



مركز الإحصاء
STATISTICS CENTRE

Statistical Data Revision Policy & Procedures

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1. Glossary of Terms

Accuracy - Closeness of computations or estimates to the exact or true values that the statistics were intended to measure.

Revision - Any change in the value of a statistic issued by SCAD.

Data – The statistical figures and information gathered by means of censuses, statistical surveys or retrieved from administrative records.

Official statistics - The statistics issued by the Statistics Centre Abu Dhabi (i.e. Law no7, article 1)

Preliminary estimates - estimates based on secondary data sources only. The users of such data should be aware that these initial estimates may be revised once the data are collected from primary sources.

Sub-topic - Statistics issued by SCAD that are within a higher level topic (e.g. from the Statistical Tree Topic: Population, Sub-topic: Population Projections)

Timeliness - Length of time between data availability and the event they describe.

2. Scope of the Document

The policy and procedures related to the revision of official statistics is applicable to all statistics issued by SCAD.

3. Purpose of this Document

This document describes the policy and procedures, which must be followed when revising official statistics issued by SCAD and it is available on the SCAD website. The general revision policy include a Code of Practice (Appendix A) for revisions of official statistics published by SCAD. It is aligned with article (4) of Law no.7 of 2008 which require SCAD to provide accurate and reliable statistics. Comprehensive analyses of revisions including commentary, tables and figures are conducted and are used to assess the impact of revisions on previously published official statistics.

4. Statistical Data Revision Concept

One of the key quality dimensions of official statistics is the requirement to produce and disseminate statistics to the users in a timely manner. As a result, there is tension between the timeliness and accuracy of the statistical estimates since higher quality statistics, which are more comprehensive and robust, take longer to produce. Official statistics are produced by using the best available information at the time of production. However, the need to produce it as quickly as possible will require that revisions be made to the preliminary estimates when new and updated information becomes available. In addition to the requirement to incorporate updated information into the preliminary estimates of official statistics, revisions to previously published preliminary and final statistics may also be made when methods or systems are changed or as a result of benchmarking and rebasing.

These reasons for the revision of previously issued statistics are explained in more detail below together with the SCAD policies for dealing with revisions to official statistics.

5. Revisions to Official Statistics

Activities undertaken by SCAD to modify previously issued statistics are considered as revisions and are covered by this policy. Statistics previously published by SCAD may be revised for the following reasons:

1. Initial estimates are released with the expectation that these may be revised and updated as further data becomes available.
2. Major revisions may be required when new methods, definitions, techniques, systems, guidelines and classifications are implemented.
3. Unexpected revisions due to errors and unforeseeable accidents occurring in the production process

It is part of SCAD's policy not to confuse data users with many revisions when further data becomes available, but to combine a set of data revisions together.

For example, a major revision may be implemented when the preliminary estimates of annual Gross Domestic Product (GDP) are updated with more comprehensive data, which are collected from businesses and administrative data sources. Similarly, when new guidelines, methods or systems are implemented, the complete published time-series must be revised to reflect the same basis for calculation.

These types of revisions can be planned in advance. However, despite the best efforts and quality control procedures applied by SCAD, genuine mistakes can happen. Corrections for such errors must be made in a timely manner, in line with principle 9 of the Code of Practice for revisions of SCAD statistics (Appendix A).

This policy give general guidance about the SCAD approach for revisions based on the principles, which are described in the Code of Practice for revisions of SCAD statistics (Appendix A). This general revisions policy provides guidance for the development of specific revisions policies for each sub-topic of statistics (on the SCAD statistical tree) published by SCAD. The general revision policy applies to all sub-topics published by SCAD. Specific revisions policies for each sub-topic in the SCAD Statistical Tree will be developed and take into account the characteristics and specificities of the particular sub-topic.

6. Revisions made because further data becomes available

6.1 Preliminary estimates

Some statistics for example the GDP are first released as preliminary estimates. This practice enable the users of SCAD data to make timely decisions based on the most up-to-date data available at the time. Preliminary estimates are calculated using secondary data sources and methods. Users of these statistics should be aware that preliminary estimates might be revised when primary data sources become available for that reference period.

