

**THE NATIONAL INSTITUTE OF STATISTICS  
OF ROMANIA**

**THE ERRORS TREATMENT POLICY  
of the National Institute of Statistics of ROMANIA**

**JUNE 2016**

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# THE ERRORS TREATMENT POLICY

## of the National Institute of Statistics of ROMANIA

### 1 Introduction

The Errors Treatment Policy is a component of the Statistical Data Revision Policy and complies with the European Statistics Code of Practice, which, under Principle 6 (Impartiality and objectivity), states that “statistical authorities develop, produce and disseminate European Statistics respecting scientific independence and in an objective, professional and transparent manner in which all users are treated equitably” and, under Principle 8 (Appropriate statistical procedures), states that “appropriate statistical procedures, implemented from data collection to data validation, underpin quality statistics”. Under Principle 6, Indicator 6.3 sets out that “errors discovered in published statistics are corrected at the earliest possible date and publicised”, and Indicator 6.6 states that “advance notice is given on major revisions or changes in methodologies”. In addition, under Principle 8, Indicator 8.6, it is noted that “revisions follow standard, well-established and transparent procedures”.

The errors treatment policy provides a common framework on the management of errors in all statistical production areas, with a view to continuously improving the quality of statistical processes, products and services, as well as the image of the National Institute of Statistics (NIS). It should not be mistaken for the revision policy, which gives explanations on changes in statistical data in general. Customary revisions are usually reported in NIS publications and in the tables published on the NIS website. In contrast, errors can create confusion for the users and require special processing and information.

The implementation of the errors treatment policy is supported by NIS internal procedures, which include internal and external communication mechanisms, as well as tools for correcting errors and reporting models.

The errors correction operations are part of the **unplanned revisions** specified in the Statistical Data Revision Policy and which, by definition, are not announced in advance as they are the result of unpredictable events. The term “unplanned” does not relate to the cause of the error but to the times at which error revisions are performed, which are neither set out in the timetable of annual revisions nor reflected in dissemination plans.

The errors treatment policy focuses on treating the errors contained in the statistical data and information already disseminated.

### 2 Definitions

Under this policy, the errors are incorrect statistical data and information caused by the erroneous processing of data, which have not been detected before their publication and which could have been corrected, had they been found in due time. The errors treatment policy uses the following specific definitions and terms:

- **Statistical data** are numerical data obtained through procedures of (total or partial/selective) statistical observation. By statistically processing the data we obtain primary and derived indicators, carriers of statistical information. Statistical indicators

measure the size, structure, intensity and variation of a studied phenomenon in time and space, including in terms of quality.

- The **statistical information** generally relates to statistical metadata. In particular, it includes statistical symbols, comments, tables, diagrams, figures, definitions, methodological explanations and other texts that explain the content and significance of statistical data. In the error revision processes this information also needs to be corrected.
- The **error** is defined as the dissemination of incorrect statistical data and information to the users due to:
  - the bad management of data processing procedures,
  - erroneous data entries or the lack of data in the processing process.

Errors can be identified in the recently published statistical data (recent data) as well as in the previously disseminated statistical data (past data). The publication of statistical data that has taken place in breach of statistical confidentiality or the release of data that are under embargo is also considered an error.

- **Revisions or corrections are broadly defined** as any change in the statistical data made available to the public. In general, the data are revised in order to incorporate new improved information and hence the revisions are inherent to statistical production. For example, the reporting of provisional or preliminary data when data about a certain phenomenon are requested will be improved with relevant information, available only after a certain period of time.
- **The relation between an error and a revision.** An error in the disseminated statistical data, which needs to be corrected in accordance with this error correction policy, will trigger an unplanned revision of statistical data because, in most cases, the correction of errors cannot be announced in advance.
- **The person responsible for the paper** is the person who is directly in charge of the statistical work, by virtue of a clearly defined task.

### 3 Categories of errors

In order to ensure a reasonable reaction to the published errors, in accordance with the previously presented definition, they are sub-divided into the following types of errors:

- 1) **Errors with an insignificant impact/unimportant:** incorrect data that do not modify the published data and information ("mistake"). They include, for example, errors of grammar, expression or spelling, incomplete/out-of-date links, which do not affect the interpretation of the trend by the users.
- 2) **Errors with a minor impact:** incorrect table, text or graph data:
  - a) whose importance is so small that the content of the information remains unchanged (regardless of the level of aggregation) *or*
  - b) that occur at any aggregation level and whose importance is great enough to change the content of the information, but which are not of interest to the public.

