Boundary issues in relation to UK official statistics

Conference of European Statisticians, Geneva, June 2009

Richard Laux and Richard Alldritt: UK Statistics Authority

Abstract

This paper considers two related boundary issues in the context of the UK's decentralised system of official statistics. First, and in most detail, it considers the nature of official statistics, and the implications for 'producer' statisticians and for the UK Statistics Authority, and concludes that a broad interpretation of 'official statistics' is a necessary condition if trust in statistics is to be rebuilt. Second, it briefly considers some aspects of the service provided by official statisticians, particularly in relation to the core business of government, in the light of this broad interpretation of 'statistics'.

1. The UK official statistics system

The UK statistical system is largely decentralised. Whilst there is no single metric to summarise this, the degree of decentralisation is indicated by the following indicators:

- 225 (18%) professional statistical staff in ONS; almost 1000 outside ONS;
- 250 (19%) National Statistics produced by ONS; over 900 outside ONS;
- 60% of data sets required by the European Commission are supplied by ONS;
- There are over 100 producers of official statistics in the UK (see Annex 1).

So ONS accounts for about one fifth of the UK statistical system's activity, though it is responsible for many of the key economic and social/demographic statistics. ONS is headed by the National Statistician (a statutory post), and has an important coordinating role across the UK statistical system, mainly achieved via statistical Heads of Professions in Government Departments and the Devolved Administrations – the Scottish Executive, National Assembly for Wales and Northern Ireland administration - each of which has a distinct statistical organisation. In practice each of these statistical organisations is further decentralised between local policy ministries and produces a wide range of statistics.

Despite the introduction of non-statutory 'National Statistics' arrangements in 2000, intended to strengthen the quality and integrity of UK statistics, public confidence in the statistical system remained low. The *Statistics and Registration Service Act 2007* was designed to address issues of public confidence and central oversight by establishing a non-executive Board – the UK Statistics Authority – to monitor the quality and comprehensiveness of UK statistics, and to report to Parliament.

Following a period of consultation, the Authority published its *Code of Practice for Official Statistics* in January 2009. While the Code is similar in many respects to the previous National Statistics Code, in other respects it is quite different. In particular, the new Code is shorter, simpler and more imperative; closer in style, structure and content to the European Statistics Code of Practice; drafted to apply to all bodies that produce official statistics, and not just to statistical staff or to the statistics themselves; and it does not set out exceptions and exemptions in the text of the Code itself.

The Authority has established a Monitoring and Assessment (M&A) Team, under the direction of its Head of Assessment (again, a statutory post), to undertake the assessment and designation of National Statistics, and to provide the wider monitoring function over the UK statistical system as a whole. Further details are available on the Authority's website¹. (It is worth noting, as a 'boundary issue' – albeit one not discussed in this paper – that the process of Assessment involves judging the compliance of a set of official statistics against the Code of Practice, and then deciding whether to designate them as 'National Statistics' – so, National Statistics are a subset of official statistics).

The golden thread running through the Authority's Monitoring and Assessment activity is the Code of Practice. The Code provides the benchmark against which the Authority will determine its response – for example, in reviewing whether statistical reports are adequate, it will consider whether the specific requirements supporting the principle of "frankness and accessibility" are being met.

2. Case study – knife crime statistics

In December 2008, the UK's Home Office released a "Tackling Knives Action Programme" Fact Sheet, containing a number of pieces of statistical information which showed that the Government's efforts to reduce the number of teenagers killed or seriously wounded by knives were effective.

The Fact Sheet contained information of the following types:

- Information on hospital admissions, drawn from an administrative system, which is regularly published as official statistics by the Information Centre for Health and Social Care;
- Information collected by the Home Office from a selection of police forces that had taken part in the Tackling Knives Action Programme.

Whilst initial attention focused on the fact that the Fact Sheet contained hospital admissions statistics before their scheduled publication, the Authority's Note² comparing the statistics in the Fact Sheet against the Code of Practice led not only to further media discussion, but also a Parliamentary hearing³. One question that the Authority considered was whether it was appropriate to comment on a policy document that others might perceive contained research findings that were not official statistics. The following section addresses this boundary issue in more detail.