Following the stated quality assurance processes, SCAD also issue statistics based on data sourced from other government entities without any changes to the collected data. These data can originate from censuses and surveys conducted by other entities as well as from administrative sources, for example data about births and deaths. The data may be updated from the administrative source and provided to SCAD to revise the related issued statistics. As a result of these changes to data collected from other government entities, SCAD will publish revisions to such data as determined by the source agency and according to the documentation and dissemination requirements of this policy.

It is always clear from the announcement of a first release of statistics whether the figures are preliminary estimates and possibly subject to revision later.

A separate section in the technical notes of each publication must describe the revision policy for the statistics related to that publication and the glossary of terms explain the meaning of preliminary estimates and final estimates. In addition, preliminary estimates of statistics are identified with a footnote to the relevant statistical tables and figures.

Once primary data are incorporated into the statistics, it is considered as final statistics for that reference period and are not revised unless further significant changes to primary data become available or if revisions are required for the reasons mentioned below.

One of the most common reasons for revising statistics published by SCAD is therefore to replace previously released preliminary estimates with final estimates.

6.2 Benchmarking

Benchmarking also refines the precision of statistics and is a longer-term reason for revising a statistical series. Some short-term, statistics may be produced using data sources that are readily available but of a lower quality than other sources, or they may be based on smaller sample sizes than would be the case for a large annual survey.

When more reliable data sources become available, such short-term statistics can be benchmarked against them and appropriate adjustments made. For example, estimates of quarterly GDP are compiled from a quarterly economic survey of a small number of large establishments and from administrative data sources. The quarterly GDP estimates are revised when it is benchmarked to estimates of the annual GDP. The annual estimates are more detailed and accurate, but less timely.

7. Major revisions due to new methods or systems

7.1 New methods, definitions, techniques, systems, guidelines, classifications

While users naturally want statistics to be comparable over time, the statistical aggregates measured by SCAD and our sources of information are continually changing. The methods, techniques and systems used by SCAD must reflect the changes in the economy, society and the environment. These statistics are compiled according to agreed and approved international guidelines which must be followed to ensure the quality of the data is maintained and to deliver statistics which facilitates comparability over time and between different sub-topics and between compiling economic territories.

Maintaining consistency in the methods, systems and techniques employed ensure comparability of a statistical series over time, while revisions ensure that the statistics more accurately reflect the latest developments in the subject matter area.

If the introduction of a new method, technique or system introduces the need for revising issued statistics, then a complete revision of the series is implemented to ensure consistent historical data are available where possible. If a break in the series is inevitable, then it is identified and documented, allowing users to understand the reason for it. Actual breaks in the series should be clearly identified in both the statistical table and any accompanying graphs.

The timing and expectations of the impact of revisions to incorporate new guidelines, classifications and definitions is communicated in advance to the users of SCAD statistics.

7.2 Rebasing

The need to rebase a statistical index can be because the relative importance as measured by the weight of the individual component items has been re-evaluated and updated. It can also be as a result of an update to the index reference period or price reference period. The base

year provides the reference point to which future values of the GDP are compared and ensure the index provide an up to date description of the economy.

Rebasing does not mean that there was a revision to the underlying data from which the re-referenced index is calculated. It ensure that the weights used in the calculation of for example the Consumer Price Index, represent as close as possible the current consumption pattern of households. Rebasing allows an index such as the CPI to remain relevant and accurate.

8. Unexpected Revisions

8.1 Errors and unforeseeable accidents occurring in the production process

Unexpected revisions should be reduced over time to the case of errors and unforeseeable accidents occurring in the production process. Comprehensive analyses of revisions including commentary, tables and figures are conducted and are used to assess the impact of revisions on previously published official statistics. Corrections for such errors must be made in a timely manner, in line with principle 9 of the Code of Practice for revisions of SCAD statistics (Appendix A)

9. Schedule of revisions

The SCAD practice for planned revisions as described in sections 5.3 and 5.4 (e.g., from preliminary estimates, benchmarking, for weight updates, for changes in methodology) follows a pre-announced pattern and is reasonably stable from year to year for each sub-topic. Specific and more detailed revisions policies and practices are developed for each sub-topic. The reasons underlying the cycle (e.g., the availability of source data, the timing of revisions with related sub-topics, the timing for preparing important economic policy documents) are explained.

