Statistical data revision policy and error correction at the National Statistics Office of Georgia (Geostat)

Introduction

The document defines the policy of revision and correction of statistical information in the National Statistics Office of Georgia (Geostat). It describes the need for revision, its causes, types, and principles, as well as relevant terminology. There are general guidelines that form the basis for defining revision policies for individual statistical products.

The document also describes the processes of detecting, compiling, analyzing, correcting, and reporting errors in statistical data and information published by Geostat.

1. Statistical Data Revision

1.2. The essence of revision

A revision is any kind of change in statistical data already published and available to the public. Revision can be conducted in the following cases:

A new source of information and additional data (monthly, quarterly, or annually) become available;

Some old data are being clarified;

The methodological changes;

Current data is being changed, for example, when specifying preliminary data.

Typically, revisions and clarifications are made when necessary to reflect new and/or improved information.

1.3 The purpose and need for revision

Data revision is a commonly accepted international practice. It aims to continuously improve the quality of statistical data. The quality of statistical information includes several criteria, among which the main ones are accuracy and timeliness.

Both criteria are of particular importance for ensuring compliance and compliance with customer needs.

The need for data revisions/clarifications arises from the obligation of the National Statistics Office to produce high-quality, timely statistics based on the latest information.

- **2.** The revision policy is based on international standards and requirements. Principles 6, 8, and 12 of the European Statistics Code of Practice define the revision policy:
 - Principle 6, indicator 6.6 "Information on significant revisions or changes in methodologies is announced in advance".
 - Principle 8, Indicator 8.5 "Revision shall be based on standard, established, and transparent procedures".
 - Principle 12, Indicator 12.3 "In order to improve the primary data, statistical processes, and results obtained, regular revision analysis is performed".

In the case of data clarification as well as methodological changes, it is especially important that the National Statistics Office informs the public promptly about this and explains the reasons to convince

users of the necessity of the changes. Having a revision policy is an important aspect of good governance in a statistical office.

1.4 Causes for revisions:

Clarification of statistical information obtained through assessment – timely production of current or operational statistics requires estimating some data (not available at the date of publication).

As the estimation data usually do not exactly match the updated information provided later, it is necessary to revise the preliminary statistics and correct them based on the new data.

Based on the lower frequency data, which later became known, as the higher frequency data specification, the so-called benchmarking (e.g., adjusting quarterly data based on annual data).

Changes to classifications are another, but less common, reason for revision. Changes to the classifier result in some entities being redefined, so old and new entities are different and may not even be comparable.

- Change of base year, which, along with the new weighting system and new rating range, changes the time series.
- Change in data sources a new source of data becomes available that is more suitable to the existing concepts, and it becomes possible to replace the survey with receiving data from an administrative source, the results of a new census, etc.
- Clarification of data by respondents or administrative sources changes in data can be caused by the clarification of data by respondents or administrative sources.

Conceptual and methodological changes (e.g. changes in concepts, definitions, classifications, etc.) that lead to the need for revision.

1.5. Current and non-scheduled revisions

1.5.1. Current revisions

Current revisions include regular and major revisions:

Regular revisions are changes in published data related to the standard data production process (for example, when the data obtained from the assessment is replaced by the actual data provided by the respondents or the published data is preliminary, before the further publication of the data, they will be revised and updated in the established terms).

A major revision is a change in published data that is substantial and is caused by one of the following reasons:

- Long-term structural data became available (as a rule, this term is determined by 5-10 years), such as data obtained from descriptions received, labor cost analysis, etc.
- The changed base year for indexes, which mostly happens once every 5 years.
- Changes were made to the methodology (concepts, definitions, and/or classifications), such as changes to international statistical standards, the introduction of a new classification, etc.
- Changes were made in legislative and normative acts and/or a new law came into force.
- Significant errors were detected.

Radical changes are used during methodological changes. Such practices make it possible to avoid frequent data revisions. Therefore, fundamental revisions are caused not by one reason but by their combination.

1.5.2. Non-scheduled revisions

Non-scheduled revisions are not announced in advance as they are caused by unforeseen events such as errors or additionally identified circumstances.