3. Boundaries of official statistics

3.1 Boundaries, and trust – why does all this matter?

Earlier we noted that public confidence in official statistics in the UK is low: to the extent that this was likely to have been an outcome of a lack of effective central control over a decentralised system, this was the rationale behind the establishment

3

http://www.parliament.uk/parliamentary_committees/public_administration_select_committee/pasc0809pn13.cfm

¹ http://www.statisticsauthority.gov.uk/assessment/index.html

² http://www.statisticsauthority.gov.uk/assessment/monitoring-and-assessment-notes/knife-crime-statistics---a-review-against-the-code-of-practice.pdf

of the Statistics Authority. Anecdotal evidence suggests that the public is not readily able to distinguish between different categories of numerical information (such as statistics, management information, social research that produces quantitative estimates, and so on). We believe that if the presentation of numerical information becomes a matter of public concern, then this concern will impact upon trust in official statistics. Hence we believe that if we restrict our scrutiny role unduly then we risk failing to address one of the likely drivers of low levels of public confidence in statistics.

This might, with some grounds, be seen as a uniquely UK response to an unusually intense problem with trust, and in the context of our decentralised statistical system. In countries with a highly centralised system, with a visible and respected National Statistical Institute responsible for the overwhelming majority of official statistics, the boundary between official statistics and other numerical information may well be more clearly drawn in the mind of the public and so there may be less need, at least from the perspective of trust, to be too concerned about activity that takes place beyond the NSI.

3.2 The UK's Statistics Act, and the Code of Practice⁴

The Statistics and Registration Service Act 2007 defines 'official statistics' as those statistics produced by a range of public sector organisations, which can be added to in secondary legislation (as has already happened). It does not, however, define statistics⁵. This is important given that the Authority's remit is to 'monitor the production and publication of official statistics'.

The Code of Practice for Official Statistics relates, almost entirely⁶, to the production, management and dissemination of official statistics⁷. In relation to 'dissemination' the Code applies up to and including release in statistical reports (including websites etc), but does not make any specific reference to the subsequent quoting or use of official statistics in other official documents or verbal statements - except for one special case in which the Code extends to government statements published alongside the release of statistics (at protocol 2, practice 9).

Most of the Statistics Authority's role, as defined in the *Statistics and Registration* Service Act 2007, can be mapped directly on to the requirements of the Code that relate to production, management and dissemination. But there are certain cases where the Authority may wish – in pursuance of the broad role that the Act confers on it - to comment publicly on matters that are, not explicitly dealt with within the Code.

⁵ The new Regulation of the European Parliament and of the Council on European Statistics defines 'statistics' (at article 3(1)) in the following terms: 'statistics' means quantitative and qualitative, aggregated and representative information characterising a collective phenomenon in a considered population'.

⁷ The phrases 'production, management and dissemination' and 'statistical report' are explained at paragraph xiv of Preamble to the Code.

⁴ http://www.statisticsauthority.gov.uk/assessment/code-of-practice/code-of-practice-for-official-statistics.pdf

⁵ The pow Pagulation of the Figure 10 in the control of th

⁶ There is however one other requirement of the Code that is not about the production, management and dissemination of statistics – principle 3, practice 7 says "Promote a culture within which statistical experts in government can comment publicly on statistical issues, including the misuse of statistics". That requirement applies to the Statistics Authority as well as to other bodies; and it signals the intention, which is also to be found in international guidelines, that the statistical community should not remain silent on the misuse of statistics.

These relate to:

- Public use of management information;
- Raw statistical data;
- Special aggregations;
- The use of official statistics in policy documents.

3.3 Public use of management information

Government departments and other bodies that produce official statistics sometimes publish numerical information - in statements and policy documents - that they do not regard as being official statistics.

This distinction is important as such information (which we call *Management Information* here) is not covered by the Code. In particular, the requirements of the Code relating to publishing the statistics separately from political comment, and publishing in the form of a statistical release before any other use, do not apply except in some limited respects discussed below.

