

Stocktake of the Code of Practice for Official Statistics Exposure draft

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Following an internal review of the regulatory function of the UK Statistics Authority, prompted by the findings of the 2016 Independent Review of UK Economic Statistics¹ by Professor Sir Charlie Bean, the Monitoring and Assessment Team within the Statistics Authority became known as the Office for Statistics Regulation in November 2016.

The UK Statistics Authority comprises both the Office for National Statistics, the UK's national statistical institute, and the Office for Statistics Regulation, the independent regulator for statistics in the UK.

¹ <https://www.gov.uk/government/publications/independent-review-of-uk-economic-statistics-final-report>

Acknowledgements

The Stocktake has been a collaborative exercise, and we would like to acknowledge the contribution made by those producers and users who talked to us in workshops and other meetings about their views of the Code, the members of the Steering Group who volunteered their time, colleagues and members of the GSS Good Practice Team who conducted excellent analytical research.

Foreword

The Code of Practice for Official Statistics, published in 2009, has served the public well. Its high level principles have helped support the publication of a wide range of statistics by Government bodies and it has also helped guide statistical professionals in a range of policy-making situations. It extends beyond statisticians and is available to help guide officials and advisors involved in the production of official statistics or who use those statistics. And it has supported the Authority's work to assess official statistics and award the National Statistics designation to those which meet the highest standards of trustworthiness, quality and value.

So why this review? There are two main drivers. Firstly, the landscape of information production and dissemination has changed significantly since 2009, and we wanted to take stock of how far the Code has been flexible in the face of these developments. Secondly, we feared that, for all its strengths, the Code is often perceived as a barrier or inhibitor. So we wanted to conduct a Stocktake to bring the Code out of the shadows, and highlight its value.

This Stocktake report is the result of a widespread exercise of engagement with users of the Code. It proposes a new strategic vision for the Code, based around the following insights:

- The Code should be seen as a transformational document, not a checklist, and should be built around the high level outcomes it enables of trustworthiness, quality and value
- The Code should continue to apply to official statistics, and the Authority's Office for Statistics Regulation should focus on reviewing how official statistics comply with the Code
- There is a wide range of other information published by Government that is not, and should not be, official statistics. Yet the high level principles of the Code – of transparency, equality of access, and integrity – can apply more widely, and we encourage those who disseminate information to look to the Code as a broad guide to good practice
- We therefore propose that the Code makes a clearer distinction between high level principles – with which a range of organisations can comply on a voluntary basis – and the core practices which apply to official statistics.

This Stocktake proposes a vision for a refreshed Code. But it is not the end of the story – far from it. To flesh out these proposals will require careful thought, both in terms of the content of the Code and in its application, and we will do this in a very consultative manner. This report exposes our thinking. As an exposure draft, we invite comments and observations from all of our stakeholders: policymakers, statisticians and users of statistics. And any specific changes to the content of the Code will of course be subject to a more formal consultation during 2017.

Above all, this Stocktake seeks to change the emphasis of the Code from a series of specific practices to a more general aspiration – of trustworthy, high quality and high value statistics. As part of the launch of the Office for Statistics Regulation’s work, we will consider how we can bring out examples of this spirit in practice in an annual review of the state of statistics.

We want to advocate a refreshed Code to a wide range of users, and we would welcome any comments about the findings of this Stocktake.

Ed Humpherson, 14 December 2016

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1 Summary and Recommendations

