

Good governance in statistics: The development of a revision policy for the German Federal Statistical Office in the European context

by Irina Meinke and Peter Schmidt¹

Abstract

Revisions of published statistical data are part of the regular production process of many statistics. In order to describe the general guidelines for handling data revisions, the ESS Quality Assurance Framework requires a policy on revisions. A general revision policy applicable to all statistics is an important aspect of good governance in statistics: It provides explanations for reasons of revisions, clarifies the typology of revisions, demands proper documentation and ensures effective communication with the public, fosters a transparent revision process, and therefore promotes confidence among users.

The importance of such a revision policy is being increasingly recognized by the international statistical community and considerable work has been done in this field over the past years both at national and European level: In 2012 the ESSC endorsed the ESS guidelines on revision policy for Principal European Economic Indicators, which can be generalized to other statistics and shall be used by ESS member states for the development of their national revision policies. According to these ESS guidelines a general revision policy for the German Federal Statistical Office (Destatis) has been drafted in 2013 and is intended to be released in 2014. A short survey conducted by Destatis within the ESS Working Group "Quality in Statistics" confirms that numerous other ESS member states have already developed or are currently working on a general revision policy while using the ESS guidelines on revision policy as baseline document.

The purpose of this paper is threefold: it presents the need for a revision policy and its contribution to ensure good governance in statistics, it further sets out the guidelines and principles of Destatis that should be taken into account in the revision of released statistics and it gives a summary of the results of the short survey.

¹ Irina Meinke is Research Assistant in "Data Quality Management" and Peter Schmidt is Head of the "Institute for Research and Development in Federal Statistics" at Destatis.

1. Revisions of already released statistics: chances and risks

Statistics are often subject to revisions. In a general sense, revisions are defined as...

...any change in a value of a statistic released to the public either in printed or electronic form by an official statistical agency. Revisions generally incorporate new, improved information or introduce methodological improvements.

*(ESS guidelines on revision policy
for Principal European Economic Indicators)*

Revisions are a procedure inherent to the production and release of many official statistics and their goal is to (progressively) improve the data quality. Quality of statistical information comprises several criteria of which two are worth noting when thinking of revisions: accuracy and timeliness. Both quality dimensions are of particular importance to ensure that statistical information is relevant for users, or to put it in other words, meets the users' needs. Revisions are inevitable, when these two quality dimensions want to be met by the statistical agencies.

The need to carry out revisions often reflects the commitment of the statistical agency to report promptly on actual developments and therefore to produce statistical data as up-to-date as possible, even though some relevant information is still outstanding. To satisfy the user's need for up-to-date statistical information, provisional statistical results (first estimates) are often released. These already published but provisional statistical results are then refined or rather revised as soon as previously not available information or statistical data has been received (e.g. new observations become available or some past values are modified or corrected). Likewise, the statistical agency committed to ensure high standards of accuracy and rigor including new methodological improvements (e.g. update of the base period, availability of new data sources like administrative data), conceptual changes (e.g. changes in definitions and classifications), new developments in the calculation method making statistics more adequate (e.g. updating of weight structures) or changes in laws or regulations at European or national level.

Usually, the statistical agencies – and in the case of Germany Destatis – try to meet both quality requirements accuracy and timeliness, which are very often two conflicting concepts. From the user's perspective, revisions are something of a double-edged sword. On the one hand, they upgrade the information available and are therefore welcome. On the other hand, revisions also mean extra work to data users, who have to update their databases and adjust

their analyses. Furthermore, revisions might confuse users: Estimates that are not subject to revision could wrongly be considered more accurate and reliable than revised ones. Revisions are a two-sided affair from the producer's perspective as well. The new information they provide is needed to describe actual developments more precisely, however, frequent and/or major revisions (which are not communicated transparently and in advance) can damage the credibility of the statistical data. Changes to current data may result in a different assessment of the actual developments and could therefore (at worst) cast doubt on past empirical results.

