

Monitoring Brief

Monitoring Brief 4/2010 30 July 2010

Findings from the first 50 Assessment Reports

Introduction

The Statistics Authority has a statutory function to assess sets of statistics against the Code of Practice for Official Statistics¹, with a view to determining whether it is appropriate for them to be designated as National Statistics. Each Assessment is published in an Assessment report².

At the time the Statistics and Registration Service Act came in to force in April 2008, several hundred sets of statistics already carried the National Statistics label. Each of these will be subject to formal assessment in the period 2009-2012 leading either to confirmation or withdrawal of designation.

Designation as National Statistics is an important endorsement of the arrangements for the production, management and dissemination of the statistics. It means, broadly, that the statistics meet identified user needs; are produced, managed and disseminated to high standards; and are well explained. It also signifies that the Authority judges the statistics to be readily accessible, produced according to sound methods, and managed impartially and objectively in the public interest. It is a statutory requirement that the producer organisation shall ensure that those statistics designated as National Statistics continue to be produced, managed and disseminated in compliance with the Code.

The Authority has been consistently impressed by the professionalism and commitment of statisticians in all the government departments in which it has conducted assessments. The Code of Practice expects that official statistics will be the best that can be produced at the time, and that is nearly always what we have found. However, this is not to say that there is no room for improvement. This Brief summarises the findings from the first 50 Assessment reports covering around 230 sets of statistics produced by many different government organisations. It reports on the extent of code compliance, highlights a range of examples of good practice from the more recent reports, and identifies priorities for future action. In so doing it updates Monitoring and Assessment Note 2/2010 *Findings of the 2009 Assessment Programme*³.

Summary of strengths and weaknesses

The current Code of Practice for Official Statistics was introduced in January. It was designed to set a challenging standard across all aspects of the production and publication of official statistics; in some respects above the status quo. It thus incorporated some pressure for continuing development and it was therefore not surprising that none of the sets of statistics covered in the first 50 assessments were found to be Code compliant in every respect. However, many did come close to that standard.

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

² http://www.statisticsauthority.gov.uk/assessment/assessment-reports/index.html

³ http://www.statisticsauthority.gov.uk/assessment/monitoring-and-assessment-notes/monitoring---assessment-note-2-2010--findings-of-the-2009-assessment-programme.pdf

The extent of Code compliance evident in Assessment reports 28 to 50 was similar to that in reports 1 to 27. This suggests that whilst it is evident that work to address the messages from the early assessment reports had started, it was still too soon to see a great deal of further progress in the later reports. The first 50 Assessments all resulted in 'conditional designation' as National Statistics. This means that whilst there was generally good compliance with the Code, designation was subject to completion of certain further steps (called 'Requirements'⁴). The Authority normally allows three to six months for implementation of Requirements. As at July 2010, the Authority Board had confirmed designation of 70 sets of statistics from 27 Assessment reports. The remaining Assessments still have improvements outstanding. Overall, the response to Requirements has been positive and encouraging.

Whilst compliance with the Code was generally good, some of the eight main principles have clearly proved more problematic than others. The greatest challenges were seen to be presented by those parts of the Code relating to identifying the use made of the statistics, and user engagement more generally; reflecting the fact that the Code expects a higher standard in these areas than had historically been the norm. Compliance with the other principles, particularly Principle 3 (integrity), Principle 6 (proportionate burden) and Principle 7 (resources) was strongest.

The term 'user' of statistics is employed in the Code of Practice to mean any organisation or person whose decisions or actions are beneficially 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; and such uses create their own demand for statistical data. This interpretation is central to the Code.

Figure 1 shows, as a proportion based on the maximum possible, compliance with the Code's practices⁵ in the first 50 reports taken together. Whilst this illustrates the extent of Code compliance, it should be noted that, in effect, it attributes equal weight to each element of the Code. In reality, users of statistics are likely to regard some practices as more important than others.



Figure 1: Percentage of practices complied with, by Principle and Protocol

⁴ A 'Requirement' is a formal recommendation in an Assessment Report

⁵ A practice is a specific element of the Code. There are 74 practices in total. The percentages in this chart are based on the 50 reports together.