The nature of the Stocktake

- 1.1 The Code of Practice for Official Statistics² was published in January 2009, following a public consultation in the preceding autumn. Since then it has been the basis of government statisticians' professional standards and the bedrock for the UK Statistics Authority's regulatory judgments – most notably the Authority's statutory Assessment function carried out by the Office for Statistics Regulation³, and its public statements on the use of statistics in the public domain ("casework"). It has proved sufficiently flexible to allow the Authority and statistical producers to apply it in a wide range of statistical contexts. The Code emphasises in particular the importance of user engagement and of clear explanation of the messages contained in sets of statistics: there has been clear evidence of improvement in these areas.
- 1.2 The Code is consistent with the United Nations Fundamental Principles of Official Statistics⁴ and, in turn, with the European Statistics Code of Practice⁵.
- 1.3 The Stocktake of the Code of Practice was launched in late 2015 - building on prior work to develop standards and guidance in new areas such as 'Open Data', and following widespread discussion at the Authority's Regulation Committee and within the Authority's Office for Statistics Regulation - with the aim of raising the profile and enhancing the value of the Code. The Stocktake was carried out by the Office for Statistics Regulation on behalf of the Authority.
- 1.4 The Stocktake, overseen by a Steering Group (see Annex B) chaired by Dr Levy, a non-executive director of the Authority, comprised three distinct stages:
 - Consultation – via an online survey which elicited over 600 responses – supplemented by widespread engagement with producers, users, and other stakeholders
 - Analysis of the survey results, workshop discussions, and detailed desk-research
 - Development and reporting of Recommendations.

² <https://www.statisticsauthority.gov.uk/monitoring-and-assessment/code-of-practice>

³ The Office for Statistics Regulation is the regulatory arm of the UK Statistics Authority (taking over the role of the Monitoring and Assessment team).

<https://www.statistics.gov.uk/monitoring-and-assessment/>

⁴ https://www.statisticsauthority.gov.uk/wp-content/uploads/2015/12/images-unfundamentalprinciples_tcm97-18281.pdf

⁵ <https://www.statisticsauthority.gov.uk/monitoring-and-assessment/code-of-practice>

- 1.5 The Stocktake was conducted with an emphasis on engagement. This has itself contributed to raising the profile of the Code and has kept the statistical and user communities engaged in (and contributing to) our thinking about how we propose to increase the value of the Code in future. During the Code Stocktake, substantial effort was devoted to communication – including hosting over 30 workshops or presentations across the UK and over 35 bilateral meetings (see Annex C). The Authority’s website was regularly updated with developments from the Stocktake⁶, which were cross-posted on other sites to increase awareness and which encouraged further bilateral discussion with users.
- 1.6 The Stocktake activity was strategic in nature, and this report reflects the particular focus on establishing a long-term vision for the development of the Code of Practice. While the Stocktake began as a free-standing exercise, from May 2016 it was taken forwards in the wider context of the development of proposals stimulated by Recommendation 24 of the Bean Review⁷.
- 1.7 As the Office for Statistics Regulation, with responsibility for setting the standards official statistics must meet, we will be responsible for the implementation of the recommendations in this report.

Emerging themes, and Recommendations

- 1.8 The precursor to these recommendations was a set of Emerging Themes. These were outlined through the analysis of our engagement activity and shaped by an internal team workshop which discussed the results of a suite of analytical work packages (see Annex D) to define the rationale, assess the evidence and develop next steps – all targeted at the strategic goal of increasing the public value of official statistics (OS).

⁶ For example <https://www.statisticsauthority.gov.uk/monitoring-and-assessment/code-of-practice/code-of-practice-stock-take-latest-news>

⁷ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/507081/2904_936_Bean_Review_Web_Accessible.pdf. Recommendation 24: The UKSA regulatory function should be subsumed within a new Independent Regulation and Evaluation Office (IREO) charged with assessing the trustworthiness and quality of official statistics as well as ONS’s effectiveness...

- 1.9 Based on the work of the Code Stocktake to date, the Office for Statistics Regulation concludes that the high level principles of the Code are robust: they, and the majority of the detailed practices in the Code, have stood the test of time well. However, the Code needs to be updated to reflect the changing channels for the distribution of statistics, the increasing sophistication of users, and the capabilities presented by new technology. We also propose changes to the ways that we apply the Code to enhance the public value of statistics. This is an optimum time to develop and launch a refreshed Code, with an engaged community and alongside our recent launch as the Office for Statistics Regulation.
- 1.10 During the Stocktake different stakeholders' experiences of the Code were explored. Some commented on aspects of the Code itself – that is, the content of the Code; others, perhaps reflecting our focus on the 'lived experience' of the Code, raised different aspects of the way in which we have used the Code in making our regulatory judgments – that is, the application of the Code.
- 1.11 Structuring the report in terms of content/application was considered, but it was felt to be limiting for the main body of the report. However the findings and recommendations have been separated into those which relate to content (including supporting material) and those which relate to application.
- 1.12 The thirteen recommendations of the Code Stocktake are set out below.

