Revision policy of the National Statistics Institute

Revision policy

1. Introduction: definition of revision and objectives of the revision policy.

The main objective of the revision of statistical data focuses on the improvement of the quality of the information provided. There are different reasons for carrying out revisions of statistics. In general, revisions are due to having new data regarding the past that could not be included at the time that the previous version was compiled and disseminated. This new data may come from the inclusion of new information (for example, due to lags in the responses to a survey), or due to the correction of the information initially transmitted by the statistical source.

Nonetheless, revisions may be due to other factors, such as: the detection of chance errors associated with the incorrect use of information sources or data processing; the need o introduce methodological improvements and update the norms regulating statistics; or revisions linked to procedures such as the correction of seasonal effects in short-term series. All of this frequently implies significant changes, which have an impact on the data published previously, and which, therefore, give rise to revisions.

However, it is necessary for the revisions to be backed up by a set of guidelines and principles, which favour the transparency of the processes and ensure trust and effective communication with the users. This is what is known as a "Revision policy".

The revision policy must establish general rules for the information to provide the user regarding the possible causes of the revision, regarding the typology of the revisions and regarding the documentation supporting the revisions.

2. Reference frameworks.

In the preparation of the INE revision policy, the following conceptual frameworks have been considered:

- European Statistics Code of Practice, Eurostat, 2011.
- ESS guidelines on revision policy for PEEIs. Eurostat, 2013.
- Principles for a common revision policy for European Statistics. Eurostat, 2009.

3. General principles of the revision policy.

Notwithstanding the differences existing between different statistics and revision typologies, it is possible to establish general criteria that the revision policy must fulfil: in particular, the corresponding standards defined in the European Statistics Code of Practice:

Principle 6 "Impartiality and objectivity" (Indicator 6.6: Revisions or significant changes in the methodology are announced ahead of time).

Principle 8 "Suitable statistical procedures" (Indicator 8.6: Revisions follow normalised, consolidated and transparent procedures).

Principle 12 " Precision and reliability" (Indicator 12.3: Revisions are analysed periodically, in order to improve statistical processes).

Principle 15. Accessibility and clarity: The revision policy must be made public for all users.

To this end:

- The INE must guarantee that the general criteria regulating the revisions are available to users in an accessible way.
- The revised results must be disseminated to the public, and accompanied by explanatory notes.
- If the revision is significant, information must be included regarding the underlying factors, such as the correction of the initial data or the introduction of new data.
- The "errors" leading to revisions, regardless of their nature, must be documented and notified to the users as soon as possible.
- In those cases in which the need for a revision might be anticipated, that is, a revision as a result of methodological changes, it must be announced to the users with advance notice.
- The revision measures must be in accordance with the dissemination policy, in terms of the principles regulating the publication of the revised results and the application of internal action protocols when dealing with errors arising in the INE publications online.
- Studies and analyses of the revisions must be performed regularly, for the purpose of improving the statistical compilation processes. For example, the analysis of the current routine revisions might enable the adoption of measures to reduce the magnitude of said revisions (eliminate the bias, eliminate any significant time correlation between revisions, reduce their volatility, etc.).
- A transversal analysis of the revisions shall be carried out periodically by the INE Quality Unit, for the purpose of assessing compliance with the revision policy.

The revision policy is defined, based on the decisions regarding the following aspects:

- Applicable principles in the case of "routine" revisions.
- Applicable principles in the case of large revisions.
- Applicable principles in the case of extraordinary revisions.
- Differentiation by statistical operation.

4. Applicable principles in the case of "routine" revisions.

Ordinary or routine revisions are those that, due to their nature, are inherent to the production process of the statistics. They are mainly due to the inclusion of new data.

These revisions may occur both for annual statistics, and especial for infra-annual statistics, which are more frequently subjected to revisions, due to the time gap between the period to which the data refers and their dissemination.

The basic principles that are applicable to these revisions are the following:

- In general, routine revisions must be carried out until the time at which the information considered necessary for obtaining a rigorous and stable value of the statistical variable is available.
- Periodical routine revisions must be performed and disseminated in accordance with well-defined, synchronised and updated calendars. One way of preparing these calendars is to incorporate them into the general publication calendar of the statistics.
- Users are notified in advance regarding when the data will be made available.
- In the specific case of those revisions linked to the correction of seasonal and calendar effects in short-term series, notwithstanding the general criteria, the specifications listed in the "INE standard for the correction of seasonal and calendar effects in short-term series" shall be followed, as indicated in section 3 of said document.