Figure 2 shows the distribution of Requirements made in the first 50 reports, classified by the Principle or Protocol against which each was reported.





Priorities for action

The main conclusions and messages from the assessment reports have not changed since the first Findings report but the views of the Statistics Authority on the priority areas has been developed further to provide more specific guidance. A fuller discussion of some of the main themes can be found in the Statistics Authority's report *Strengthening User Engagement*⁶.

- I. Bearing in mind that statistics only realise their potential value when they are used in beneficial ways, there needs to be more systematic engagement with those organisations and individuals whose decisions, or actions, are informed by official statistics. The aim must be to get the messages from the statistical data to the people who can use that information and support subsequent use. This has the added virtue of promoting trust in the statistics and in those who produce them. Central government users of statistics tend to be relatively well served in this respect, so the greatest return on further improvement is likely to come from further supporting the wide range of beneficial uses of official statistics outside central government.
- II. The Code requires that producers of official statistics should 'investigate and document... the use made of official statistics and the types of decision they inform'. It further requires that the statistics should be accompanied by 'information on the quality and reliability of statistics in relation to the range of potential uses...'. The evidence from Assessment reports so far is that little documentation of this kind yet exists, either in terms of documenting the use made, or documenting the strengths and weaknesses in relation to uses. This is fundamental to demonstrating the relevance and value of the statistics and the Authority will continue to focus attention on these things. One option that might help expedite progress would be for producers to document their assumptions about the use that is made of the statistics and build on that base. Any invalid assumptions are likely to be challenged by users and this can be seen positively as the start of a constructive dialogue.
- III. In the context of supporting the effective use of statistics, it would be helpful in many cases to explain the statistics more fully, including trends over time and geographical patterns, with international comparisons where possible. Enhancing the narrative (commentary) accompanying statistics will help the user understand and make effective use of the data. That commentary needs to include appropriate details about the context in which the statistics are produced, the main features, and above all, their known limitations.

⁶ http://www.statisticsauthority.gov.uk/reports---correspondence/reports/strengthening-user-engagement--final-report.pdf

- IV. The Code requires a range of background documents to be published by the producer organisation. Publishing such documents ensures that reference information is readily available, thereby increasing transparency and demonstrating the openness, integrity and trustworthiness of the statistical production process. As more producer bodies have experience of assessment, we have found that more of this material has been published.
- V. An analysis of the first 50 Assessment Reports also points to the scope to simplify and streamline the Code of Practice itself, to remove duplication and ambiguity and so that the relationship between the Assessment process and the requirements of the Code is as clear as possible. The Statistics Authority is now planning to consult on a second edition of the Code towards the end of 2010.

Developments in the Assessment process

The Assessment process is still evolving and the Statistics Authority will continue to pay close attention to feedback from the bodies that produce official statistics. One criticism that is made is that the process focuses attention on minor negative points and away from major positive ones. The Authority takes the view that achieving the National Statistics standard, and the strong endorsement that this implies, should properly involve a degree of challenge and pressure for continuing improvement. We believe the statistical service is more worthy of public confidence, and international and professional respect, precisely because it is subject to a testing external regime of assessment. However, it is not our aim to understate the positive and we will continue to look for ways to stress the large measure of endorsement implicit in conditional and final designation as National Statistics.

One recent change to the process is the introduction of some 'short-form Assessment' reports. The main part of these reports relies on 'exception reporting' – it includes text only to support the Requirements made. This abbreviated style of report will in future be adopted when certain criteria are met⁷. They save time in terms of drafting and thus increase the efficiency of the process. In such cases the assessment team will still assess compliance with all parts of the Code of Practice but will only comment on those in respect of which some remedial action is recommended. We recognise the hazard that these reports, even more than the full format reports, will focus on minor negative points. We will be looking for ways to correct that impression.

There are three Annexes:

- Annex 1 looks at findings in relation to each of the Code's main principles.
- Annex 2 identifies some improvements made as a result of assessment.
- Annex 3 considers some problematic aspects of assessment.