2. Good governance in statistics: the need for a general revision policy

In order to minimize the risks related to revisions and in order to ensure the usability of statistics and to foster user's confidence in statistics (which are subject to revisions), it is important that the users receive all the necessary information about the revisions made, in a timely and transparent manner. Therefore the setting out of a general revision policy applicable to all statistics² is an important aspect of good governance in statistics and is an important step towards better quality in production as well as dissemination of statistics:

A general revision policy provides explanations for the possible reasons for revisions and clarifies the typology of revisions that may occur, explains the timing of revisions (including a revision calendar), stipulates regular revision analyses, demands proper and purpose-oriented documentation on the reasons, process, cycle and magnitude of revisions, ensures effective communication with the public, fosters transparent revision practices and enables users to get a detailed understanding of the revisions made and therefore promotes confidence among users in official statistics. A general revision policy, which is publicly available and regularly updated, provides the users in advance and in a timely manner with explanations about revisions and shows the users that revisions take place within the framework of an overall policy including standard rules and guidelines for revisions and according to a predetermined schedule. If the policy, procedures, and schedule are published, it will be evident that revisions are not ad hoc and are not made for political reasons.

In 2008, a set of eight principles for a common revision policy at ESS level have been developed. They constitute the basis for the ESS guidelines on revision policy for Principal European Economic Indicators (PEEIs), which have been endorsed by the European Statistical System Committee (ESSC) in 2012. These ESS guidelines are not only applicable

² This Paper focuses on general revision policies implemented at institutional level, for further reflections on domain specific revision policies see [ESS guidelines on revision policy for Principal European Economic Indicators](#).

to PEEIs, but can be generalized to other statistics and are meant to be used by ESS member states for the development of their national revision policies. The definition of common principles and guidelines for revision policies within the ESS follows the objective of a harmonized European statistical system where the releases and the revisions of European statistics are coordinated and synchronized as far as possible. The implementation of the ESS guidelines on revision policy represents an important step towards the harmonization of revision policies within the ESS. National revision policies which are developed in accordance with the ESS guidelines foster the harmonization of revision practices across the ESS member states and therefore facilitate the comparison of European statistics and enhance the consistency of data aggregates at European level. Furthermore, a common language when discussing revisions will also be promoted. Hence, the quality of the documentation of revisions will improve.

3. Revision policy of Destatis: outline of the principles

So far, at Destatis principles and guidelines for revisions have been formulated at the level of statistics or areas of statistics (e.g. business statistics, price statistics and national accounts). A general revision policy at institutional level in line with the ESS guidelines on revision policy has been drafted in 2013 and is intended to be released in 2014. The following section presents an outline of the guidelines and principles that should be taken into account in the revision of released statistical results, while respecting the already existing revision practices of Destatis.

Principle 1: The information gain and the burden on users are in an acceptable relationship

A balance has to be found between the demands for the best statistical information at all points in time (which would then require permanent revisions) and avoiding unnecessary changes in the data. Too many changes would impose excessive burden both on data producers and users, as the data would need to be continually updated. Hence, this would create a barrier to communication with society. Therefore, this basic principle says that significant information for important data should be incorporated as quickly as possible into published data in order to avoid a wrong assessment of current developments, whereas minor changes should first be collected before being implemented, so that users are not confronted with too many revisions.

Principle 2: Revision cycles and releases are coordinated within statistical domains

Revisions should be coordinated within statistical domains as far as possible: To coordinate revision cycles and releases within statistical domains, a consistent and coherent framework for all statistics, which produce data always in line with all information reported to statistical agencies, would require a continuous and simultaneous updating of all source statistics and derived statistics. This is not possible in practice, some inconsistencies will always remain. The most appropriate balance between timeliness and synchronization has to be found when coordinating revision cycles and releases within statistical domains. It would be preferable to regulate the timing of revisions and the scope of the revised time series to be provided within statistical domains, making it binding for them to comply with their obligations. A staggered introduction of such revisions within statistical domains should be avoided as these will affect data comparability within statistical domains. Furthermore, from user's perspective revision cycles and releases should also be coordinated across countries to constitute a minimum length for European aggregates and to promote data comparability across countries.

Principle 3: Transparent communication on revisions with the users

To foster transparency and to facilitate user understanding of the underlying causes of a revision, the release of a revision should be accompanied by adequate and explanatory documentation (e.g. press release, website, quality reports, metadata and other publications). This documentation shall detail well in advance and in a standard way the reasons for the revisions, the timing, the length, the depth of the revision, it should offer a comparison of the "new" and the "old" data and, whenever possible, an evaluation of the impact of revisions on previously released statistical data.

