



Department for
Communities and
Local Government

Statistical Notice

Quality Guidelines



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Quality Assurance

Introduction

The United Kingdom Statistics Authority Code of Practice for Official Statistics requires all producers of Official Statistics to publish quality guidelines - Principle 4: Sound Methods and Assured Quality. This document describes the quality guidelines used within the Department for Communities and Local Government (DCLG).

The Code of Practice was published in January 2009 and can be found at: www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html

Statistical quality refers to the sum of total activities and choices made by DCLG to ensure that our official and national statistics meet the needs of users i.e that the statistics are fit for purpose. This is a challenging concept as different users may require different levels of quality for the same statistical product to meet their purposes, and similarly one statistical product might be fit for some purposes but not others. Good user engagement is required in order to inform decisions about the trade-offs, for example between accuracy and timeliness, and to understand the implication for quality of changing resource allocations etc.

In DCLG, quality is managed throughout the full statistical production process, and the department encourages and promotes a culture of continuous improvement, self-assessment and **quality reviews**. Quality management is about having the right processes and checks in place to ensure that what we produce is fit for purpose. It is made up of quality assurance and quality control.

Quality assurance is about anticipating and avoiding problems. The goal of quality assurance is to prevent errors in a statistical product and to get them right first time. Quality assurance is critical to ensure that the analysis we use to support decision making in DCLG is fit for purpose and that the information we provide is robust and accurate. This means that:

- the calculations made are accurate
- any assumptions used are credible
- the way the analysis has been conducted is suitable
- the collection, production and publication of statistics are robust

Quality control is about understanding and responding to observed errors. Quality control is often applied at the process stage of a survey but can also be used to record and understand errors that have been made and what actions have been taken to mitigate them.

Following an external review by the Chief Methodology Officer at the Office for National Statistics, we have drawn up an Action Plan to strengthen and develop our existing practices, and spread good practice across the department. All the actions in this plan

have been met and a number of tools have been produced which are used in the production of statistical products:

- Quality assurance checklist and associated statistical run-through guidance
- Statistical release template
- Guide on how to publish statistics on GOV.UK
- Error log

In addition, DCLG requires that a report is provided to the Head of Profession for Statistics on how each new statistical series will be resourced and quality assured. This applies to both one-off and regular data collections. The report is completed jointly by the lead analyst and the policy customer. All quality assurance documents are reviewed on a regular basis by the senior statistician group and the Head of Profession for Statistics.

DCLG will also seek continuous improvement in statistical processes by releasing statistical work in progress, such as “Experimental Statistics”. These will be published in order to involve users and stakeholders in their development and as a means to build in quality at an early stage. Further detail on the quality of individual statistical products is included in the relevant statistical release under the data quality section of the technical notes.

Quality Assurance of Analytical models

All government departments have a responsibility to quality assure their analytical models. This has been brought into focus since the publication of the Macpherson Review of quality assurance in 2013. The responsibility lies with any official, in any role, who uses modelling to support their decisions or advice to ministers.

In response to the recommendations of the Macpherson Review, the department has produced a QA action plan. This is the key document in explaining our response to the review and defining the roles and responsibilities of all officials dealing with analytical models – whether working on the analysis directly or leading the policy delivery.

DCLG has a range of guidance to ensure that the models used in DCLG are quality assured to the right level:

- Excel modelling guidance
- Excel model template
- internal QA checklist .
- external QA – guidance on commissioning this
- template for approval from Research Gateway to procure external QA
- ad hoc analysis checklist: quick guide on ensuring the quality of ad hoc analyses
- the ‘Aqua Book’: this government-wide document covers a full range of advice concerning QA

QA Champions

The Department has appointed QA Champions across analytical teams to help support good QA. DCLG also has Senior QA Champions who are responsible for ensuring appropriate QA takes place for all models in the department.

Dimensions of Statistical quality

The five dimensions of statistical quality used in DCLG are in line with version 1,1 of the Quality Assurance Framework of the European Statistical System¹. These are formulated to fit 10 principles of the European Code of Practice. The five dimensions are:

- Relevance
- Accuracy and Reliability
- Timeliness and Punctuality
- Accessibility and Clarity, and
- Coherence and Comparability.