⁷ http://www.statisticsauthority.gov.uk/assessment/principles---procedures/criteria-for-deciding-upon-the-format-of-anassessment-report.pdf

Annex 1 Findings in Relation to Each Principle of the Code

Principle 1 and Protocol 1: Meeting user needs and User engagement

The Code of Practice increases the emphasis on the use that is made of statistics and the importance of engagement with users to support beneficial use. To deliver the greatest value, official statistics must be communicated in ways that are as helpful as possible to those who rely on them.

Principle 1 of the Code encapsulates the need for statistical producers to engage effectively with users. The concept of 'value for money' is not explicitly stated in the Code, but various aspects of the Code taken together indicate an expectation that the producers of official statistics will both seek to achieve good value from the money spent on statistical work and seek to demonstrate publicly the nature of that value. In this context, the value of statistical work refers to the benefit delivered by the use of the statistics to influence decisions and actions, now and in the future. It is rarely possible to put a cash sum on that so the requirements of the Code focus on description of the benefit.

The first assessments found a good deal of evidence of producers engaging effectively with users within government, particularly within the body that produces the statistics. However, we found that producers often knew less about, and appeared to have paid less attention to, the users, and use made, of the statistics beyond their own organisation. It is important that user engagement should identify the use actually made of the statistics, and any further needs of users. We recognise that engagement needs to be proportionate to the importance of the statistics and that it may take some time for statistical producers to develop a good understanding of the range of ways in which their statistics are used in different sectors of society. However, statistical activities ought to be planned and organised with uses and users in mind and that is one of the main themes of the Code of Practice.

Example: Assessment report 28 on the first phase of the special assessment of population censuses for 2011, reported that the three census offices had each published plans for user engagement ahead of the 2011 Census. The three offices have separate business plans outlining costs and expected benefits of the 2011 Census.

Specifically, the Code requires identification of 'the needs of users of official statistics, the use made of existing statistics and the types of decision they inform'. Assessments to date have found this to be done only infrequently. In practice we would be content for the time being for producers to make clear their *assumptions* about uses and potential uses – which users can then comment on as they wish. This may offer a way forward that requires a smaller commitment of resources.

Of course, identifying uses is not an end in itself. That information needs to be employed to enhance the service provided. Assessments to date have found some good examples of responsiveness to the identified needs of users.

Example: The Ministry of Justice (MoJ) responded to users' needs by publishing more information about long-running Freedom of Information request cases, and the length of time that internal reviews were taking (Assessment report 35). MoJ also responded to users' needs by publishing Court Statistics quarterly from 2009 (Assessment report 36). These developments were associated with a wider review of statistical organisation that MoJ undertook in the light of the new Code.

Principles 2 and 3, and Protocol 2: Impartiality and objectivity, Integrity, and Release practices

We found that statistical producers had dealt effectively with any pressures that might be thought to have influenced the production or presentation of statistics, and seemed to have robust procedures in place to ensure integrity. Some of the steps taken included:

- publishing timetables in advance;
- ensuring that all statistics were available through the National Statistics Publication Hub;
- reviewing pre-release access lists and making these and other pre-release access details easily available through their website; and
- naming the responsible statistician in the published statistical release.

Principle 4: Sound methods and assured quality

We found that the methods used in the production of the statistics were generally sound; in a few cases we made Requirements to strengthen them.

One consideration in relation to methods is comparability within the UK and internationally. Whilst using harmonised methods cannot always be the primary consideration, it does offer real value to the user of statistics. Recent assessments have found some examples where international and UK comparability has been given high priority.

Example: Harmonisation between the three UK censuses (England and Wales, Scotland and Northern Ireland), in particular the development of the questionnaire and the production of harmonised products, is a major feature of the 2011 Census design. The 'Statement of Agreement' between the three census offices includes a section on harmonised aspects of the Census. Development of the questionnaire content and question wording was co-ordinated across the three offices with the aim of making the content as harmonised as possible, although there are differences in questionnaire content which reflect differing user needs. The census offices are endeavouring to ensure that, even with these differences in inputs, outputs from the three Censuses will be as comparable as is possible. (Assessment report 28)

More generally, the standard of documentation about methods varied. We are looking for evidence that methods are described in an accessible manner for the intended users. This may range from simple explanations of concepts for non-expert users, through to detailed documentation of sources, methods and databases for expert users. The required level of documentation needs to be determined in conjunction with users and potential users.

