be launched, involving joint efforts with Georgian datasets to explore the integration of administrative data sources. This will include practical exercises focusing on quality assessment, record linkage, and

how to derive new variables essential for building and updating the population register. Additionally, **sharing of MS experiences** is crucial, as presenting experiences from EU Member States on data integration, statistical processing, and population statistics production will provide valuable insights. The introduction of tools and methodologies currently in use will support this effort. A **webinar on data linkage** should be organized to address record linkage methodologies tailored to the Georgian context and explore potential experimental approaches. Moreover, the **continuation of the data source survey** is essential to enhance understanding of data availability and quality, while also acquiring sample datasets from data providers. A critical step will also be the **development of a quality repository**, where the structure and content of a quality indicators repository for administrative sources should be defined, with the repository being populated using results gathered from the questionnaire. Finally, **ongoing data integration testing** should continue, particularly through experiments integrating Census microdata with sample datasets (such as those from the Social Service Agency) to evaluate data quality and consistency.

In parallel, the following objectives should be strongly pursued: **promoting inter-agency collaboration** to build on the cooperation initiated with data providers by fostering joint projects and raising institutional awareness of the benefits of data integration. A deepened **legal and organizational framework** analysis is necessary, focusing on options for the Georgian population register, drawing inspiration from international practices. Lastly, the **roadmap development** should continue, refining key milestones and outlining the steps required for the progressive establishment of a robust and sustainable Georgian population register.

6. Identification of needs for additional support

Support for the development of a register of addresses. Standardization and unification of address catalogs/directories, including an address ID and/or normalized address name, are crucial for managing the integration with the register of buildings and play a key role in managing 'place of residence' and mobility/migration within the population register.

7. Outstanding issues and next steps

Tasks to be concluded before the next missions:

- Bilateral meeting with some administrative data holders and review of the data content of the register: variables, update frequency, data sources, coverage, challenges, etc. The revised draft assessment questionnaire will be used during the meeting, allowing for its refinement and consolidation.

The next activity to take place:

Sub-component 2.1.: Activity 2.1.4. 1-4.7.2025 in Tbilisi

- Analyzing results of the second wave of inventory and modifying the assessment questionnaire further
- First draft of a Catalogue for data sources and analysis of the information collected for population statistics
- First design of data processing steps needed to produce statistical population outputs from integrate administrative data
- Road map will be developed further

Annex 1. Terms of Reference

Terms of Reference

EU Twinning Project GE 21 NDICI ST 01 23
Further Strengthening of the Georgian Statistical System

Component 2:
Demographic and population statistics developed

Activity 2.1.3:
Population Register – Further development and assessment of data sources
Dates: 1 - 4 Apr 2025
Hosting Institute: National Statistics Office of Georgia
30, T. Dadiani St., 0180 Tbilisi, Georgia

0. Objective, Mandatory results and sub-results for the component 2

Objective:

Under this component, the action plan and strategy for the establishment of population register will be available, as well as Geostat will be ready to start production the population projections. Component is sub-divided in two sub-components each with a Mandatory Results (MR) with indicators of achievements associated with the sub-component, presented in table below.

The objective of the activity is to focus on analysing the results of the first interview/bilateral meeting and modifying the questionnaire based on the results on feedback received and expert insights. In addition, a first draft of the catalogue of data sources will be prepared and continue the discussions on the options for establishing a population register in Georgia, as well as the development of a roadmap will continue. A possible setting for data experiments with available administrative sources will also be introduced, helping to identify further attributes for the catalogue.