Definition	Key aspects	Users can expect
Relevance The degree to which the statistical output meets user needs for both coverage and content.	Any assessment of relevance needs to consider: <ul style="list-style-type: none">• who are the users of the statistics• what are their needs; and• how well does the output meet these needs?	To be appropriately consulted about their needs and DCLG will seek to review data collections and statistical outputs on an ongoing basis to ensure that they continue to meet user needs.

¹ http://ec.europa.eu/eurostat/documents/64157/4392716/qaf_2012-en.pdf/8bcff303-68da-43d9-aa7d-325a5bf7fb42

<p>Accuracy and Reliability For survey data: the closeness between an estimated result and the (unknown) true value.</p> <p>For all data sources: how well the information is recorded and transmitted</p>	<p>Accuracy can be split into sampling error and non-sampling error, where non-sampling error includes:</p> <ul style="list-style-type: none"> • coverage error • non-response error • measurement error • processing error; and • model assumption error. <ul style="list-style-type: none"> • completeness • timeliness of recording and transmission • accuracy of recording of data items • correct use of coding; and • correct interpretation. 	<p>Survey data in DCLG will be presented with full information on:</p> <ul style="list-style-type: none"> • sampling variability • confidence intervals • response rates; and • other relevant criteria to allow users to make informed judgements on quality. <p>All statistical publications will:</p> <ul style="list-style-type: none"> • include details of how the underlying data are collected to allow users to understand the strengths and limitations • contain a description of data quality issues; and any impact this may have on analysing changes over time • comparisons between different groups will be transparent to both lay and expert audiences. • be compliant with the published DCLG Revisions Policy or the specific policy for that output.
<p>Timeliness and Punctuality</p> <p>Timeliness refers to the lapse of time between publication and the period to which the data refer.</p> <p>Punctuality refers to the time lag between the actual and planned dates of publication.</p>	<p>An assessment of timeliness and punctuality should consider the following:</p> <ul style="list-style-type: none"> • production time • frequency of release; and • punctuality of release. 	<ul style="list-style-type: none"> • publications will comply with the Code of Practice on pre-announcing dates or will state clearly at the time of pre-announcement any reasons why this has not been followed • we will comply with the Protocol 2 in the Code of Practice • we will publish Statistical releases as soon as possible after the relevant time-period.

<p>Accessibility and Clarity</p> <p>Accessibility is the ease with which users are able to access the data. It also relates to the format in which the data are available and the availability of supporting information.</p> <p>Clarity refers to the quality and sufficiency of the metadata, illustrations and accompanying advice</p>	<p>Specific areas where accessibility and clarity may be addressed include:</p> <ul style="list-style-type: none"> • needs of expert and non-expert users • consistency of standard in relation to revisions, rounding, data suppression and spreadsheet type • assistance to locate information • clarity; and • dissemination 	<ul style="list-style-type: none"> • statistical publications will be published in line with the CLG website accessibility policy¹. • all publications will use Plain English wherever possible
<p>Coherence and Comparability</p> <p>Coherence is the degree to which data derived from different sources or methods but which refer to the same phenomenon are similar. Comparability is the degree to which data can be compared over time and domain</p>	<p>Coherence should be addressed in terms of :</p> <ul style="list-style-type: none"> • data produced at different frequencies • other statistics in the same domain • sources and outputs • coverage of different databases • data published at different geographic levels; and • definitions and coding used for different data sources. <p>Comparability should be addressed in terms of comparability over:</p> <ul style="list-style-type: none"> • time • spatial domains e.g. sub-national, national, international; and • domain or sub-population e.g. crime/offence type, ethnicity. 	<p>As standard practice, we will release related statistical publications on the same day in order to aid user understanding unless:</p> <ul style="list-style-type: none"> • this would mean significant delay to one set of figures in order to present the coherent set of releases • User Engagement suggests that separate releases on separate days would be preferable. <p>Where related measures are published across several publications we will make it clear to users where the related information can be found.</p> <p>We will use harmonised concepts and definitions in statistical publications wherever they are available Any statistical publication which does not use harmonised definitions will</p>

		explain why this has not been used and any plans to move it onto a harmonised basis.
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