- 3) **Errors with a major degree of impact/critical:** incorrect table, text or graph data which:
  - a) occur at any aggregation level, whose importance is great enough to change the content of the information and which are of interest to the public *or*
  - b) have significant economic consequences *or*
  - c) represent a breach of data protection and confidentiality.

## 4 Responsibilities

Depending of the category of identified errors, there are different degrees of responsibility, namely:

- 1) *The head of department/division* – is responsible for the publication of statistical data and information and, consequently, for the correction of the published errors. In the absence of the head of department/division, his/her tasks are performed by the person assigned to these duties.
- 2) *The director of a directorate that produces statistics/the director-general* – is responsible for the strategic issues related to publication and, consequently, for the strategic issues related to the correction of the published errors. In their absence, their tasks are performed by the persons assigned to these duties.
- 3) *The director responsible for dissemination/publications/communication* – is in charge of the errors that occur in these directorates. Through the directorate co-ordinated by him/her, he/she provides support to the directorates in the compilation of various forms of dissemination.

## 5 Error identification

An error can be identified within any NIS organisational entity or by external users of statistical data and information. Regardless of the manner in which the identified error becomes known, the head of the department/division where the error was generated is informed through the usual channels of communication. If the head of department/division cannot be contacted, the superior is informed.

## 6 Error correction

### 6.1 General rules

In all cases, the head of the directorate where the error was generated informs the heads of the dissemination and communication departments, so that they are aware of the issues aroused and able to answer the users' comments.

The head of department/division, together with the director of the department and with the person responsible with the work, determines the type of error in accordance with the categories defined in Chapter 3.

In every printed publication it is mentioned, preferably on cover II, that in case of error detection, an erratum will be published on the NIS website.

## **6.2 Specific rules depending on the category of error**

**Errors with an insignificant impact/unimportant** are corrected without any mention in press releases, publications, online data bases or on the website. In case of this type of errors, no internal information and centralized documentation of errors is needed. Excepting the systematic errors, documentation within the responsible department is sufficient. There is no action of active notification for the known users.

*In case of press releases, the error will be corrected as soon as possible and the corrected version will be published on the NIS website.*

*In case of printed and electronic publications, the error will be corrected and introduced in the next edition of the publication.*

*In case of data published in online data bases, the wrong data sets are replaced by the correct ones as soon as possible.*

*In case of data and information published on the website, the error will be usually corrected at the next revision of the respective page.*

**Errors with minor degree of importance** are corrected in the press releases, in the electronic version of the publications, in the online data bases and on the website.

*In case of press releases, a note on the correction will be included below the title, such as "Corrected version of ... (the indicator is mentioned)", the corrected data will be written in bold and a footnote states that the data in bold represents a correction of previously published data, mentioning the number and the date of the press release. The new press release will be posted on the site and will replace the previous one.*

*In case of printed publications, no new corrected edition will be printed, but an erratum will be published on the NIS website.*

*In case of electronic publications, the incorrect version will be replaced as soon as possible, including the attached Excel files. A note on the data and / or corrected information in the electronic version will be included on the first page. In case the publication, according to the catalogue of publications, is issued both in electronic and printed format, the note will also refer to the errors in the printed publication.*

*In case of data published in online data bases, the wrong data sets will be replaced by the corrected ones and the space devoted to notifications will include a note on the corrected data.*

*In case of data and information published on the website, the errors will be corrected and the respective page will be replaced as soon as possible.*

In case of **errors with major degree of impact/critical**, the publications and press releases are withdrawn from the website and corrected as soon as possible. Serious errors of content that were detected in a form of dissemination whose relevance has decreased significantly due to the time lag compared to the reference period are exempted from this rule. These later errors are subject to correction criteria of errors with a degree of minor importance.

