

Enhancing the impact of Assessment
European Conference on Quality in Official Statistics, Athens
29 May to 1 June 2012

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Abstract

Since the introduction of a new *Code of Practice for Official Statistics* in 2009, the UK Statistics Authority has been independently and systematically assessing the extent to which UK official statistics comply with the *Code*.

The first programme of assessment – of about 1100 sets of statistics, covered in about 250 published assessment reports – is nearing completion. The assessment process has offered reassurance that many aspects of the UK's statistical system are sound, but has also pointed to specific improvements that need to be made.

The next cycle of assessment is currently being developed, taking account of experiences to date in the UK and elsewhere. It will be more varied and flexible, more responsive and focused on topical issues; and will include a greater element of self-assessment by the professional statisticians responsible for the statistics – all intended to enhance the impact of assessment by ensuring that it continues to deliver benefits to the statistical system, and independent reassurance to Parliament.

This paper:

- describes the results of the assessment programme in the UK to date;
- draws on some emerging international developments; and
- describes the UK's plans for assessment work from 2013 onwards.

1. Introduction

The UK Statistics Authority was established by the *Statistics and Registration Service Act 2007*¹, the first comprehensive statistical legislation in the United Kingdom. It came into effect in April 2008. Although the UK had a previous concept of 'National Statistics' it did not have a tradition of evaluating these systematically against the (then) National Statistics (NS) *Code of Practice*². The Act specified that these 'legacy' National Statistics were to be subject to formal assessment against a (new) Code of Practice. The Statistics Authority published the *Code of Practice for Official Statistics*³ in January 2009; it built on the earlier NS Code and the *European Statistics Code of Practice*⁴.

The revised *Code* was written in a concise and imperative style that would support those engaged in that assessment process. It includes 74 specific requirements on the very large number of bodies⁵ that produce official statistics, against which compliance could be

¹ http://www.opsi.gov.uk/Acts/acts2007/pdf/ukpga_20070018_en.pdf

² <http://www.ons.gov.uk/ons/guide-method/the-national-statistics-standard/code-of-practice/national-statistics-code-of-practice/index.html>

³ <http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html>

⁴ http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/code_of_practice

⁵ We think that there are over 200 bodies that produce official statistics in the UK – ministerial departments (in the UK Government, and the Devolved Administrations of Wales, Scotland and Northern Ireland), and agencies and public bodies with specific executive functions.

determined by an Assessment team⁶ (operating independent of producers of official statistics, and reporting to the Chair of the Authority Board).

In three important respects the standards set by the new *Code* were pitched at the top end of prevailing good practice:

- Investigate and document the needs of users of official statistics, the use made of existing statistics and the types of decisions they inform.
- Provide information on the quality and reliability of statistics in relation to the range of potential uses.
- Prepare and disseminate commentary and analysis that aid interpretation, and provide factual information about the policy or operational context of official statistics.

The first assessments began in early 2009, soon after the *Code* was published. Several aspects of the European peer review process informed the development of assessment – for example, the emphasis on evidence-based judgements, and the collection and discussion of evidence about *Code*-compliance from producers, users and other stakeholders. One important difference from the European peer review is that Assessment is undertaken by a dedicated team, in order to ensure common standards.

Assessment reports are considered and approved by the Board of the Statistics Authority, and published. They include a statement about designation as National Statistics. Designation as National Statistics is mostly granted on condition that some steps (called 'Requirements') are taken by the producer body, within a stated timeframe, to strengthen *Code*-compliance. In those cases, the producer body is required to report to the Statistics Authority the steps taken. Once the Requirements have been met, the Authority Board, on the recommendation of the Assessment team, designates the statistics unconditionally. Ongoing compliance with the *Code* is a legal requirement on organisations that produce National Statistics.

As we approach the end of the first cycle of Assessment, the Statistics Authority is reviewing the value of, and good derived from, Assessment.

2. Findings from Assessment

To date, over 200 Assessment reports have been published, covering nearly 1000 sets of National Statistics. Due in part to the higher standard set by the new *Code*, few Assessment reports gave a completely clean bill of health initially, and many required current practice to change in order to ensure compliance with the *Code of Practice*. These Assessments have therefore stimulated changes, whilst the overall findings from Assessment offer a reassurance about what is good about the UK's statistical service – elements of the statistical value chain such as methods, management of the burden on data suppliers, and the protection of confidentiality; and qualities such as commitment, innovation, and professionalism – and virtually no evidence of political interference in the production of statistics. Five main areas for improvement have been identified by the Assessment process. These are considered in turn below.

