

HM Treasury National Statistics: policy, principles, procedures and guidelines on quality

HM Treasury National and Official Statistics are governed by the Code of Practice for Official Statistics¹, as determined and assessed² by the UK Statistics Authority³. The Code is intended to ensure that the range of National and Official Statistics meets the needs of users; and that the statistics are produced, managed and disseminated to high standards, and explained well.

Principle 4 of the Code of Practice is that "Statistical methods should be consistent with scientific principles and internationally recognised best practices, and be fully documented. Quality should be monitored and assured taking account of internationally agreed practices."

Each Treasury National and Official Statistics release includes specific information about the quality of the statistics contained in the release. However the general policy, principles, procedures and guidelines for managing quality in all these releases are set out in this statement, in accordance with the requirements set out in the Code of Practice for Official Statistics.

We aim to ensure that all our statistics are produced to a high level of quality that meets users' needs, and that our methods are robust, well documented, and consistent with relevant international standards and classifications.

We intend to be open and transparent about the quality of all the statistics we publish and to ensure that users of our statistics have easy access to comprehensive information about all quality-related aspects of our statistical releases.

Definitions

The statistical quality of the Treasury's statistical outputs is defined as meeting users' needs in relation to the five quality criteria in the European Statistical System (ESS)⁴:

relevance - the degree to which statistics meet the current and future needs of users;

¹ http://www.statisticsauthority.gov.uk/assessment/code-of-practice/code-of-practice-for-officialstatistics.pdf

² The Treasury's National Statistics outputs were assessed against the requirements of the Code of Practice by the UK Statistics Authority in 2011. The assessment reports for Public Sector Finances and Public Spending are available from the Authority's website.

³ http://www.statisticsauthority.gov.uk

⁴http://epp.eurostat.ec.europa.eu/cache/ITY PUBLIC/QAF 2012/EN/QAF 2012-EN.PDF

- **accuracy and reliability** the degree of closeness between estimated results and the true value that the statistics were intended to measure;
- **timeliness and punctuality** the former is the length of time between publication and the period to which the data refer, whilst the latter is the length of time between the actual and planned publication dates;
- accessibility and clarity the former is the ease with which users can access the data, including the suitability of the data formats and availability of supporting information. The latter relates to the extent to which easily understandable metadata are available which help to give an impartial and full understanding of the statistics;
- **coherence and comparability** the former is the degree to which statistical outputs are produced using harmonised concepts and methods and can be combined and the latter is the degree to which data is comparable over time, place and domain.

In addition, we also consider the quality of the underlying *processes* in the context of ESS criteria. Overall this has two broad aspects:

- **effectiveness** how successful the process is at delivering desired outcomes and meeting business needs;
- **efficiency** the cost effectiveness of producing the desired outcomes for both data providers and producers of statistics

The four specific process quality criteria are:

- sound methodology that underpin the production of the statistics;
- **appropriate statistical procedures** that are used in all aspects of statistical business processes;
- non-excessive burden on respondents: reporting burdens that are proportionate to the needs of users and not excessive for reporters. how well the process deliver results against challenging demands; and
- cost effectiveness: effective use of resources.

Additional process quality components that can impact on outputs are **confidentiality**, **transparency and security**.

General policy on quality

The Treasury endeavours to produce statistical outputs of the highest possible quality, balanced against costs, consistent with our duties on efficient use of public resources, and taking into account the expected uses of the statistics. We focus on both *output* (our statistical releases) and *process* quality (the latter including the underlying methods used to produce our outputs).

New information will be communicated as it emerges on aspects of quality for our National and Official Statistics releases. Relevant information will be disseminated in the releases themselves and on our website. All our releases will include information on quality related aspects of the statistics.

We review quality aspects of our outputs and our underlying data collection and processes on a regular basis. In particular we review:

- the results and effectiveness of the quality assurance processes for data collected onto the Treasury's central spending database (OSCAR). This database records the spending of all central government departments, including the devolved administrations, and wider non-departmental public bodies which are funded by departments;
- the transparency and accuracy of the processes that compile published statistics from source data;
- data issues that arise from data processing in the run up to releases;
- our methodologies and classification systems, to ensure that we keep these up to date with the latest developments, both in terms of the classification of particular items of data, and in terms of developments in external frameworks, such as international classifications;
- our documentation and guidance, for instance to ensure that departments have clear and detailed guidance on how individual items of expenditure should be classified and recorded.

The Treasury's Head of Profession maintains sole responsibility for the content and format of all statistical outputs that are published as National Statistics.

Specific aspects of output quality in HM Treasury

Relevance

We aim to review our outputs regularly to ensure that they remain relevant to users' requirements. We inform and consult users on our future plans to develop our statistics, and ensure that these plans meet users' requirements, as far as our priorities, resources and data sources allow. We welcome all feedback from users on their detailed requirements, and the extent to which these are met by our existing releases and analyses, as well as our additional releases of underlying data. Feedback can be sent at any time to statistics-enquiries@hmtreasury.gsi.gov.uk. Our policy on user engagement is set out on the Treasury's website:

 $\frac{https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/191041/statistics_user_engagement.pdf$

Accuracy and Reliability

The Treasury's National and Official Statistics releases are all derived from government and wider public sector financial accounting data held on administrative data systems. As well as for statistical purposes, many of these administrative data are collected for reporting to Parliament, so that Parliament can approve spending plans, and for the Treasury to monitor and control departmental spending or tax receipts and in the case of Help to Buy statistics to inform the operation of the scheme. Some data are taken directly from banking or accounting sources.