The content and scope (C) of the Code

Finding 1: National Statistics status is conferred on those statistics which meet the highest standards of Trustworthiness, Quality and Public Value. Those we spoke to as part of the Stocktake were supportive of the philosophy of Trustworthiness, Quality and Public Value, and felt that a clear and consistent articulation of these attributes through the Code would help to enhance the Code.

Recommendation C1:

- a) The elements of the National Statistics brand - Trustworthiness, Quality and Public Value (TQV) - should be explained and emphasised more distinctly in the Code (paragraphs 3.3-3.5).
- b) The Code should be restructured so that it is clear that compliance with the Code supports statistics that achieve the outcomes of trustworthiness, quality and public value (paragraphs 3.3-3.5).
- c) The Code should provide more explicit support for Heads of Profession in Departments in raising any concerns they have relating to the trustworthiness, quality and public value of their statistics (paragraph 3.4 & 3.11)

Finding 2: There was widespread support for our proposal that the presentation of the Code should be more transformational, and have even less of a sense of providing a checklist for producer and regulator to follow.

Recommendation C2:

- a) The Code should be more overtly outcome- and principle-based (and less practice/rule-based).
- b) The Code should give greater prominence to an articulation of Trustworthiness, Quality and Public Value, and proportionately less prominence to (for example, by annexing/linking) the detailed practices (paragraphs 3.6-3.8).

Finding 3: The Code currently encourages producers to consider statistical series in isolation from related statistics that describe similar or complementary phenomena. This tendency can appear to give insufficient weight to the coherence of statistics at a broader, more systemic level.

Recommendation C3: The Code should include practices that explicitly support the concept of public value, particularly the importance of ensuring coherence within 'families' of statistics and across statistical domains (paragraph 3.74).

Finding 4: Heads of Profession within Departments play a crucial role in supporting the publication of statistics of high public value, making final decisions on the content of statistical releases. However, Departments publish a wide range of other types of information, including management information and research, and in some cases the public value of this information might be enhanced if it complied more fully with the Code. Working with their Department's policy and analysis function, Heads of Profession can help ensure that this wider body of information is released in a transparent and trustworthy manner.

Recommendation C4: The Code currently expects Heads of Profession to play a key role in deciding how statistics are published by their Departments. The Code should also emphasise a clearer responsibility for advising about what new statistics should be published. The Code should also recognise the important role played by Heads of Profession in advising about how Departments might publish a wider range of numerical outputs (paragraph 3.11).

Finding 5: To meet the Authority's objective of safeguarding official statistics that serve the public good, the Authority and the Office for Statistics Regulation, as the Authority's regulatory arm, has increasingly commented on the public use of other numerical information from the perspective of the Code. It has done so because concerns about this sort of information can spill over to affect perceptions of official statistics and users cannot be expected to distinguish between official statistics, as defined by Departments, and other types of numerical information published by Government. For other types of numerical information such as management information and research, there are benefits in terms of public confidence in compliance with the core principles of the Code, particularly relating to transparent publication. The Bean Review⁸ recommended that "high-profile releases of management information by departments should be treated as official statistics and be compliant with the Code".

Recommendation C5:

- a) The formal scope of the Code should continue to be official statistics (as defined by the Statistics and Registration Service Act 2007). Formal regulation, of compliance with the new Code – through assessment – would continue to focus on official statistics produced by public bodies.
- b) The Code should recognise that Government publishes a wider range of outputs that might be commonly understood by the public as 'statistical information' – aggregated statistics and underlying data. The Code should advocate to Government departments the benefits of wider applicability of the core principles around transparency to other categories of numerical information (produced by official bodies) and also recognise the potential application of these principles to statistics and other numerical information produced by non-official bodies.
- c) To reflect this emphasis on wider applicability of core principles, the Code could be renamed as the "Code of Practice for Statistics", in line with the Statistics and Registration Act 2007.