The timing of revisions is aligned with revisions in related sub-topics. For example: When the annual GDP is updated, estimates of quarterly GDP for each reference year must be benchmarked and revised to reflect the same estimate as the annual GDP. When revisions outside the regular cycle are required (e.g., by the discovery of significant new source data), they are identified in the relevant publication.

Unplanned changes to statistics issued by SCAD are treated as described in section 5.5.1. of this policy.

10. Revision analysis and documentation

Revisions analysis is an important component of the process of understanding revisions and comprehensive documentation of revisions serve as a future reference for ongoing improvement of the quality of statistics and for training purposes. Differences between the revised and preliminary statistics are identified, analysed and documented with clear explanations for the reasons behind the revisions including a comparison table, which shows the differences between the old and new series or statistics.

The reliability of the new revised statistics are assessed based on the quality assessment practices adopted by SCAD.

11. Communicating the revisions policy to the users of statistics

Specific revision policies will be developed for each sub-topic published by SCAD. It will be aligned with the general revision policy. The specific revision policy will be published on the website as a separate document attached to each publication. There will be a short summary statement about the revision policy for that sub-topic in the technical notes of each publication. The summary statement will describe when to expect planned revisions and the reasons for it (Appendix C).

12. Sources of information

This general data revision policy is based on several existing studies on revisions policies such as:

1. Requirements from the General Data Dissemination Standards and the Data Quality Assessment Framework of the International Monetary Fund (IMF)
2. The paper of Carson and al. "Revisions Policy for Official Statistics: A Matter of Governance" (IMF Working Paper, 2004),
3. The OECD "Data and metadata reporting and presentation handbook",
4. Eurostat Handbook on Quarterly National Accounts,
5. The Protocol on Revisions of the ONS National Statistics Code of Practice
6. Eurostat guidelines on major statistical revisions.
7. Eurostat Code Of Practice
8. The paper of Gian Luigi Mazzi and Rosa Ruggeri Cannata "A Proposal for a Revisions Policy of Principal European Economic Indicators"
9. Statistics Centre of Abu Dhabi - Law No7 of 2008
10. Statistics Centre of Abu Dhabi – Dissemination Policy 2014

13. Appendix (A)

Code of Practice for revisions of SCAD statistics (based on Eurostat Code of Practice)

This section will briefly present and discuss the principles on which a revisions policy should be based.

Main Pillars

The following four principles describe the foundation of the general revisions policy. They are considered to be the essential core of a general and transparent revisions policy.

Principle 1 – General policy on data revisions

SCAD defines and disseminates a general policy on data revisions applicable to all statistics under its responsibility.

The general policy on data revisions should constitute a framework applicable to all statistics. It should be adaptable to the characteristics of different statistics and allow the definition of revisions policies for all subject matter areas, compliant with the general policy itself.

Principle 2 – Specific revisions policies for each subject matter area

For each sub-topic, a specific revisions policy compliant with the general policy should be drawn up and implemented.

The specific revisions policies should be defined taking into account data specificities as well as constraints deriving from the SCAD legal act.

The specific revision policy is published on the website as a separate document attached to each publication. There is a short summary statement about the revision policy for that sub-topic in the technical notes of each publication. The summary statement describes when to expect planned revisions and the reasons for it.

Principle 3 – Documentation and communication of revisions

The general revisions policy as well as the specific ones should be documented, publicly available, easily accessible and presented in a form that facilitates proper interpretation by the users of statistics produced by SCAD.

The general revisions policy and the specific ones should be documented and disseminated by SCAD on the website. A similar format must be used for each specific revisions policy in publications and online documents.

Principle 4 – Consistency and stability over time of specific revision policies

As far as possible, revisions policies should be kept consistent across statistical areas. They also should be kept stable over a sufficiently long time period.

When developing the revisions policies for the subject matter areas, as much consistency as possible should be established across all areas. Users should know in advance when future revisions will take place. Once the specific revisions policies are defined they should be kept stable over time. Changes to specific revisions policies should be pre-announced, documented and justified.

Principle 5 – Release/revision calendars and revisions

Planned revisions (i.e. routine and annual) should be published in the framework of well defined, synchronised and publicly available release/revision calendars covering a predefined period. These calendars should be regularly updated.

A public revision calendar has to be established. The revision calendar should also be part of the reference metadata.

