**Future – Engage – Deliver: refreshing the UK Code of Practice for Statistics**

Ed Humpherson, Director General, UK Office for Statistics Regulation

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Abstract: We live in a data-rich world that is rapidly changing. This environment impacts us all, as well as the statistics used to make essential judgements and decisions in all parts of society. In the UK, the *Code of Practice for Official Statistics* has been at the heart of setting high standards since 2009. The changing data landscape and recommendations from Sir Charles Bean’s *Independent Review of UK Economic Statistics* provided a strong impetus for considering how to ensure the Code continued to remain relevant in driving further improvements in official statistics. We followed a Future – Engage – Deliver model. We envisioned the *Future* in our Code stock take, conducted from late 2015 to December 2016. Our testing and development of the refreshed Code in the period January to June 2017, in which we conducted a series of focus groups, as well as our formal consultation, represented the *Engage* phase. And our Code Consultation informed our *Deliver* phase, in which we have revised the Code content to reflect stakeholder feedback. The three pillars of Trustworthiness, Quality and Value now form the central framework for the statistical practices. We are focusing on embedding the Code through the development of interactivity, guidance, and the communication of our strategy on application and on the reach of the Code beyond official statistics. Our ambition is for organisations publishing statistics outside of our official statistics community to also apply the Code principles. The fundamental components which form the basis of the Code can act as guidelines for all producers.

**Introduction**

In the UK, the *Code of Practice for Official Statistics* has been at the heart of setting high standards for official statistics. The first edition of the Code was published by the UK Statistics Authority in January 2009 as one of the Statistics Authority’s statutory responsibilities under the UK’s Statistics and Registration Service Act 2007.

Since then, the UK’s Code has established itself as the heart of the UK’s system of official statistics. It has been adopted widely across the UK public sector, within over 150 bodies who publish official statistics. It forms the basis of the assessment of statistics by the Office for Statistics Regulation, which reviews compliance with the Code and leads to the award of the National Statistics designation. It is recognised more widely, for example within Parliament and in the UK’s fact-checking community.

In 2015, the UK Statistics Authority’s regulatory arm, the Office for Statistics Regulation[[1]](#footnote-1) launched a stocktake. This stocktake reviewed how the Code was working in practice. The stocktake concluded that we should consult on a revised version of the Code. The new version of the Code was published in February 2018. It is built around three pillars of public confidence: Trustworthiness, Quality and Value.

This paper considers the factors that led the Office for Statistics Regulation to revise the Code; describes the approach we took, based on a model called Future–Engage–Deliver; introduces three pillars of the Code; and describes the potential for voluntary adoption by organisations who publish data that are not official statistics.

At the heart of the new Code, and emphasised throughout this paper, is the importance of public confidence in statistics.

**Why change the Code?**

Several factors came together to make a compelling case to refresh the 2009 Code.

First, it was clear to the Office for Statistics Regulation, and to the whole of the UK’s statistics profession, that we are in a world that is increasingly rich in data. Data are abundantly available – easier to collect, easier to combine, easier to analyse and easier to disseminate. As a result, the traditional model of official statistics production, based on the specification of a data collection, usually through a survey, has become increasingly supplemented by administrative data sources and by multi-source statistics that combine different datasets.

Alternative providers of statistics and data are increasingly able to complement, even compete with, the outputs of official statistics. When the 2008 Code was published, these developments were in their infancy. As a result, the 2008 Code was relatively light on the behaviours and processes that support the production of statistics in this new world. It was a Code that reflected a world of largely survey-based sources, collected by the statistics producer for the purpose of statistics, and published in traditional long-form output. And it worked very well indeed for these outputs. But to preserve public confidence in statistics, we needed to adapt the Code to the changing world.

A second factor was a gradual shift from concerns about organisational process to concerns about statistical quality. In 2008, when the original Code was developed, concerns surrounded the processes of production – so things like pre-release access, organisational governance, and publication policies were at the core of the 2008 Code. By 2015 and 2016, the focus of concern was shifting away from these basics of production, and towards quality. Concerns emerged at roughly the same time in different sectors, including crime statistics (with criticism of the reliability of recording of crimes by the police, which undermined confidence in aggregate statistics on crime); migration statistics (with growing Parliamentary criticism of the survey-based approach to measuring net migration to the UK); and most prominently, a review of economic statistics conducted by Sir Charles Bean, former deputy governor of the Bank of England, which highlighted issues with the quality of economic statistics.

A growing debate about the reliability of “facts” used in public debate – which came to be known as post-truth – constituted a third factor. “Post-truth” reflected a fear that values like integrity in the use of evidence, recognition of the strengths and limitations of data, and the quality of data itself – in short, the values that underpin a system of official statistics – were under theat. While there is some dispute about what the term post-truth means, and its usefulness as a description of political discourse, it became a widely discussed phenomena in 2016 and 2017. We became concerned that widespread debate about the reliability of political statements might infect public confidence in official statistics. We wanted to issue a strong response that defended the value of official statistics.