Example: Publication of Statistics on Road Conditions in England (Assessment report 40) produced by the Department for Transport, includes clear and comprehensive information about the methods in a Technical Note⁸. The Note also includes details of the quality assurance procedures used to check the data.

Many statistics were accompanied by documentation about technical aspects of quality. The Code does not set down absolute levels of quality – statistics that are fit-for-purpose for one user, or for one purpose, may be less fit for another. The Code requires producers to ensure that statistics are of a level of quality that meets users' needs, and to explain the quality of published statistics in terms of the quality dimensions adopted for the European Statistical System: relevance, accuracy, timeliness and punctuality, accessibility and clarity, comparability, and coherence. The presentation of quality measures may therefore range from the quantification of sampling errors, through to higher-level indications of the usefulness of estimates in relation to different uses.

The publication of quality measures was generally not as wide-ranging as that implied by the European Statistical System's definition of quality. Sampling errors are often relatively simple to measure and present for survey estimates. Non-sampling errors, such as coverage errors, measurement errors and processing errors – which relate to statistics produced from surveys,

⁸ http://www.dft.gov.uk/pgr/statistics/datatablespublications/roadstraffic/maintenance/rcmtechnote.pdf

censuses and administrative data alike – are often more difficult to measure, but may be at least as important as sampling errors. Producers need to ensure that the whole range of potential sources of error is considered when presenting information about quality. In the absence of quantified information, we would like to see basic description of the types of biases that may exist in statistics, their likelihood, and an indication of their magnitude – together with evidence of plans to improve users' understanding of their potential impact on the figures. This will help users to understand the strengths and limitations of the statistics more clearly.

Principle 5: Confidentiality

We found that procedures for maintaining the confidentiality of statistical data were effective. Some of the arrangements were not explained publicly, and we required several producer bodies to publish their confidentiality arrangements. We think that it should be fairly straightforward to do so, and that it is an important step in reassuring data providers and others of the appropriate protection of the confidentiality of data.

Many producers had ensured that employees' contracts of employment covered confidentiality statements. The template declaration included in the National Statistician's guidance on confidentiality of official statistics⁹ is an alternative way of meeting the expectations of the Code.

Principles 6 and 7, and Protocol 3: Proportionate burden, resources and the use of administrative sources

The Code requires producers to measure the burden on data suppliers (in a way that does not itself impose an unnecessary burden on those suppliers) in order to ensure that the burden is proportionate to the value of the statistics being produced. Some producers, however, had not reported the estimated costs relating to surveys. We hope that this should be relatively straightforward to estimate at a high level, and think that it is an important element of ensuring that the production of statistics is not unduly burdensome on those providing data.

Although the Code only requires estimates of the burden imposed by surveys to be published, we think that it is good practice to understand and report the costs of all data collections. Again, the effort in measuring this should be proportionate to the value of the information collected.

Many statistics are produced from administrative data – data that are collected primarily for managing some government process. In general, the systems for managing those data are not designed with statistics in mind. However, the data have great potential for the production of statistics, largely because their completeness means that useful statistics may be produced even for detailed geographical areas, or for detailed categorical breakdowns.

The Code requires producers to ensure that administrative sources are fully exploited for statistical purposes. This requires them to work proactively to maximise the benefits that may accrue from developing the use of administrative systems that they either currently use, or may use in the future. Protocol 3 of the Code, therefore, applies to all statistical producers, whether or not they use administrative data sources.

From an assessment perspective, we have seen producer bodies trying to document their broad strategies for dealing with data from administrative sources, and how they engage with the owners of those data systems. We will progressively expect to see more detail, such as that specified in practice 5 of Protocol 3, in order to be satisfied that administrative data sources can be fully exploited for statistical purposes.

Principle 8: Frankness and accessibility

⁹ http://www.statisticsauthority.gov.uk/national-statistician/guidance/confidentiality-of-official-statistics.pdf

The Code requires the publication of statistics to be accompanied by commentary to aid their interpretation. We would hope to see:

- the main messages summarised, early in the commentary;
- a description of the policy or operational context for the statistics, including any targets that the statistics are used to measure progress against;
- a description of the statistics in neutral language;
- comparisons over time wherever practicable, presented relative to a baseline that is chosen for statistical reasons;
- avoidance of specialised terms; and
- explanation of the ways that the statistics are used (or assumptions made in that regard), and any limitations of the statistics in relation to these uses.

