

### **Statistical Notice**

# Statistical Policy Statement on Statistical Quality: Principles and Procedures

Principle 4 Practice 4 of the Code of Practice for Official Statistics requires producers of Official Statistics to publish quality guidelines for their official statistics. The Code is at:

www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html

Version number	Date	Details
1	March 2010	First edition
1.1	November 2010	Amended references to Department for Children, Schools and Families, to Department for Education
1.2	June 2011	Updated Head of Profession
2	April 2013	Deletion of references to the Research and Statistics Gateway

## Statistical Policy Statement on Statistical Quality: Principles and Procedures

#### Principles

Statistical quality in the Department for Education (the Department) is defined as meeting users' needs with particular reference to the six quality dimensions:

- relevance;
- accuracy;
- timeliness and punctuality;
- accessibility and clarity;
- comparability; and,
- coherence

... of the statistics collected, analysed and reported.

The following principles underpin the delivery of statistical quality in the Department:

- Users are identified and we engage with them in a spirit of consultation and responsiveness, and their needs prioritised and met within available resources.
- Suppliers are respected and dealt with ethically, legally and effectively.
- Methodologies, processes and practices are documented to the correct level of detail for their purpose, kept up to date and made available where appropriate.
- Statistical processes and outputs are monitored and measured against standards with a view to their maintenance and improvement.

The definitions and key components of the six statistical quality dimensions in the Department are contained in Table 1 below.

# Table 1:Statistical Quality Dimensions: Definitions and Key Components

Definition	Key Components
Relevance:	
Relevance is the degree to which the statistical product meets user needs for both coverage and content.	<ul> <li>Any assessment of relevance needs to consider:</li> <li>the users of the statistics</li> <li>their needs, and</li> <li>the extent to which the output meet these needs</li> </ul>
Accuracy:	
For survey data, accuracy is the degree of closeness between an estimate derived from the survey data and the (unknown) true value.	Accuracy can be split into sampling error and non-sampling error, where non-sampling error includes: • coverage error; • non-response error; • measurement error; • processing error; and • model assumption error
For administrative databases, accuracy is how well the information is recorded and transmitted.	<ul> <li>Accuracy can be measured in terms of:</li> <li>completeness;</li> <li>timeliness of recording and transmission;</li> <li>accuracy of recording of data items including data matching;</li> <li>correct use of coding including recoding; and</li> <li>correct interpretation.</li> </ul>

Timeliness and Punctuality	
Timeliness is related to the time elapsed from the period to which the statistics relate to the date of release of the statistics. For example, if the statistics relate to the financial year 2008-09 and they are released in January 2010 then the elapsed time is ten months. The timeliness could be improved by one month if the statistics for the financial year 2009-10 could be released in December 2010. Punctuality is elapsed time between the actual and planned (and published) time and date of release.	An assessment of timeliness and punctuality should consider the following: • production time; • frequency of release; and • punctuality of release
Accessibility and Clarity 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. Clarity refers to the quality and sufficiency of the metadata, illustrations and accompanying advice.	<ul> <li>Specific areas where accessibility and clarity may be addressed include:</li> <li>needs of expert and non expert users;</li> <li>consistency of standard in relation to revisions, rounding, data suppression and spreadsheet type;</li> <li>assistance to locate information;</li> </ul>
Comparability Comparability is the degree to which data can be compared over time and domain.	<ul> <li>Comparability should be addressed in terms of comparability over:</li> <li>time;</li> <li>spatial domains e.g. sub-national, national, international; and</li> <li>domain or sub-population e.g. type of school, ethnicity of pupils.</li> </ul>

### Procedures to deliver quality

To put the quality principles into practice, reference should be made to the Department's statistical policy notices identified in Table 2 below (as well as more specific information contained in the Department's statistical releases) which overlap with and reinforce particular aspects of delivering statistical quality.

### Table 2:Delivering quality statistics

Quality Dimension	Users should expect that:
Relevance	<ul> <li>they will be appropriately consulted about quality principles and procedures in line with the Department's Statistical Policy Statement on Meeting User Needs through Engagement with Users.</li> </ul>
Accuracy	<ul> <li>statistical releases will contain a description of data quality issues relating to the release; and any impact that has on analysis of changes over time or comparisons between different groups will be transparent to a lay and expert audience;</li> </ul>
	<ul> <li>statistical releases will be compliant with, and contain specific details on the implementation of the Department's Statistical Policy Statement on Revisions;</li> </ul>
	<ul> <li>survey and administrative data will be published with details of how the data is collected to allow users to understand its strengths and limitations;</li> </ul>
	<ul> <li>survey data will be presented with full information on sampling variability; confidence intervals; response rates and other relevant criteria to allow users to make informed judgements on quality;</li> </ul>

Timeliness and Punctuality	<ul> <li>release dates for statistical releases will be announced in advance in accordance with the code of practice for official statistics;</li> </ul>
	<ul> <li>statistical releases based on either provisional or revised (final) data will be released as soon as possible after the relevant time period (subject to the coherence below);</li> </ul>
	<ul> <li>statistical releases will be produced and released in line with the Department's policy statement on meeting user needs through engagement with users.</li> </ul>
Accessibility and Clarity	• statistical releases and other information posted on the Department's Research and Statistics Gateway will comply with the Department's Internet Accessibility policies.
	<ul> <li>all publications will use plain English wherever possible.</li> </ul>
Comparability	• we will use harmonised concepts and definitions in statistical releases wherever these are available.
	<ul> <li>any statistical release which does not use harmonised definitions will clearly explain why the harmonised definition has not been used and any plans to move to harmonised definitions.</li> </ul>
Coherence	• we will release related statistical releases at the same time and on the same day to aid user understanding unless this requires significant delay to the release of one or more of the statistical releases.
	• where related statistics are released across more than one release, we will make it clear to users where the related statistics can be located.

#### Monitoring and Reporting

The Department supports transparent monitoring and reporting of the statistical quality of its statistical releases and outputs. The Department is also actively involved in the Government Statistical Service Task Force on Data Quality and any improvements in statistical quality policies and procedures from the task force will be incorporated in the Department's policies and procedures.

The annual report from the Head of Profession for Statistics to the National Statistician will provide information on the quality of our statistical releases and outputs, including the timeliness and punctuality of our statistical releases, and any unplanned revisions to our releases.

**Jude Hillary** Head of Profession for Statistics Department for Education