The fourth factor related to the culture created by the first version of the Code itself. While this Code had been very successful in setting standards across the UK public sector, and in providing the basis to protect statistics from political interference, in some ways it may have done its job too well. The first version of the Code came to be seen as a barrier to innovation in some Government Departments, and that this in turn could damage public confidence. It led us to lament that official statistics were starting to resemble a “walled garden” – beautiful, well looked after, but elitist and cut off from the world outside, and not consistent with public confidence.

**Our approach: Future**–**Engage**–**Deliver**

These four factors – the growing availability of data; concerns over quality; the anxiety about living in a post-truth world; and official statistics existing in a closed-off walled garden – created a compelling case to refresh the Code of Practice.

We started by taking stock, and identifying the changing features of the world described above. We then adopted the Future–Engage–Deliver model, developed by Steve Radcliffe to guide organisational transformation[[2]](#footnote-2). This approach defines three phases in any transformation:

* Future: this involves ideas and thoughts about what an organisation or a community would like to see in the future, how people would like things to be, and what they’d like to build.
* Engage: Engaging others is crucial. The Engage phase focuses on interaction rather than simply presenting ideas.
* Deliver: the delivery of products and services in line with the vision.

*The Future Phase: Public confidence and the three pillars*

We therefore considered what the four factors – availability of data; quality concerns; post-truth; and the walled garden – meant for official statistics. And this led us to fear an unattractive future in which official statistics would cease to be relevant.

Our overall objective was to turn this risk on its head, and focus instead on an alternative, more positive future, built around greater public confidence in statistics.

We wanted to put public confidence at the heart of the new Code. But what does this mean in practice? We started to identify the general factors that underpinned confidence in any exchange of information, and it gradually become clearer that in an exchange of information between human beings, the quality of the information itself is only one of the things that supports confidence. The identity and reliability of the provider of the information is equally important, and in many situations, precedes any focus on the information’s quality: a person is hardly likely to inspect in detail the quality of a statement made by someone who is known to be a liar.

This analysis led us in turn to identify three attributes of data and statistics that are necessary to achieve public confidence:

* The trustworthiness of the provider of the information
* The quality of the information
* The value of the information to the user

This then was our ambition: we wanted to build a positive future of official statistics based on trustworthiness, quality and value.

*The Engage Phase*

The Engage phase involved an intense process of engagement with people with an interest in the Code. We recognised a key distinction between the Code’s users and its beneficiaries. The **users** of the Code are those people who draw on the Code on a regular basis to guide decisions about the production of official statistics – people who work in organisations that produce official statistics, including statisticians, policymakers and communications professionals. The Code’s **beneficiaries** are a much wider group of people who benefit from statistics. These beneficiaries include people with a role in public policy; expert users who undertake research; businesses and community groups who draw on statistics to make decisions; and – perhaps most importantly – the broader public who want to be reassured about the reliability of the statistics on which public decisions and discourse are based.

For the users of the Code, we undertook a wide range of consultation activities, including a 13-week consultation of our draft Code which elicited 78 formal questionnaire responses between July and October 2017. Our other engagement activities were based on interaction and debate, rather than simply presenting our ideas. We led 17 focus groups with statisticians and analysts; and made over 30 presentations including to the Royal Statistical Society and the Government Statistical Service, the Government Economic Service and the Government Social Research Service. We calculated that we travelled more than 4,000 miles across the UK during the consultation. We also were active on social media, using Twitter to maintain awareness through regular Tweets, and writing a sequence of blogs.

These social media activities helped generate awareness of the Code for the broader audience of beneficiaries. We also worked with Sense about Science, a charity which makes evidence and data meaningful for the public. With Sense about Science, we explored ways of making the Code accessible to the public. All these efforts to broaden the appeal of the Code culminated in an article in the London Evening Standard in July 2017, entitled *Statistics are the lifeblood of democracy, and need to be protected[[3]](#footnote-3)*, which extolled the virtues of the new Code as we launched our formal consultation.

*The Deliver Phase*

The extensive feedback we received during the Engage phase helped us refine the ideas of trustworthiness, quality and value. The ideas resonated very well with people, but they told us the ideas needed to be explained more clearly. This iterative process, featuring the input of a huge range of users, culminated in these descriptions of the three pillars:

* **Trustworthiness:** Trustworthiness is about the processes, people and systems of organisations. It is based on the ideas of Baroness Onora O’Neill[[4]](#footnote-4) around trust and trustworthiness. As Sir David Spiegelhalter said in his President’s Address to the Royal Statistical Society in July 2017[[5]](#footnote-5), “no-one can just expect to be trusted”. An organisation must provide testable evidence to demonstrate that they have the interests of the public at heart, by demonstrating competence, honesty and openness. The practices under the Trustworthiness pillar set out the key commitments that must be made to support independent statistics production.
* **Quality** is about the data, and how they are processed into statistics. Following the Bean Review of Economic Statistics[[6]](#footnote-6), the Code recognises that independence of production is not, on its own, enough to guarantee worthwhile statistics. The statistics must be the best available estimate of what they aim to measure, and should not mislead. To achieve this the data must be relevant, the methods must be sound and the assurance around the outputs must be clear. These aspects of statistical production are at the heart of the practices in the Quality pillar.
* **Value** follows the emphasis in the UN Fundamental Principles of Official Statistics on statistics that “meet the test of practical utility”[[7]](#footnote-7). It defines what statistics must provide for the public. This includes a coherent picture, a focus on users, an emphasis on what questions the statistics answer and a focus on innovation as the world changes. Trustworthy processes to create high-quality data may not be useful to the public if the statistics are not accessible, do not address key questions, are inefficiently produced, and do not add value or provide insight.