Principle 4: Revision analyses are performed to ensure the quality of the statistical products and processes

Revision analysis is an important tool both for data producers' and data users' as it gives essential insights on the quality of the data and the production processes: For data producers, the revision of already released data might reveal some problems in the production or in the estimation processes. It is therefore of importance to look at revisions on a regular basis in order to further improve data quality. Revision analysis can be applied to track potential sources of systematic data anomalies and to identify areas of data collection and compilation processes which should be improved. Users should also be informed about the results of revision analyses of relevant statistics in order to be able to evaluate the impact of revisions

on already published data. Revisions could mean to users, that they have to update their databases and adjust their analyses and conclusions. Hence, statistical agencies should publish reports and technical papers containing results on revision analyses.

4. Situation in Europe: results of a short survey

The importance of developing a revision policy is being increasingly recognized by the international statistical community and considerable work has been done in this field over the past few years both at national and European level. As already explained before (see chapter 2), the ESSC endorsed in 2012 the ESS guidelines on revision policy. This was an important step at European level to provide guidance for developing national revision policies. However, what exactly is the situation at national level?

Which ESS member states have already developed a revision policy at institutional level? And did they use the ESS guidelines on revision policy as a reference document? Which other baseline documents (e.g. from institutions other than statistical agencies) or revision policies from other countries were consulted when developing one’s own revision policy? If no revision policy exists, are there preparations to develop such a policy?

These are the central questions of a short survey related to existing revision policies in the ESS conducted by Destatis from March 3, 2014 until April 4, 2014 within the ESS Working Group ”Quality in Statistics” comprising quality management staff from 32 countries (28 European Union and 4 EFTA member states)³.

Table 1: Key results of the short survey (absolute figures)

Participation in the short survey		Existing revision policies at institutional level	
Participation in the survey	21	Yes, a general revision policy exists	13
No participation in the survey	11	No, a general revision policy does not exist	3
ESS member states in total	32	A general revision policy is in work	5

21 out of 32 countries replied to the survey, whereas 11 countries did not participate in the survey resulting in a response rate of 66 % that enables a good overview about the current

³ Please contact Irina Meinke, Research Assistant in ”Data Quality Management” at Destatis (e-mail: irina.meinke@destatis.de; telephone: +49 611 75 3428), for a comprehensive documentation of the results of the short survey.

situation within the ESS. 13 participants indicated that a revision policy at institutional level exists. Table 2 indicates the links to existing revision policies in the ESS⁴, the year of publication and if the ESS guidelines on revision policy were consulted. More than half of the participants indicated that the ESS guidelines on revision policy were used as a baseline document.

Table 2: Overview of existing revision policies in the ESS (alphabetical order)

No.	Country-name	Link to the revision policy	Year of publication	ESS guidelines consulted?
1	Austria	Revisionspolitik. Datenrevisionen veröffentlichter statistischer Ergebnisse	2013	yes
2	Czech Republic	CZSO Data Revision Policy	2013	yes
3	Denmark	no link available	2014	yes
4	Estonia	no link available	2014	no
5	Greece	ELSTAT Revision Policy	2013	yes
6	Latvia	Revision policy guidelines	2009	(no) ⁵
7	Lithuania	General Principles behind the performance, analysis and announcement of revisions of statistical indicators	2013	yes
8	Luxembourg	Correction d'erreurs et révision de chiffres	?	no
9	Malta	Policy on Revisions of Official Statistics	2004	no
10	Portugal	Revisions policy	2008	?
11	Slovak Republic	Revision policy	2011	yes
12	Slovenia	Revision policy and Revisions of statistical data – methodological explanations	2010	yes
13	Switzerland	no link available	2010	no

6 of the above listed revision policies were published recently, namely in 2013 or 2014. This confirms what was said before: considerable work has been done in this field over the past few years at national level. Probably this sudden rise in the implementation of general revision policies is related to the endorsement of the ESS guidelines in 2012 by the ESSC encouraging and helping the ESS member states to develop their national revision policies in

⁴ It is possible that the table does not include all existing revision policies within the ESS. Please note that revision practices based on sound statistical methodology, appropriate statistical procedures and broad experience can be in place, even though a formal document labeled as a revision policy is not in place. Chapter 2 of this paper explains why there is a need to implement revision policies.