2.1 Improving the text that accompanies the release of statistics

For official statistics to be understood and used in ways that deliver value, it is important that appropriate written advice is published alongside the figures when they are first released. This text should be seen as the heart of the statistical release, not just an introduction for the less expert user.

⁶ The Assessment team, comprising about 20 individuals, reports to the Head of Assessment – a statutory officer, and a member of the Board of the Statistics Authority.

The essence of good commentary lies in statisticians bringing to bear their expertise and knowledge about the subject matter, policy context and history of the statistical series, in explaining in straightforward terms the main messages contained in the statistics. Authors need to communicate why the statistics matter, and how they are likely to be used. They should help users to understand the strengths and limitations of the statistics in relation to the main uses – for example, the limitations of small sample sizes ought to be explicitly mentioned where appropriate, as ought any changes in context which may affect the interpretation of the statistics. The Statistics Authority has embodied these thoughts in its statement on *Standards for Statistical Releases*⁷ outlining good practice in relation to commentary.

This topic has attracted more ‘requirements’ (formal recommendations) in the Assessment process than any other aspect of the *Code*. Some official statistical outputs lack commentary altogether, but more often it is the limited helpfulness of what is written that causes concern. Experience of the Assessment process suggests that staff writing statistical releases do not always have sufficient knowledge of the subject matter, or the likely use of the statistics, to be able to offer the insights that would help guide users. It is also quite common for authors to tell us that the most important users do not need advice. This is often not the case. The most important users – the ones that take the ‘biggest’ decisions – are likely to be political or administrative institutions which, by their nature, are often far from expert in their understanding of the relevance of the statistics. Indeed, some may be prone to taking statistical tables at ‘face value’.

2.2 *Better understanding and communicating the use made of the statistics*

Statistics realise their full potential only when they are used in ways that serve the public good. To achieve this, more systematic engagement with organisations and individuals whose understanding, decisions or actions are informed by official statistics is required. Without a well-developed understanding of use, it is difficult for anyone to make judgements about the adequacy or quality of statistics; or indeed the need to continue to produce them. The Statistics Authority recognises that the use of official statistics is diffuse, often at several removes from the original data. But the fact that it cannot be comprehensively researched does not lessen the value of finding out as much as possible. And normally all that is needed is a generic understanding of the uses, not detailed information about exactly how the statistics are used. For example, it may be enough to know that some public health statistics are relevant to some local government planning decisions. That tells the producer body to bear in mind their suitability for that kind of use – in particular whether there are issues about geographic consistency or administrative processes that should be highlighted to such users.

The Assessment process has found that the use of statistics within government departments in relation to developing, monitoring and evaluating policy is generally well understood by those producing statistics. However, we take the term ‘user’ of statistics to mean any organisation or person whose understanding, decisions or actions are influenced by official statistics; and similarly, ‘potential user’ is anyone who might be so influenced. This need not mean that the user directly inspects statistics or performs calculations. It may be more a matter of being influenced by messages derived from the statistics – for example, if crime statistics suggest that thefts of mobile phones are increasingly common, steps to prevent such thefts are deemed to be a use of statistics, regardless of whether those taking the steps have ever looked at the figures. Such uses matter because they create additional demand for statistical data to be available in particular forms and levels of detail.

Engagement with users outside central government is likely to require more effort and imagination but will be repaid in terms of added public value from the statistics. The Statistics Authority’s recommendations relating to engagement with users can be found in

⁷ <http://www.statisticsauthority.gov.uk/news/standards-for-statistical-releases.html>

the Monitoring Report, *Strengthening User Engagement*⁸. The Statistics Authority has also published guidance about documenting the use made of statistics⁹.

2.3 *Improving the documentation of sources and methods*

The *Code* requires the publication of supporting documents intended to improve understanding of different aspects of the statistics – including details of methods and sources used to produce the statistics, the uses made of the statistics and a statement detailing the use of administrative sources for statistical purposes. Although in many cases such documentation is already available for internal use, this is still an area where we found that *Code* compliance needs to be strengthened. It is often very important to ‘expert’ users, and those who analyse data directly.