These pillars are conceptually distinct. But they support each other. A producer of official statistics is more likely to be perceived as trustworthy where the data they provide are clearly of high quality. High-quality statistics are much more likely to provide useful answers to key questions than lower-quality statistics.

We published the new Code on 22 February 2018[[8]](#footnote-8). It was built around the three pillars, supported by 14 principles (each supported by detailed practices), as shown in Figure 1:

**Figure 1: The three pillars and 14 principles of the UK’s new Code of Practice**

We delivered the Code as a printed, physical document. We also created an interactive version on our website, which provides a searchable version of the Code, and provides links to useful resources like case studies, which highlight good practice, and guidance[[9]](#footnote-9). It also includes pages for non-statisticians, explaining the purpose and value of the Code clearly and succinctly. And we distributed the Code through a variety of channels, including social media, a YouTube video, traditional press releases and a series events across the UK, including launch events for each Government Department.

The deliver phase is not yet complete. We have more to do to raise awareness; promote use; and clarify interpretation. But we are not doing badly: we are already on our third reprint, and have had around 18,000 hits on the Code’s web pages.

**Voluntary adoption**

We also wanted to expand the Code’s reach. In a world of abundant data and multiple data sources, the pillars of trustworthiness, quality and value have broader application. They can support public confidence in a much wider range of data outputs than just official statistics, and from a wider range of producers – not all of them in Government.

From this insight, we have developed the concept of voluntary adoption of the Code. We encourage organisations that publish research and analysis, both inside and outside Government, to adopt a “review and publish” approach. They should review their practices against the Code – how do they assure themselves of the quality of their data; what is the value of what they produce; how do they demonstrate a trustworthy process – and they can then publish short statements alongside their data or research explaining how they line up to the three pillars. Several organisations have already adopted the Code voluntarily, including:

* The Race Disparity Unit, which publishes data on a website highlighting different outcomes from public services for different ethnicities.
* The Scottish Fiscal Commission, which forecasts Scottish GDP and tax revenues.
* The Department for Work and Pensions, which adopted the Code on a voluntary basis for a range of publications.
* Ipsos MORI, a private research company which has adopted the Code for some of its research outputs commissioned by the Department for Work and Pensions.

**Conclusion**

We refreshed the Code of Practice in the face of four factors: growing abundance of data; concerns about quality; post-truth; and the risk of irrelevance embodied in the image of the walled garden. What links all four is the fundamental importance of public confidence in official statistics. We developed a vision of the future of official statistics based around the essential components of public confidence, which we defined as Trustworthiness, Quality and Value. We then engaged extensively on this vision, and delivered a new Code that has public confidence at its heart. And by focusing on public confidence the Code has much wider potential application – beyond official statistics to encompass a range of data and analytical outputs from different organisations.

A final word: In a data-rich world, public confidence in data and analysis – in trustworthiness, quality and value – is too important to be confined just to official statistics. This insight has led us to the concept of voluntary adoption of the Code for data and research that are not official statistics – an important and exciting new frontier.

1. The UK Statistics Authority’s regulatory arm was renamed the Office for Statistics Regulation in November 2016. Prior to that point, it had been known as the Monitoring and Assessment team. For ease of reference, this paper will use the term “Office for Statistics Regulation” throughout, unless it is specifically referring to activities in the period prior to November 2016. [↑](#footnote-ref-1)
2. Leadership, Plain and Simple, Steve Radcliffe (Financial Times, 2012) [↑](#footnote-ref-2)
3. https://www.standard.co.uk/business/anthony-hilton-statistics-are-lifeblood-of-democracy-and-need-to-be-protected-a3586686.html [↑](#footnote-ref-3)
4. See for example O’Neill’s Reith Lectures from 2002 (https://www.bbc.co.uk/programmes/p00ghvd8), or her Ted talk from 2013 (https://www.ted.com/talks/onora\_o\_neill\_what\_we\_don\_t\_understand\_about\_trust) [↑](#footnote-ref-4)
5. David Spiegelhalter, Presidential Address to the Royal Statistical Society, July 2017 (www.rss.org.uk) [↑](#footnote-ref-5)
6. Independent Review of Economic Statistics, HM Treasury, 2016 (https://www.gov.uk/government/publications/independent-review-of-uk-economic-statistics-final-report) [↑](#footnote-ref-6)
7. https://unstats.un.org/unsd/dnss/gp/FP-Rev2013-E.pdf [↑](#footnote-ref-7)
8. Code of Practice for Statistics, UK Statistics Authority, February 2018, (https://www.statisticsauthority.gov.uk/code-of-practice/) [↑](#footnote-ref-8)
9. https://www.statisticsauthority.gov.uk/code-of-practice/ [↑](#footnote-ref-9)