⁵ Latvia's revision policy will be revised and updated this year in accordance with the ESS guidelines on revision policy for PEEIs.

accordance with these ESS guidelines. There are also some pioneers, like Malta and Portugal, having published their revision policies already in 2004 and 2008.

4 countries, namely Cyprus, Italy, Norway and Romania (besides Germany), indicated that a revision policy at institutional level is in work using the ESS guidelines as a reference document. So, in the coming years other ESS member states will follow and will adopt a general revision policy. This will lead to the situation that the majority of the ESS member states are going to have a national revision policy, in most cases it is in accordance with the ESS guidelines. Only 3 respondents indicated that they do not have a revision policy at institutional level and that they are currently not planning to develop one. As far as 11 ESS members did not participate in the survey, probably there may be more revision policies in practice or in work. It seems that the ESS finds itself in a turnaround situation, where the importance of the revision policies is more and more accepted.

Furthermore, the respondents mentioned several documents, which have been consulted when developing their revision policies (e. g. documents from central banks, IMF, OECD and CMFB). Especially, the ESS guidelines on revision policy were often consulted. Additionally, the respondents indicated four revision policies, that is from Austria, Czech Republic, Portugal and United Kingdom⁶, which were consulted as reference documents when developing their own revision policies. While looking through the just mentioned revision policies, the following special features can be noticed: Portugal's revision policy at institutional level has been one of the pioneers explaining very detailed the key factors underlying a revision, the typology of revisions, the different dimensions of revision analysis and the general principles of Portugal's revision policy. Austria's revision policy at institutional level (not available in English) similarly contains very detailed explanations on the typology of revisions and on the communication policy of revisions. Furthermore, it integrates in its annex a list of all statistics with regular revisions. This list includes information about the timing of revisions (revision cycle) as well as content-related facts. The Czech Republic's and the United Kingdom's revision policies include not only general guidelines and principles applicable to all statistics, but also define domain specific rules and principles to follow when performing revisions (e.g. for national accounts statistics, price statistics, population statistics, etc.).

⁶ Please note that United Kingdom did not fill in the questionnaire, but their revision policy ([Guide to statistical revisions](#) and [ONS Revisions and Corrections Policy](#)) was mentioned by other ESS member states.

5. Conclusion and outlook

The aim of the paper is not only to point out the importance of a revision policy for good governance in statistics and to illustrate the outline of the revision principles of Destatis, but also to support those ESS members, which are currently developing or planning to develop a revision policy at institutional level. Here, especially the ESS guidelines on revision policy have to be mentioned. They provide good guidance for the development of national revision policies and enhance the implementation of common principles and guidelines within the ESS.

So far, Destatis has drafted a revision policy at institutional level in line with the ESS guidelines on revision policy, which is intended to be released in 2014. This provides the basis for further (still outstanding) works, like developing and implementing domain specific revision policies as well as a revision calendar that includes revision schedules of all statistical domains. A general revision policy represents a framework applying to all statistical domains. The general revision policy represents the reference for the development of domain specific revision policies. In order to include more concrete principles and guidelines, which are specifically tailored to the relevant statistical domains, a domain specific revision policy can be developed. As principle 1 of the German revision policy states, significant information for important data should be incorporated as quickly as possible into published data, whereas minor changes should be first collected before being implemented. Therefore a domain specific revision policy could include for example concrete thresholds for the relevant statistical domain to split important from minor revisions, so that the optimal timing and the frequency of revisions can be determined.

Furthermore, a crucial element of a revision policy is the availability of a revision calendar. At the moment, Destatis publishes a release calendar, where revision schedules can be indirectly derived. However, to increase the visibility of the revision cycle and the transparency of the revision process as well as to help users to better understand the timing of revisions, Destatis plans to develop and publish a revision calendar as soon as possible giving direct information on the revision cycle.

6. References

Czech Statistical Office (2013): [CZSO Data Revision Policy](#).

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