We consider that any body that produces official statistics and is proposing to release statistical information <u>other</u> than under the provisions of the Code of Practice should first seek the opinion of the National Statistician or the Statistics Authority.

We define Management Information here to include all numerical data produced, or publicly used, by official bodies but which that body does not regard as official statistics. Thus, it includes:

- Data about departmental business that no-one would reasonably regard as official statistics;
- The numerical results of any research project for example a one-off sample survey - where the body responsible does not regard those results as being official statistics:
- Data that, whilst not themselves published as official statistics, are aggregated to produce official statistics (for example, local counts of hospital records). However, it is helpful to distinguish these as raw statistical data because they are covered by some aspects of the Code of Practice and there are therefore some particular considerations, discussed further below;
- Special aggregations of raw statistical data, distinct from those aggregations
 that are published as official statistics (for example, figures relating to a
 particular area of the country when that area is not one of the standard areas
 used for the official statistics). Again there are particular considerations,
 discussed below.

We will consider two main criteria in deciding whether to recommend that any management information should be treated as official statistics and therefore handled in accordance with the Code of Practice:

- the management information is used <u>publicly</u> in support of decision-making by government – including decisions on policy, resource allocation and any other major decisions of public interest; <u>or</u>
- the management information attracts public comment or controversy when published and the Statistics Authority takes the view that it would better inform public debate if the figures were to be handled as official statistics and a proper statistical release prepared.

(However, an exception would be made to the first criterion where it was accepted that the management information was of a kind that was unlikely to be thought of as 'official statistics' by Parliament or the public.)

Where one of these criteria is met, we will write to the relevant body drawing attention to our view that the information should, in our opinion, have been treated as official statistics. Depending on the circumstances we may further comment on the manner in which the figures were published and indicate respects in which the requirements of the Code of Practice appear not to have been met. We may recommend that the statistics be issued again, in accordance with the Code of Practice, to the extent that this is practicable.

3.4 Raw statistical data

Raw statistical data will usually be the local or low level statistics from which official statistics - in their published form - are compiled. Here the detailed data, whilst not regarded as official statistics themselves, are nonetheless subject to some of the requirements of the Code of Practice – for example the assurance of impartiality, quality standards and protection of confidentiality. We regard the public release of such data as legitimate once the related official statistics are published, but not before (and subject to any disclosure control constraints).

We will investigate any release of, or public reference to, such *raw statistical data* <u>prior</u> to the release of the related official statistics. We will consider with the responsible body the particular circumstances of such cases and any lessons that may need to be drawn. We may conclude, exceptionally, that the circumstances justify the public use of the raw statistical data ahead of the official statistics, or that the public use was inappropriate and should be resolved by the responsible body either preventing such premature release or bringing forward the regular release of the official statistics so that the situation is less likely to occur.

3.5 Special aggregations

Bodies that produce official statistics sometimes issue special aggregations of *raw statistical data*, distinct from the official statistics that are normally produced from those data, in order to address a specific topic. We will normally regard such special aggregations as being official statistics and will be unlikely to accept the argument that they are distinct from the normal official statistics and can therefore be released without reference to the Code of Practice. Should there be a case for treating special aggregations as other than official statistics, we would expect the National Statistician to be consulted in advance of their publication.

3.6 The use of official statistics in policy documents

In the context of these notes, the term *policy document* is defined as any document or statement, including verbal statement in Parliament, issued by a public body, other than a statistical report or output. This includes such documents and statements issued by public bodies that do not themselves produce official statistics.

In exceptional cases, we may regard a *policy document* or statement issued by a body outside the public sector (perhaps a trade association or similar representative body) as being covered by the same principles.

Policy documents and statements sometimes contain substantial amounts of both management information and official statistics without necessarily distinguishing

between the two. However, the circumstances in which we might comment on the public use of management information are considered above. Here we consider the criteria that would determine whether to comment on the use of official statistics in such documents and statements.

The Pre-release Access to Official Statistics Orders⁸ prohibit the inclusion of official statistics in any policy document <u>before</u> the release of the statistics

In the special case where a policy document (usually a Ministerial statement) is issued <u>alongside</u> the release of official statistics, there are specific requirements in the Code of Practice, Protocol 2. We will assess compliance with that aspect of the Code through the formal Assessment process.