2.4 *Maximising the use of existing administrative data*

Data from administrative systems (such as hospital or school records) are used in the production of many official statistics. Such data have some well-documented strengths, compared with data collected from sample surveys, including the potential to produce better quality statistics (or indeed any statistics at all) for small geographic areas, lower burdens on data suppliers and low production costs.

However, the use of such data for producing statistics is not always straightforward:

- It is often difficult for statisticians to identify administrative sources that have potential to be used to produce valuable statistics.
- Once appropriate sources have been identified, gaining access to administrative data held in organisations other than the one the statistician happens to work in can be difficult.
- The quality of the data may not be immediately sufficient for use in the production of statistics. Administrative data are simply a by-product of administrative processes and may not exactly match the needs of the statistician.

Evidence from the Assessments suggests that many producer bodies are not researching sufficiently fully the quality of data from administrative sources. However, we have noted a range of work across departments to increase the use of existing data, which is to be welcomed. Complementing its work on Assessment, the Statistics Authority has published a note (*Creating official statistics from administrative data*¹⁰) setting out the importance of administrative data for statistics, and suggesting some steps that might enhance the potential value of administrative data holdings.

2.5 *Improving comparability of statistics between the four UK administrations*

Many equivalent sets of statistics are produced by organisations in the four administrations of the UK. Sometimes these statistics are comparable but, in some cases, they are not - because different methods have been used to produce the statistics, or because concepts and policies vary from one administration to another. While the statistics may be the best possible for each of the four administrations, the different approaches make it difficult for those users who want totals for either GB or the UK, and for those who want to compare one country with another.

We have made a range of Requirements about this issue in Assessment reports. They fall into three broad groups: better signposting of equivalent statistics from the other countries;

⁸ <http://statisticsauthority.gov.uk/assessment/monitoring/monitoring-reports/index.html>

⁹ <http://www.statisticsauthority.gov.uk/assessment/monitoring/monitoring-briefs/index.html>

¹⁰ <http://statisticsauthority.gov.uk/reports---correspondence/correspondence/letter-from-sir-michael-scholar-to-rt-hon-francis-maude---administrative-data---16032012.pdf>

better explanation of differences between the equivalent statistics from the other countries; and working with the other countries to improve comparability.

3. International Dimension

We are aware of much interest, internationally, in Assessment – reflecting the fact that the process (of systematically assessing a country’s official statistics against a code of practice) is, as far as we are aware, unique. Since 2009 members of the Assessment team have presented a number of papers about Assessment at international statistical events. Our perception is that their reception has been mixed. We think that some senior statisticians in other countries have regarded ‘assessment’ as a threat. It has been regarded by some as a ‘British response to a British problem’ [of a lack of trust in official statistics]. This is not a perception that we have sought to tackle directly. We would note only that trust in statistics, even in countries with long-established and publicly-recognised centralised statistical systems, is not guaranteed – trust is lost far more quickly than it can be gained. Whether or not people trust official statistics in the UK, our interpretation of the evidence assembled from Assessment is that UK official statistics are in very large part trustworthy – and the improvements needed to further enhance trustworthiness are identified and generally well understood.

But we have noted a more positive view of Assessment from those bodies internationally that have responsibility for statistical standards – although it is fair to note that there are still comparatively few such bodies (often referred to as ‘statistical councils’). For example, in its 2010 annual report¹¹, the European Statistics Governance Advisory Board (ESGAB) drew positive attention to the UK’s statistical governance arrangements; ESGAB said that it “encourages (the) establishment of suitable *Code*-monitoring mechanisms in all ESS (European Statistical System) countries”.

The UK’s Assessment process has also been discussed specifically in the context of the development of a certification scheme for Greek statistics, which has been stipulated in a recent change to Greece’s statistical law. It is inevitable that one size will not fit all situations, but the common features of a rigorous process of independently reviewing quality and other aspects of a statistical system are easily transportable.

The European Commission has also recently proposed that each member state sign a ‘Commitment on Confidence in Statistics’, as one element of a revision to Regulation (EC) 223/2009 (commonly referred to as the “European Statistical Law”). Commitments, which will be signed by national Governments and countersigned by the Commission, and which will be reported on by the Commission to the European Parliament and Council, will relate to the measures necessary to maintain confidence in the Member State’s European statistics. Self-assessment and improvement actions are specified as features of the Commitment. We anticipate that the Assessment regime will provide the ‘evidence’ base on which the UK Commitment will be presented.