See:

http://www.ine.es/en/clasifi/estandar_efectos_estacionales_en.pdf

5. Applicable variables in the case of large revisions or structural revisions.

Large revisions of published data are due to several reasons: the availability of a structural data source that is obtained over long periods of time (such as the population censuses); changes in the concepts, definitions and classifications used in the production of series (for example, adopting new classifications or methodological changes derived from community regulations); the improvement of methodological procedures (for example, changes in the level of detail and stratification of the data from a sample survey).

The basic principles that are applicable to these revisions are the following:

- Large revisions must only be carried out during long periods of time (normally between five and ten years).
- Large revisions must be announced widely and with advance notice. They must be included a revision calendar, or as pertinent, in the publication calendar that includes the details of the revisions.
- The reasons for these revisions must be clearly explained to the public, if possible, together with their potential impact on the most important data.
- Following the revision, an analysis showing the impact of the changes made must be published.
- As much as possible, the large revisions of the different statistical fields must be performed in a coordinated manner.
- In as short a time as possible, the revisions must be accompanied by transformations in the previous data series (or by auxiliary tools for their transformations), allowing reconstructing the time history of the phenomenon under study, and avoiding breaks in the data series of the fundamental variables.
- The time period for which the revision will be calculated will depend on the balance between the cost of obtaining it and the benefit of its availability for the respondents.

6. Applicable principles in the case of extraordinary revisions.

Extraordinary revisions are those that are not foreseen, and that arise due to unexpected events, or to a great extent, due to events that are exogenous to the production process, but that significantly affect the statistics.

The basic principles that are applicable to these revisions are the following:

- Extraordinary revisions must be restricted to the case of unforeseeable errors and accidents occurring in the production process, and that imply significant changes in the data already published.
- Extraordinary revisions must be carried out as quickly as possible, once the underlying factors have been identified and their impact on the data has been assessed.
- The correction must be accompanied by an appropriate explanation of the nature and implications of the error.

7. Differentiation by statistical operation.

Each statistical operation has its own specificities, both in the design and in the information collection, and in many cases, they are subject to European regulations and other specific legal norms. Therefore, there may be singular criteria in the revision policy of the different statistics.

Nevertheless, and regardless of the concrete criteria regulating each of the statistics, it is possible to establish some principles that, generally or transversally, are applicable to all of them:

- i) The revision policy of each of the statistics shall follow transparent procedures.
- ii) The revision criteria for each of the statistics shall be made known, and made public, to all users:
- These criteria must include: the identification of the different types of revision adopted; the indication of the circumstances under which the revisions are carried out; the scope of the revisions (number of periods revised); and the frequency thereof.
- The data revision criteria shall be included in the methodological documents for each statistical operation (methodologies, metadata associated with each indicator, etc.). In particular, this description must be included in the corresponding standardised methodological report accompanying INE publications (in the section dedicated to describing the "Revision policy").
- iii) All statistics shall provide, at least for the fundamental variables, indicators of the magnitude of the revisions, and specifically, those considered in the Eurostat catalogue of "quality indicators": the average size of the revisions as an absolute value; the average size of the revisions in relative terms. The definition of these indicators corresponds to the criteria defined by Eurostat in the document entitled "ESS Quality and Performance Indicators 2014":

http://ec.europa.eu/eurostat/documents/64157/4373903/02-ESS-Quality-and-performance-Indicators-2014.pdf/5c996003-b770-4a7c-9c2f-bf733e6b1f31

- iv) Previously defined indicators must be included in the corresponding standardised methodological report accompanying INE publications (in the section dedicated to describing the "Revision policies").
- v) The analysis of the revisions taking place in each statistical field must be a basic tool for improving statistical processes, detecting and avoiding obtaining systematic biases in the revisions.
- vi) In the revision policy, the maximum consistency possible shall be sought amongst the statistical operations. When the revision of one of the statistics determines the results of another, said fact must be borne in mind, and the coordination between the revisions of both statistics must be guaranteed.