So here we are only concerned with policy documents issued <u>after</u> the statistics are in the public domain.

Where our attention is drawn to the presentation, description or technical interpretation of official statistics in a policy document or statement, we will consider the following criteria in determining whether to comment publicly:

- The presentation etc of the official statistics leads us to conclude that there may have been an <u>intention</u> to mislead the reader about the statistical information (beyond what could defended on the grounds of accepted practice in public debate); and
- We believe that the public interest would be best served by the document or statement being challenged.

We will also always investigate and publish our findings if we become aware that the advice of the National Statistician or the relevant Head of Profession for statistics has been offered, but not followed, on the use of statistics in a policy document.

Where we conclude that the use of statistics in a policy document is unsatisfactory in a technical sense but we do not think there is any intention to mislead, we will normally propose that the body that issued the document should put the matter right, rather than comment publicly.

We would summarise the Statistics Authority's expectation in relation to policy documents and statements as follows:

- they must not leak official statistics:
- they must not mislead (beyond the normal selection of material to support an argument) through their use of statistics or the manner of their publication;
- they must respect any professional advice that may have been given by government statisticians.

4. The service provided by official statisticians

Historically, the work of UK official statisticians could be summarised as follows. In ONS, the service can be characterised primarily as the production of statistical outputs and services intended for external audiences. Examples include:

First Releases describing the results of new statistical data collections;

⁸ http://www.statisticsauthority.gov.uk/assessment/pre-release-access/index.html

- Multi-source publications, such as Social Trends, Regional Trends, Economic and Labour Market Review – containing analysis;
- Multi-source databases, such as Neighbourhood Statistics⁹ ("NeSS").

Secondary, or supporting, activities relating to co-ordination across the statistical system – including work on:

- Standards, classifications and frameworks, and methodological advice;
- Policy development;
- A dissemination infrastructure (NS Online, the Publication Hub).

In government departments the service differs in many respects. Statisticians publish statistical First Releases, but also work on the following activities:

- liaising with policy and other users;
- working with owners of administrative databases;
- providing an evidence base to assist policy makers.

However, it is clear that the service provided by government statisticians needs to evolve to address the challenges presented by the Code of Practice, and by the broader consideration of official statistics described above.

In particular, as noted earlier, the Code requires the promotion of a culture "within which statistical experts in government can comment publicly on statistical issues, including the misuse of statistics". Whilst the National Statistician has long undertaken this role, it is undoubtedly the case that statisticians at a working level will need to be supported in commenting publicly in this way.

Indeed, a more pro-active role for statisticians has recently been outlined by the Head of the UK Civil Service, in the context of guidance offered to non-statistical staff:

- When preparing any publication containing statistics, including those drawn from administrative or management information, you must involve statistical professionals at the earliest opportunity.
- You must not use unpublished statistics without the advice of a statistical professional.
- You must not selectively quote favourable data from any unpublished dataset.
- Decisions taken by statistical professionals are final.
- Any publication containing official statistics must provide information relating to their quality, reliability and usability.
- Pre-release access to official statistics is a privilege. You must not disclose any information, nor seek to alter it in any way.
- Ignoring any of the above may constitute a breach of the Code and result in an investigation by the UK Statistics Authority and a published report to Parliament.

⁹ http://www.neighbourhood.statistics.gov.uk/dissemination/

Implementing this guidance is likely to have a significant impact upon the work of statistical Heads of Profession within government departments and agencies, although the details are currently being considered.

5. Conclusions

- 1. Boundaries matter, especially in a statutory context and where there are many different players it is important to have a shared understanding of roles.
- 2. In the UK context it is important that the Statistics Authority is seen as the arbiter of what constitutes official statistics (within the context of the Statistics Act) and therefore what it can legitimately comment on; equally it is important that it describes its thinking openly, and is fully engaged with those responsible for management information.
- 3. The Statistics Authority was established in order to strengthen control in a decentralised system, and hence to improve trust in UK official statistics. It seems to be the case that the public does not distinguish clearly between different categories of numerical information published by official bodies, and therefore (in terms of trust) it would be counter-productive for the Authority to promulgate a narrow interpretation of official statistics this might merely incentivise some parts of government to release statistical information in other forms, doing nothing to improve trust in official statistics.
- 4. Statisticians need more authority, and to be appropriately resourced, and perhaps to develop new skills, in order to provide the level of professional input that is required in order to maintain standards in the way required both by the Authority and by government.