4. The Future

The *Statistics Act* requires the Statistics Authority to ‘assess and determine whether the *Code of Practice*...continues to be complied with in relation to statistics already designated as National Statistics.’ The first programme of Assessment, from 2009 to 2012, approached every set of National Statistics in essentially the same way. This raised awareness and understanding of the *Code* and what it means for statistics to comply with it, and served to ensure a uniform and equitable review of the entire statistical system. But the legislation

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http://epp.eurostat.ec.europa.eu/portal/page/portal/esgab/documents/EN_ESGAB%20report%202010_FINAL.pdf

does not mean that all statistics that are designated as National Statistics have to be reviewed in the same way or with the same frequency in future.

In order to maximise the benefit from Assessment, alongside other scrutiny work that the Statistics Authority might undertake, these and other factors suggest a more flexible and responsive programme of Assessment, which in turn we expect to continue to evolve. These general points suggest that we should do some or all of the following:

- re-assess some outputs against the *Code of Practice* in much the same way as we did in the first programme (possibly those that are the most high profile and likely to be seen as important to users);
- re-assess other outputs only in relation to those practices of the *Code* where we made a Requirement in the first programme of Assessment (in effect this would be a follow-up report).
- assess all the statistical work of some producer bodies in a single report (most suitable where the producer body is responsible for a relatively homogeneous range of statistics);
- focus on aspects of the statistical work that have changed since the first Assessment (for example, the content of publications may have changed);
- assess compliance with specific parts of the *Code* – either for a specific set of statistics or across a wide range of statistics (for example we might look in one report at a specific practice, such as publishing information about the use made of the statistics, across the whole of the statistical service).
- Introduce a degree of ‘self-assessment’ that would allow the senior statistician within a producer body to offer public reassurance about *Code* compliance, in relation to some parts¹² of the *Code*, rather than rely on the judgement of the independent Assessment team – as a way of increasing buy-in.

As well as determining the form that Assessment might take, we need to consider how best to set priorities for future Assessment work. Central to our thinking is that Assessment should be ‘risk-based’: prioritising those areas of statistical activity that are considered to present a risk to the quality and reputation of official statistics. We consider that the following criteria might guide priorities:

- Whether there has been a significant change to the statistics (sources, methods or outputs), or their use, or governance, since the first Assessment.
- The nature of any concerns raised with us, or identified by us, about the statistics or about the implementation of requirements from previous Assessment reports.
- The nature of the decisions made with reference to the statistics – where official statistics are relevant to major decisions in government or among the general public (such as in relation to elections), we would give priority to ensuring *Code* compliance.

These issues will be covered in a detailed report “Assessment 2009-2012” which we expect to publish in September 2012.

5. Conclusions

Although it is not always clear precisely what part Assessment has played in stimulating improvements, it is our view that Assessment is beginning to have a beneficial effect. There are signs that Assessment has enhanced evidence and understanding about the use made

¹² A list of *Code* elements that would always be reserved for formal assessment by Monitoring and Assessment would include some of those relating to the more challenging, and public facing elements of the *Code* – relating to the investigation and documentation of the needs of users of official statistics, the use made of them, and their presentation.

of statistics; led to improved engagement between producers and users of statistics outside their own organisations; and improved the quality and accessibility of statistical releases.

As well as stimulating many improvements to individual sets of statistics, the totality of Assessment reports has provided the Authority with a strong evidence base on which to offer (i) views about strategic priorities for the development of the statistical service – such as better communication of statistics; and (ii) public assurance about the strengths and limitations – but also the general trustworthiness – of official statistics in the UK. Furthermore, it is clear that the *Code* and Assessment regime have helped strengthen the position of statisticians in producer bodies.

There is growing international recognition of the strong system of statistical oversight in the UK.

We have demonstrated that independent assessment can work effectively. We have found that the *Code* has stood up well to its use in Assessment. It has a consistent philosophy – about “meeting users’ needs” – and this has helped us to interpret it. We now have a deep understanding of the *Code*, including how we might improve it. We also have a better understanding of how to work closely enough with producers to be able to understand their concerns and priorities but not so closely that we risk losing our independent perspective. And this has given us confidence to begin to offer support and advice to producers of statistics, as a ‘critical friend’. We want to start doing more of this because it is an important way of adding value to ‘Assessment’.

It has been a substantial and sustained programme of work, but one that is already starting to pay dividends.