Principle 6 – Accessibility of each release of data

Time-series data corresponding to each data release must be maintained in a release/revision file on the shared folder for each subject matter area.

The availability of historical information on revisions represents the main requirement for a regular monitoring of the revisions process and for the production of revisions analysis.

Principle 7 – Regular monitoring of revisions

Revisions must be constantly monitored and regularly analysed.

A regular monitoring of the revisions process is of crucial relevance both for users and producers of statistics. Whenever possible revisions studies should be carried out. The revisions studies could be dealing with size, frequency, regularity and the reasons for revisions.

Differences between the revised and preliminary statistics are identified, analysed and documented with clear explanations for the reasons behind the revisions including a comparison table, which shows the differences between the old and new series or statistics.

Principle 8 – Major revisions

Major revisions should only take place in larger intervals. They should be pre-announced, backwards implemented and coordinated across statistical areas.

Major revisions are often linked to changes in definitions, classifications, etc. Whenever possible, major revisions should be announced widely in advance and included in the release/revision calendar. Reasons for major revisions should be clearly explained together with, if possible, their potential impact on a recent outcome of the most important indicator(s) affected. After the revision, analysis should be done showing the extent of the changes that have been made. Major revisions should be carried back far enough to avoid having a break in recent data, which could make analysis, or modelling difficult. If a break in the series is inevitable, then it is identified and documented, allowing users to understand the reason for it. Actual breaks in the series should be clearly identified in both the statistical table and any accompanying graphs.

Principle 9 – Unexpected revisions

As far as possible, unexpected revisions should be reduced over time to the case of errors and unforeseeable accidents occurring in the production process. They should be released as soon as possible without waiting for scheduled revisions. When an error or an unforeseeable event occurs, its impact on data should be assessed before revising; if necessary additional information on the unexpected revision should be published, in particular on the reason of this unexpected revision.

14. Appendix (B)

Data Quality Assessment Framework of the IMF

Revision policy and practice

- Data revisions follow a regular and publicized procedure.

1. Revisions follow a regular and transparent schedule.

i. The practice of revisions (e.g., from provisional estimates, for weight updates, for changes in methodology) follows a predictable pattern of which users of statistics are informed.

- The revision cycle is predetermined and reasonably stable from year to year.
- The revision cycle is made known to the public.
- The reasons underlying the cycle (e.g., the availability of source data, the timing of revisions with related datasets, the timing for preparing important economic policy documents) are explained.
- Adequate documentation of revisions is included in the publication of the statistical series and in the database accessible to users.
- When revisions outside the regular cycle are called for (e.g., by the discovery of new source data, errors), they are made known to the public.

2. Preliminary and/or revised data are clearly identified.

i. Users are informed about the preliminary nature of the data.

- At the time of data dissemination, users are informed whenever data are preliminary.

ii. Users are informed about the revised nature of the data.

- At the time of data dissemination, users are informed whenever data are revised.

3. Studies and analyses of revisions are made public.

i. Users are informed of results and studies of the revisions to the statistics.

- Revisions are measured, assessed, and explained in the statistical publication and in the database accessible by users.
- Analysis of differences between the revised and preliminary data is published for major aggregates to allow an assessment of the reliability of the preliminary data

15. Appendix (C)

Example of a short summary data revision statement:

Quarterly estimates of GDP are released on the following schedule: “Preliminary” estimates, based on source data that are incomplete or subject to further revision by the source agency, are released near the end of the third month after the end of each quarter. No further updates are incorporated into the quarterly GDP until the benchmarking against the preliminary annual GDP.

The quarterly GDP preliminary estimates for the previous 2 years are updated as part of the benchmarking against the preliminary annual GDP estimate in March of each year. This include revisions as a result of the benchmarking exercise as well as to incorporate significant new data which may become available. Final annual GDP estimates for the previous calendar year are released towards the end of December of the following year as more detailed and more comprehensive data based on primary sources become available. Quarterly GDP estimates for the previous 2 calendar years are also revised as part of the benchmarking against the final annual GDP.

Further revisions to quarterly estimates of GDP are required periodically to align the quarterly estimates with the annual estimates of GDP. These revisions are necessary to incorporate definition and classification changes or to reflect the introduction of new and improved methodologies.