ANNEX 1 - PRODUCERS OF OFFICIAL STATISTICS IN THE UK

Section 6 of the Statistics and Registration Service Act 2007 defines official statistics in the following terms:

6 Official Statistics

- (1) In this Part "official statistics" means-
 - (a) statistics produced by -
 - (i) the Board [the Statistics Authority],
 - (ii) a government department,
 - (iii) the Scottish Administration,
 - (iv) a Welsh ministerial authority,
 - (v) a Northern Ireland department, or
 - (vi) any other person acting on behalf of the Crown, and
 - (b) such other statistics as may be specified by order by -
 - (i) a Minister of the Crown,
 - (ii) the Scottish Ministers.
 - (iii) the Welsh Ministers, or
 - (iv) a Northern Ireland Department.

Section 6(a)(vi) refers to organisations colloquially known as Crown bodies. There are over 100 such organisations. Although a definitive list is not readily available, a list of those whose material is subject to Crown Copyright protection is published¹⁰. However, not all of these organisations produce statistics.

Section 6(b) refers to an "order". In the current context this is a piece of secondary legislation that lists a range of non-Crown bodies as producers of official statistics. In the latest UK Order there are 54 of these, as follows:

- 1. Arts Council of England
- 2. Audit Commission for Local Authorities and the National Health Service in England
- 3. Board of the Pension Protection Fund
- 4. British Tourist Authority
- 5. British Transport Police Authority
- 6. Care Quality Commission
- Certification Officer
- 8. Chief Constable of the Police Service of Northern Ireland
- 9. Coal Authority
- 10. Commission for Architecture and the Built Environment
- 11. Commission for Rural Communities
- 12. Competition Commission
- 13. Consumer Council for Water
- 14. Consumer Panel established under section 16 of the Communications Act 2003
- 15. Design Council
- 16. English Sports Council
- 17. Environment Agency
- 18. Financial Services Authority
- 19. Gambling Commission
- 20. Gas and Electricity Consumer Council
- 21. Health and Social Care Information Centre
- 22. Health Protection Agency

¹⁰ http://www.opsi.gov.uk/advice/crown-copyright/uk-crown-bodies.htm

- 23. Her Majesty's Inspectors of Constabulary
- 24. Higher Education Statistics Agency
- 25. Historic Buildings and Monuments Commission for England
- 26. Homes and Communities Agency
- 27. Independent Police Complaints Commission
- 28. Joint Nature Conservation Committee
- 29. Judicial Appointments Commission
- 30. Learning and Skills Council for England
- 31. Museums, Libraries and Archives Council
- 32. National Consumer Council
- 33. National Lottery Commission
- 34. National Patient Safety Agency
- 35. National Policing Improvement Agency
- 36. National Treatment Agency
- 37. Natural England
- 38. Natural Environment Research Council
- 39. Northern Ireland Policing Board
- 40. Nuclear Decommissioning Authority
- 41. Office of Communications
- 42. Parole Board
- 43. Pensions Regulator
- 44. Police Ombudsman for Northern Ireland
- 45. Probation Board for Northern Ireland
- 46. Rail Passengers Council
- 47. Regulator of Social Housing
- 48. School Food Trust
- 49. Student Loans Company
- 50. Sustainable Development Commission
- 51. Training and Development Agency for Schools
- 52. UK Film Council
- 53. United Kingdom Atomic Energy Authority
- 54. Youth Justice Board for England and Wales

There is also a corresponding Order in Scotland¹¹ which, in addition to listing the organisations at numbers 24 and 49 in the list above, includes the Common Services Agency for the Scotlish Health Service.

¹¹ http://www.opsi.gov.uk/legislation/scotland/ssi2008/ssi_20080131_en_1