In case of errors with cu major degree of impact/critical, the following persons will be advised: the head of the general department in question, the coordinating vice-president and the president of NIS. The responsible unit urgently produces a corrected version of the press release and / or publication and compiles the following:

- a document that will be published on the NIS website, with reference to the detected error, its cause, the mode of correction and the products that will be corrected (press releases, electronic and printed publication, data bases, etc.);
- an internal report showing the cause of the error, how to solve it, the date of the correction and the measures to prevent future occurrence of similar errors.

The Directorate of Communication, with the support of the Directorate of Statistical data Dissemination, posts the document mentioned above on the NIS website. The correction mentioning must be visible, preferably on the home page of the NIS website.

The Directorate of Communication advises the important users/subscribers on the error.

Aside from these general rules, depending on the type of product published, a series of specific rules apply.

*In case of press releases*, a note on the correction will be included below the title, such as "Corrected version of ... (the indicator is mentioned)", the corrected data will be written in bold and a footnote will state that the data in bold represents a correction of previously published data, mentioning the number and the date of the press release. The new press release will be posted on the site and will replace the previous one, being transmitted to the beneficiaries via the same channel as the wrong one.

*In case of printed publications*, if the publication is reprinted, the error is corrected and is accompanied by a note on the correction placed in a relevant place, usually on the same page where the error was corrected. If the publication is not reprinted, an erratum will be added to the copies not yet distributed and the erratum will be published on the website. The decision for reprinting will be based on a cost-benefit analysis.

*In case of electronic publications*, the incorrect version is replaced as soon as possible, usually the same day, the attached Excel files included. A note on the data and / or corrected information in the electronic version will be included on the first page and, if necessary, the cause of error. The summarised description of the electronic publication on the website will include a reference to the error, the correction and the date of correction. In case the publication, according to the catalogue of publications, is issued both in electronic and printed format, but the publication is not reprinted, the note will also refer to the errors in the printed publication.

*In case of data published in the online data bases*, the wrong data sets will be replaced by the corrected ones and the space devoted to notifications will include, if necessary, a note on the corrected data.

*In case of data and information published on the website*, the errors will be corrected and the respective page will be replaced within maximum 2 days from the detection of the error. Depending on the technical solutions, a note on the corrected data/information will be included and, if necessary, the causes of the error.

Errors which are a violation of data protection and confidentiality are considered major errors with high impact / critical. Both the correction and the communication of such errors are decided in accordance with the law in force, especially with Law no. 226 / 2009 on the organization and functioning of official statistics in Romania, as amended and further supplemented, as well as with other specific legislative documents on data protection and confidentiality. The involvement of the head of department/division, of the director of the responsible directorate, of the general director, of the coordinating vice-president / president of NIS and of the Committee for Statistical Confidentiality is necessary in managing this kind of errors.

## 7 Management and archiving of errors

- **Information on errors discovered and corrected**

All the categories of errors, except for those with a low degree of impact /insignificant and not regular, are documented and analyzed in accordance with the rules of the management and archiving of errors, taking measures to prevent similar future errors.

The directorate responsible with the dissemination creates and manages a registration and archiving system of errors. Errors must be notified by the directorates or divisions where the errors have been corrected to the directorate responsible with dissemination, together with the following information: date of detection, date of correction, category or degree of importance, description, cause, the action and measures taken to prevent the future occurrence of similar errors, in accordance with a system operational procedure. The documents produced by applying the procedure are posted on the website of the National Institute of Statistics.

- **Error analysis**

An analysis of errors is presented annually as part of the activity report of the INS with the purpose to prevent the occurrence of errors and to reduce their number.

### References:

1. European Commission (2013), ESS Guidelines on revision policy for PEEIs-Luxemburg;
2. ESS Committee(2011), European Statistics Code of Practice;
3. Eurostat (2014), Eurostat's Internal Dissemination Error Management Policy;
4. INS Romania (2009), Quality Guide of Official Statistics of Romania;
5. INS Romania (2009), Quality Statement of the National Institute of Statistics;
6. INS România (2015), Review Policy of Statistical Data;
7. STATEC (2014) Luxemburg, Correction d'erreurs et revision de chiffres;
8. Statistics New Zealand (2013), Policy for handling errors in published statistics ;
9. DESTATIS (2013) Germany, How to deal with publication errors (Guideline).