Example: The release on Council Tax Levels in England (Assessment report 32) published by the Department for Communities and Local Government meets several of the criteria above. It gives a summary of the main points, further analysis of the data including comparisons over time, a glossary and additional notes, and information about data quality.

Example: The School and Pupil Characteristics and Absence and Exclusion statistics in England releases from the former Department for Children, Schools and Families (now Department for Education) contained detailed commentary about the source of the statistics, descriptions of changes to presentation, along with the main points from the statistics. Useful charts are also included. (Assessment report 41)

We identified some cases where statistics were released with little or no accompanying commentary. The Assessment team recognised that some of these statistics are of a specialist nature, but considered that a short commentary, drawing attention to the main trends, would improve accessibility for the non-expert user.

In addition to commentary about the statistics themselves, the Code requires that 'information on the quality and reliability of statistics in relation to the range of potential uses' should be published. Some information about quality is published (although more is needed as discussed under principle 4 above). However, this needs to be further developed to describe the quality of the statistics, methods, procedures and classifications in the context of the range of potential uses of them. Detailed quantitative measures may not be possible; but some information can still be given to enable users to judge the relevance and value of the statistics to their circumstances.

Some desirable improvements in the standard of presentation of charts and tables became apparent in the early assessments, and we hope that these should be relatively straightforward to address. Although now a little outdated, many of the principles set out in Plain Figures¹⁰ remain relevant:

- charts should present their message simply and unambiguously;
- data in tables should be rounded and presented appropriately; and
- tables and charts should be easy to interpret.

The accessibility of statistics, and information about statistics, is another theme of the Code. Most official statistics are now available on departmental websites and through the National Statistics Publication Hub. However, users have repeatedly pointed out to us that information, whilst available in plentiful supply, is often difficult to locate on websites. The accessibility of ONS's statistics on its website is seen as particularly problematic.

In addition to statistics being available through the Publication Hub, we would like to see producer bodies provide clear links from the statistical release to the following information:

¹⁰ Chapman, M and Wykes, C., *Plain Figures* (2nd edition), HMSO (1996)

- how the statistics are produced;
- how often the statistics are revised;
- a list of those who have had pre-release access to the statistics; and
- contact information.

In addition, departments should provide clear links to the following information:

- timetable for the year ahead;
- confidentiality policy;
- reports on any identified errors;
- reports on any areas where the statistics are exempt from the Code or where the Code has not been applied properly (breaches); and
- lists and contact points for user groups.

The Assessment team is working with the National Statistician's Office to develop more detailed guidance about what constitutes a good statistical release, with a view to this being promoted as the common standard for all producers of official statistics.

Annex 2 Improvements Made Following Assessment

Under the procedures for assessment, producer bodies report to the Statistics Authority steps they take following assessments to improve compliance with the Code of Practice. Some producer bodies go further than the specific steps required and use the assessment process to encourage wider changes within their organisations. In some cases, improvements will have been in hand before the assessment and we would not wish to suggest that the assessment process was the sole or primary motivation for developments. However, in considering the value of the assessment process itself, it is important to record the subsequent developments. This section gives some examples.

Northern Ireland: In the case of the Requirements made relating to statistics about looked-after children in Northern Ireland, the producer body told us that it was adopting the recommended practices for other statistics produced within the same branch in addition to those made relating to the particular set of statistics. This includes improvements to the website and to user engagement.

Scottish Government: a cross-office group has been established that aims to capture and disseminate the messages that are emerging from the assessment process. The group has developed a range of guidance notes to help teams prepare for forthcoming assessments. The group also identifies general lessons on good practice as well as highlighting areas where there is room for improvement.

HM Revenue and Customs: Following the Assessments of Child Benefit Statistics (Assessment report 23) and Child and Working Tax Credit Statistics (Assessment report 30), HM Revenue and Customs has begun to include much enhanced commentary in these releases, and is working with the National Statistician's Office to improve these further.