1.6. Principles of revision policy

The following principles are distinguished in the revision policy:

- Geostat is responsible for data revision and is guided by this document, which in turn is based on the Guidelines of the European Code of Practice and the European Statistical System.
- The revision policy document is published on the GEOSTAT website and is available to any user.
- Current revision dates are reflected in the statistical dissemination calendar available on the Geostat website. In addition, the current revisions are determined by the statistical work program.
- Users should be informed promptly about errors or inaccuracies found in already published data, which, in turn, lead to non-scheduled data revisions. The results of the revision should be published in a timely, open, and transparent manner. Reasons for non-scheduled revisions should also be explained.
- The results of both current and non-scheduled revisions must be accompanied by relevant documentation.
- Geostat informs users in advance about significant methodological changes before publishing statistical data calculated based on the new methodology.
- Geostat, based on international standards, regularly analyzes the results of the revision and prepares the corresponding document.
- Geostat periodically conducts surveys for users to determine their attitudes toward revision methods. Revisions should be published with relevant documentation.

1.7. Revision deadlines

Preliminary data are revised/corrected, as well as fundamental changes are made according to the calendar. In exceptional cases, if a significant error is detected that violates the compliance of the data, the revision or correction is made immediately.

2. Error correction in published statistical data and information

2.1. The purpose of error correction

Errors can occur during the stages of collecting, processing and disseminating statistical data. Incorrect statistical information, which may mislead the user, needs to be corrected and notified in a timely manner. The purpose of correcting errors in published statistics and information is to provide users with accurate and quality statistics and information.

Like revision policies, error correction is based on international standards and requirements. Principle 6 of the Code of Practice for European Statistics provides for the correction of errors:

• Indicator 6.3: Errors discovered in published statistics are corrected at the earliest possible date and publicised.

2.2. Error classification

An error is the publication of any incorrect statistics or information. They fall into two categories: non-essential errors and substantial errors.

A non-essential error is an error that does not lead to a misinterpretation of published statistics and information, such as

- Minor error (error in typing, inactive links, incorrect formatting, etc.),
- **Grammatical error** (if it does not prevent the correct interpretation of statistical data and information),
- **Error in the text:** when it is clear from the content where the error is made and what should be written instead (if the same word or term is spelled correctly several times and incorrectly once; for example, the year indicated in the title or the base period, etc.),

• **System error:** error in the publication process, for example, the wrong date of publication, an error in the table or graph/diagram design, etc.

Essential errors are errors made in tables, text, and diagrams, in user-accessible databases that prevent the correct perception and interpretation of statistical data and information.

2.3. Error detection

Upon error discovery, information is disseminated about it from the bottom up according to the hierarchical structure of the agency. First, the head of the lower rank responsible for the information is informed. It evaluates the degree and significance of the error, based on which it determines which category of errors the given case belongs to. Since the subsequent actions to correct the error are different depending on the category, it is important to select the category correctly.

If a case is discovered by the management of Geostat – the Executive Director or any of his deputies – the head of the relevant structural unit shall be notified and shall take the necessary measures in accordance with paragraph 2.4 to correct an error.

2.4. Error correction procedures

In case of a non-essential error, the head of the lower unit shall ensure the correction of the error in the published information on the website and/or in the database as soon as it is discovered or notified. If a similar error is made in the printed version, it is corrected in the electronic analog of the published information (for example, on the official website or database). The notification regarding the mentioned error does not apply.

In case of an essential error, upon its discovery, the said information (especially if it refers to a press release) should be removed from the website and corrected as soon as possible. It should be reported to the head of the superior unit, who in turn will report the said error to the Executive Director.

The unit responsible for the information published in the press release shall promptly prepare its correct version, which shall be accompanied by a correction notice of the error indicating the date of its correction. The message should preferably be published on the main page of the news with a link to the correct version of the release. The correct version of the release itself must be placed at the same address where the incorrect version was posted.

If information is sent to users, they should be informed of the error and its correct version using the same sources of information as soon as possible.

In the case of errors made in the printed version of statistical information, an error correction sheet is attached to it, and in the electronic version, the correction is made directly in the publication.

If an error was made in the metadata, it will be corrected in the same document, and in this case, the message will be published as a separate news item with details.

2.5. Gathering of information on errors

Information on all cases of error should be collected and analyzed. Errors are collected by the International and Public Relations Department. The department is provided with information on all errors identified during the calendar year. In case of an essential error, the head of the unit responsible for the data should indicate the following details: dates of publication of information, error detection and correction, degree of error severity (determined by the scale of user circle, international importance, influence on other statistical data, etc.) and measures taken to correct it.

2.6. Error analysis

The International and Public Relations Department prepares a report at the end of each calendar year, which should include statistical information on errors and their analysis. The report will be submitted to the Quality Management Working Group for further consideration. The purpose of the report is to avoid similar errors in the future.