

## Standard 7: be open about quality

Standard 7 of the [Standards for Official Statistics](#) in the Code of Practice for Statistics outlines what is necessary to help users and potential users decide whether the statistics are suitable and useful for their own use.

Being open about the quality of the statistics and considerate about the varying needs for different types of users can ensure that statistics are understood and used appropriately – or indeed not used if not relevant or suitable for a specific use.

This standard requires the producers to show their professional skill and judgement in understanding the quality characteristics of the statistics in relation to their use.

### The Standard:

**7. Producers must prominently explain the quality of the statistics, including any strengths and limitations, and communicate the uncertainty in estimates**

*so that the public can have confidence in using the statistics to make decisions and take actions*

- 7.1. Prominently communicate the quality of the statistics and the strengths and limitations that impact their use, reflecting the needs of different types of users
- 7.2. Report on the key quality dimensions such as accuracy and timeliness, and, where possible, give estimates of error and confidence for the statistics. Summarise how uncertainty in the estimates may impact use by using qualifying words, numbers or graphics
- 7.3. Explain the nature of data sources and why they were selected, anticipating possible areas of misunderstanding or misuse. Prominently communicate limitations in the underlying data and explain their impact on the statistics
- 7.4. Be clear about the methods used. Explain quality issues related to the methods, systems and processes, including the extent to which the statistics are representative and comparable across the UK and internationally. Describe potential bias and steps taken to address it
- 7.5. Give advance notice to users of planned changes to methods and sources that will impact the statistics. Explain the nature and extent of the change, and provide a consistent back series where possible
- 7.6. Clearly flag where statistics are being developed and tested. Be transparent about developments, outlining the plans and expected outcomes, as well as the opportunities for users to be involved in the evaluation of the statistics

## Questions to consider:

1. **Purpose:** What is the original purpose for which the statistics have been produced? What are the main strengths of the statistics that make them particularly useful, and are there other purposes? How clearly do you explain the methods you use?
2. **Limitations:** What are the main limitations that might constrain how the statistics can be used? What would you not want a user to do with the statistics? Are there important sources of bias to factor in? How are you communicating about the strengths and limitations alongside the statistics?
3. **Uncertainty:** What is the likely size and direction of uncertainty in the statistics? What is the implication of the level of uncertainty for the interpretation and use of the estimates? What is the risk of users being misled by the statistics?
4. **Misuse:** If there is potential for misuse (for example, drawing a conclusion or making a decision that may not be borne out if you had perfect data), is there information you can give to help mitigate this risk?
5. **Related statistics:** Can you point towards an alternative set of statistics that might answer other aspects of the subject area that your statistics do not address?

## Related guidance:

Office for Statistics Regulation:

- [Approaches to presenting uncertainty in the statistical system](#)

Government Statistical Service (GSS):

- [Writing about data](#)
- [Communicating quality, uncertainty and change](#)
- [Uncertainty toolkit for analysts in government](#)
- [Guidelines for Measuring Statistical Quality](#)

European Statistical System:

- [ESS Handbook for Quality and Metadata Reports](#)

Office for National Statistics:

- [Quality Questions and Red Flags](#)

## SHORT GUIDE SERIES

### Survey Futures:

- [Response Rates Position Statement - Survey Futures](#)

### Good practice examples:

- Case study – Office for National Statistics: [Effectively Communicating Uncertainty in GDP](#)
- Case study – National Records Scotland: [Communicating uncertainty for Scotland's Census 2022; a case study from National Records of Scotland](#)
- Case study – DWP – [Improving quality assurance and its communication to aid user interpretation](#)
- Case study – ONS – [Publishing information about data quality assurance processes](#)
- Blog – Cabinet Office: [Communicating the quality of ethnicity data](#)
- OSR blog: [Lessons in communicating uncertainty from the Infected Blood Inquiry: What to say when statistics don't have the answers](#)
- OSR blog: [Why communicating uncertainty is a constant challenge for statisticians](#)
- OSR blog: [Revising GDP: The challenge of uncertainty](#)
- OSR blog: [How to communicate uncertainty in statistics](#)
- ONS guide – with a data quality framework rating for each source: [Crime trends in England and Wales and how we measure them](#)

### Code of Practice for Statistics:

- [Understanding TQV](#)
- [The Code Principles](#)
- [Standards for Official Statistics](#)
- [Standards for the Public Use of Statistics, Data and Wider Analysis](#)
- [Code Guidance](#) – other short guides supporting use of the Code