⁸ See Recommendation 18 -

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/507081/2904936_Bean_Review_Web_Accessible.pdf: "the government should delegate to UKSA the power to decide that a piece of data be classified as an official statistic; high-profile releases of management information by departments should be treated as official statistics and be compliant with the Code; UKSA should decide whether official statistics should be assessed against the Code for the purposes of National Statistic status"

- d) In some cases this flexible and voluntary approach should be supplemented by the Authority formally recognising specific Government information released as official statistics, in line with the Bean Review recommendation. The Code should explain the criteria the Authority will adopt to determine when and how it will recognise Government outputs as official statistics, in line with the Bean Review and building on the existing National Statistician's guidance (paragraph 3.53).

Finding 6: During the course of the Stocktake it became clear that some producers see the Code as a barrier to improving the ways in which they disseminate their statistics and statistical data. This is a perception that the Office for Statistics Regulation is keen to dispel by improving the content of the Code.

Recommendation C6:

- a) The Code should stimulate innovation and creativity in the exploitation of data and technology, and the development of statistical products and visualisations that users want (paragraphs 3.16-3.19).
- b) The Code should support experimentation in methods through a clearer articulation of the purpose and benefits of experimental statistics (paragraph 3.31).
- c) It should be accompanied by updateable standards and guidance for the compilation, use and release of data, and examples of best practice (paragraphs 3.20-3.21).

Finding 7: The Code emphasises the importance of using sound methods and explaining the quality of statistics. The Office for Statistics Regulation thinks that it should be enhanced - to emphasise the importance of embracing new and emerging methodologies, and to support deeper reviews of method. This enhancement will support producers in improving and explaining the quality of their statistics for the benefit of guiding users on how far they can rely on statistics. This is likely to require the addition of new practices in the Code, as well as the development of supporting material which might be readily updated over time.

Recommendation C7: The Code should be accompanied by updateable standards and guidance about aspects of methods and quality; these are likely to need to be rooted in new practices.

For methods this should include:

- the importance of using sound methods
- the importance of methodological review and innovation to ensure that methods keep pace with changes in society

- the merits of trialling new methodologies
- agreed standards for documenting methods and methodological choices accessibly
- the need to engage with users and other experts about methods used.

In relation to quality, the Code should:

- be more explicit about the need for effective and proportionate quality management and assurance arrangements
- be accompanied by standards for reporting the various aspects of the quality of statistics in ways that help users to understand the strengths and limitations of the statistics in the context of their potential use (paragraph 3.39).

The Code should make explicit the responsibility of statistical Heads of Profession to continuously improve the statistics produced by their organisations (paragraph 3.11).

Finding 8: The value and application of the Code is currently limited by the way it is presented as a stand-alone PDF. It could be enhanced by improving its presentation, while retaining the existing hard copy/pdf format which is valued particularly by producers.

Recommendation C8:

- a) The Office for Statistics Regulation should support producers and users by releasing an interactive Code that:
 - explains the rationale for each specific practice
 - provides examples of ways in which different organisations have complied with the principles and practices of the Code
 - links to standards and guidance
 - links to a catalogue of case studies that illustrate (for example) the proportional application of the Code (see Recommendation A3); and
 - supports the proposed approach to voluntary compliance (see Recommendation A4).
- b) This should be supplemented by alternative presentations of the Code that make it more accessible to stakeholders beyond the statistical production team (paragraph 3.45).

The regulatory application (A) of the Code

Finding 9: It is hard to argue that each of the current 800 sets of National Statistics are all of equally high public value – many have important but ‘niche’ uses. And there is considerable support for the proposition that the Office for Statistics Regulation should apply the Code more systemically than previously and move away from any sense that Assessment is a checklist exercise, in favour of a demonstrable focus on public value.