Mandatory results (MR) and Sub-results (SR) under each MR

Sub-result 2.1: The roadmap for the establishment of the population register developed (4 indicators)	In line with international best practices and standards, this component will build the roadmap for the establishing a population register in Georgia. Indicators that assure this deliverable: <ul style="list-style-type: none">• A report on the assessment of adequate data sources and counterparts• Number of the national workshop to increase awareness of the importance of the Population Register for the country.• Share of relevant staff trained in the field.• Final report and recommendations
Sub-result 2.2: Population projections established (5 indicators)	This sub-component aims at establishing population projections in Georgia. Indicators that assure this deliverable: <ul style="list-style-type: none">• Report on the assessment of existing data sources• Recommendations of the software for population projections• Recommendations on the methodology of the population projection at the regional and municipal level for the long and short-term projections• Share of relevant staff trained of the population projections.

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	<ul style="list-style-type: none">• Availability of results of the population projections at national and sub-national level
Key activities in Component 2	<ul style="list-style-type: none">• MS Expert missions with meetings, workshops including presentations and sharing of best practices and hands-on training.• Study visit(s) with hands-on demonstrations in Member State(s).• Joint meetings with Geostat, data providers and key data user groups.

1. Purpose of the activity 2.1.3.

- Assessment of the questionnaire of data source inventory
- Modification of the questionnaire based on the results of the first bilateral meeting
- Defining methods and tools to assess data sources quality to build the population register.
- Drafting a catalogue of data sources
- Discussion on the options for establishing a population register in Georgia
- Further planning of the roadmap

2. Expected output of the activity

- Common overview of the current situation regarding:
 - Activity report
 - A work-plan for the assessment of data sources
 - Draft version of tools for quality assessment: the Catalogue of data sources and questionnaire for data providers.
 - A draft of the content for the next activity and the tasks to be completed before it.

3. Participants

MS Experts

- Ms Angela Chieppa, STE, ISTAT
- Ms Nicoletta Cibella, STE, ISTAT
- Mr Robert Winkler, STE, Destatis

Geostat

- Mr. Paata Shavishvili, Deputy Executive Director, National Statistics Office of Georgia
- Mr. Aleksandre Arabuli, CL Counterpart, Head of Population Census and Demographic Statistics Department, National Statistics Office of Georgia
- Ms. Mariana Jalaghonia, Chief Specialist, National Statistics Office of Georgia
- Ms. Donara Rukhadze, Chief Specialist, National Statistics Office of Georgia

Twinning team

- Mr. Marko Ylitalo, RTA
- Ms. Irma Gabunia, RTA-A

4. Resources

Translation and interpretation will be provided throughout the activity if needed.

5. Overall agenda

- Day 1: Opening. BC and MS recap of the previous mission findings and recent developments, results of the first bilateral meeting and data inventory, Developing the questionnaire based on the first bilateral meeting
- Day 2: Work-plan and tools for quality assessment of data sources
- Day 3: Options of establishing the population register, further planning of the road map

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- Day 4. Further planning the roadmap. Planning the content of the next activity. Summary and conclusion.

Annex A. Tentative programme

Date	Place	Topic
Tuesday – 1 Apr 9:30 – 18:00	Meeting room	Welcoming, practicalities, programme of the week Paata Shavishvili and Marko Ylitalo
		Review of the previous mission findings and recent developments, STEs, Aleksandre Arabuli
		Results of the first bilateral meeting and data inventory Developing further the questionnaire based on the first bilateral meeting
		Wrap-up of the day (STEs), report writing
Wednesday – 2 Apr 09:30 – 18:00	Meeting room	MS country experiences in assessing the quality of admin. data to build Population Register (IT)
		Designing work-plan and tools for quality assessment of data sources to use in Georgia
		Wrap-up of the day (STEs), report writing
Thursday – 3 Apr 09:30 – 18:00	Meeting room	Establishing the population register: focus on implications of different options
		Roadmap of the population register.
		Wrap-up of the day (STEs), report writing
Friday – 4 Apr 09:30 – 16:00	Meeting room	Roadmap of the population register.
		Preparing the conclusions (STEs)
		Conclusions and next steps in comp. 2.1. (MS and BC)

Abbreviations:

MS = EU Member State (Finland, Germany, Italy)

BC = Beneficiary Country (Georgia)