Department of Health: in response to Assessment report 21 on 18 Weeks Referral to Treatment statistics, the department has produced an effective interim Statement of Administrative Sources. This describes the context within which data are available in DH, and includes a statement of the Department's intent to explore the possibilities of making more extensive use of data from administrative systems. In due course, the Statement will list details of each of DH's administrative sources. We also note good practice in DH publishing a range of documents demonstrating compliance with the Code in a single, accessible place on its website¹¹.

Scottish Government: Assessment report 11 required publication of more information about the targets relevant to the statistics on house conditions. In response, the Scottish Government has published two notes on its website about the targets, and has included a new section in its statistical release about the Scottish Housing Quality Standard.

All four administrations: A joint statement documenting the differences between children lookedafter statistics in each of the four administrations of the UK is being prepared. This includes legislative and other differences, and serves to demonstrate the legitimacy of difference between different outputs.

Communities and Local Government: Assessment report 32 noted that CLG has decentralised planning arrangements, and that the lack of co-ordinated statistical planning limits wider user consultation. In response to a Requirement made in the report, CLG has completed a review of its statistical planning arrangements.

¹¹ http://www.dh.gov.uk/en/Publications and statistics/Statistics/CodeOfPractice/DH_083805

Annex 3 Problematic Aspects Of Assessment

The Code of Practice was written with a range of statistical processes and outputs in mind, but we have found that some requirements of the Code need special interpretation in relation to some types of outputs. This section describes more of the Statistics Authority's emerging thinking about the application of the Code to some of these situations.

Compendia publications

Some of the early assessments were of compendium publications, for example Agriculture UK (Assessment report 22) and Statistics on International Development (Assessment report 9). The nature of an assessment of a compendium is slightly different from that of a single output.

Such assessments relate to the processes involved in preparing the publication, rather than in producing the statistics that are included. Those sets of statistics will normally be subject to separate assessment. Designation of a compendium publication as National Statistics therefore means that the producer body has, for example: identified and met user needs in terms of the content of the publication; considered the appropriateness of each series for inclusion; and written appropriate commentary. We have included such a description in reports of assessments of compendium publications, for the sake of clarity.

One specific question about compendia relates to the publication of information about the quality of the statistics presented in the compendium. We regard the publication of some high level information as essential, along with indications about where the user can find out more. We regard the NHS Information Centre's compendium publication about Alcohol in England 2009¹² as being good in this regard. The publication lists the main sources used in the compendium and offers a short description of the main features of each, along with a brief description of quality issues, and links to more detailed information.

Some compendium publications include statistics that are not published elsewhere as official statistics. In compiling a compendium, the producer body needs to assure itself that the quality of the statistics, from whatever source, is satisfactory. We note that the inclusion of 'external' data can provide useful additional information for the user. For example, the Department for Transport includes some non-official statistics in its Road Conditions releases to support the explanation and understanding of those statistics.

Electronic dissemination

The more interactive and advanced use of the internet for publishing statistics is presenting some novel issues in the application of the Code. As an example, the Scottish Government releases environmental statistics through Scottish Environmental Statistics Online¹³. This portal draws together statistics from a range of sources. Tables are updated on the website as soon as they are available and this collection of statistics may change on a weekly basis. The Scottish Government uses the release terminology 'continuous ad hoc updates' to describe what happens. There is a question over whether this type of release practice complies with the standards of the Code on orderly release, pre-announcement, and the standard 9.30am release time. The Code is not intended to inhibit rapid updating of published information and we will be looking for a supportive solution to this and similar anomalies.

A further example relates to statistics published by the Department for Work and Pensions through its tabulation tool¹⁴. This is DWP's normal way of releasing information to any user – through user-specified tables. However, such flexibility comes at a cost, in that it is impossible to produce appropriate commentary advising on all the possible statistical analyses. In such cases, we consider it reasonable to require that some overall commentary be written about the general trends shown by the statistics, and that the source of additional further information be made clear.

¹² http://www.ic.nhs.uk/cmsincludes/_process_document.asp?sPublicationID=1242039259100&sDocID=4999

¹³ http://www.scotland.gov.uk/Topics/Statistics/Browse/Environment/seso

¹⁴ http://research.dwp.gov.uk/asd/tabtool.asp