Where data are taken directly from audited financial data or final accounts as is the case with many of the Public Spending statistics, then the main concerns over accuracy are based on the accuracy of the mapping of commercial accounting concepts into the classifications of the Treasury's spending database, which reflecting the design of the fiscal framework is based on National Accounts.

For monthly spending statistics, which are more prone to revision as they are often based on forecast data, we regularly conduct analysis of revisions and will if appropriate

make statistical adjustments to reduce revisions based on past trends. We may also utilise information from the Office for Budget Responsibility's fiscal forecast in their Economic and Financial Outlook⁵ published at Autumn Statements and Budgets to help reduce future revisions.

The Treasury uses the following processes to ensure that data are correctly recorded and classified on our spending database:

- we issue and maintain a comprehensive and consolidated set of guidance notes for finance teams in departments to refer to when inputting data from their finance systems. We also provide training to departments on how to record and code their data inputs;
- we work closely with departments to understand the processes involved in extracting data from their underlying financial systems;
- we conduct regular quality assurance checks to verify that data inputs are complete and correctly coded;
- we provide monthly feedback to departments on the quality of their data with respect to accuracy, timeliness and the need to correct errors.
- we require Finance Directors in departments to sign off and confirm that key financial inputs are accurate and have been suitably validated within the department; and
- when provisional outturn data are replaced with final audited data, we require departments to ensure the accuracy of their final inputs against their accounts.

When analyses are prepared for publication, we use further quality assurance procedures, including:

- analyses of revisions (changes since the previous release) to ensure that the changes in the outputs can be accounted for in terms of known changes in the inputs;
- cross-checks for consistency, both internally, and with external published sources wherever possible; and
- we also ask key contributors and stakeholders to check relevant sections of our final analyses, which provides both additional accountability and quality assurance.

Timeliness and punctuality

The Treasury releases are published on an annual, monthly or quarterly basis, with release dates scheduled as soon as latest data are ready for publication.

All releases are published on the scheduled release date at 9.30am to maintain equality, transparency, and consistency of access.

Release dates are announced up to one year ahead, both on the Treasury's <u>own website</u>⁶ and on the <u>National Statistics hub</u>.

⁵ http://budgetresponsibility.org.uk/economic-fiscal-outlook-march-2014/

⁶ https://www.gov.uk/government/publications/standards-and-policies-for-hm-treasury-statistics

Accessibility and clarity

We aim to make our releases as clear, widely available and accessible as possible. This includes providing access to the underlying data, subject to the constraints of confidentiality. We release the <u>underlying data</u> from the OSCAR public spending database on both annually and quarterly as Official Statistics.

Further details of how we aim to do this are set out in our statement of user engagement at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/191041/st atistics user engagement.pdf

All of our releases and data can be accessed from our website.

Coherence and Comparability

All Treasury statistics are internally coherent, consistent and reconcilable over a reasonable period of time, subject to the caveats explained in each release. Our statistics are compiled on the basis of common international standards with respect to scope, definitions, units and classifications.

We also aim as far as possible to be coherent with other departments' National Statistics in order to enable comparability and re-use of our data. For example we have designed the Help to Buy: mortgage guarantee scheme Official Statistics release to be fully consistent with the Department for Communities and Local Government's release on the equity loan element of the scheme so that users will be able to produce combined statistics on the scheme.

We use relevant international frameworks for concepts and definitions wherever possible, for example the European Unions' European System of Accounts⁷ transactions and sector classifications and the UN's Classification of Government Spending (COFOG)⁸ and to ensure that technical and methodological information is published in advance or alongside our releases.

We try to minimise revisions as much as possible, and to ensure that any revisions to previously published data are taken as far back in time as possible. Revision policies are published with each release. Our revisions policy is available out on the Treasury statistics website at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/315168/R evisions policy May14.pdf

Protection of confidential data

We follow the procedures set out by the Cabinet Office on protection of data within government and we comply with all the principles and procedures related to confidentiality in the Code of Practice. In particular:

- all access to confidential data for statistical purposes is strictly limited to a narrow group of statistical staff who need to use it for statistical purposes;
- all staff with access to confidential data for statistical purposes are required to undergo training on the confidentiality aspects of the Code of Practice; and

5

⁷ http://epp.eurostat.ec.europa.eu/portal/page/portal/esa 2010/introduction

⁸http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=4

all individuals with access to confidential data for statistical purposes sign a
declaration that they will uphold the principles and practices of the Code in
relation confidentiality.

Further details on our policies on protection of confidential data used for statistics are set out in our data confidentiality statement available on the HM Treasury statistics website:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/191043/statistics_confidentiality_statement.pdf

Tom Orford

Head of Profession for Statistics, HM Treasury