Recommendation A1: The Office for Statistics Regulation should work collaboratively with producers of official statistics to explore opportunities for clarifying the use of the National Statistics designation within their overall portfolio of statistics. This exploration could focus on the most valuable statistics, perhaps by reviewing the uses made of them and interactions between ‘families’ of statistics - that is, groups of statistics that address the same policy or societal questions (paragraph 3.73).

Finding 10: Many sets of statistics have been designated as NS for several years, and are unlikely to be re-assessed. Those we spoke to as part of the Stocktake encouraged exploration of the idea that designation – the immediate outcome of the application of the Code though assessment – should be time-limited, though it was recognised that we would need to be mindful of the Office’s future resource position.

Recommendation A2: The Office for Statistics Regulation should explore the feasibility of a defined shelf-life for the National Statistics designation – which could be different for different sets of statistics (paragraph 3.77).

Finding 11: The Office for Statistics Regulation recognises that different elements of the Code are relevant to different types of numerical information, and in particular that higher standards apply to official statistics than, for example, to management information. Producers of official statistics should comply with the Code; those responsible for other numerical information would be encouraged to explain how they comply. However the Office for Statistics Regulation has not published its position on which elements of the Code ought to apply to different types of information and therefore how compliance should be explained by those publishing the information. By doing so we will help producers of numerical information to understand the situations in which the Office for Statistics Regulation might intervene.

Recommendation A3: The Office for Statistics Regulation should clarify its expectations around proportionality – to help organisations decide how they should comply with the Code in relation to different types of numerical information being published for different purposes. While this guidance should be rooted in the enhancement of the public value of numerical information, it should not be unduly prescriptive. We regard two aspects of trustworthiness - equality of access, and the protection of confidentiality – as fundamental (paragraph 3.55).

Finding 12: Organisations outside government produce information which is used in the compilation of official statistics, or otherwise has the potential to enhance debate – and a number are keen to comply with the Code. We consider that such an ambition has the potential to raise standards and to enhance the profile of the Code.

Recommendation A4: The Office for Statistics Regulation should formalise and implement a proposition for voluntary compliance with the Code to support the extension of the reach of the Code. Organisations which produce, for example, data sources underpinning the Sustainable Development Indicators or other numerical information would be able to commit to compliance with the Code and to publish information about the extent to which they (voluntarily) comply with the Code (paragraphs 3.57-3.60).

Finding 13: Recommendations C1- C8 above describe ways in which the content of the Code should be revised. Furthermore, we are aware that there are many other aspects of the Code (including release times, media engagement as well as other points of detail (Annex A)) that merit serious consideration by a wide range of stakeholders.

Recommendation A5: The Board of the UK Statistics Authority should commission the Director General for Regulation to consult widely on a new Code of Practice for Statistics, including supporting standards and guidance, and to develop an ongoing communications role that would raise and maintain its profile. Proposals for a new Code and supporting standards and guidance should not be unduly prescriptive, reflecting the importance of flexibility in the application of the Code (paragraph 4.4).

- 1.13 The rationale for these recommendations is set out in the key findings section of the report.

2 Introduction

Context

- 2.1 The UK official statistics system is overseen by the UK Statistics Authority (the Authority). The Authority was established under the Statistics and Registration Act 2007 with the statutory objective of promoting and safeguarding the production and publication of official statistics that 'serve the public good'⁹.
- 2.2 The Authority has oversight of the following three principle elements of the UK official statistics system¹⁰:
- The Government Statistical Service (GSS) - a decentralised group of public bodies across the UK, including Government departments and components of the devolved administrations, responsible for producing a range of statistics. The GSS is led by the National Statistician.
 - Office for National Statistics (ONS) – the UK's National Statistics Institute and the largest producer of official statistics.
 - Office for Statistics Regulation – the regulatory arm of Authority which is responsible for ensuring that statistics are produced and disseminated in the public interest and meet the highest standards of trustworthiness, quality and public value. The Office for Statistics Regulation sets the standards producers of statistics in the GSS (including ONS) must meet through the Code of Practice for Official Statistics and assesses compliance against this Code.
- 2.3 Reporting to the National Statistician are Statistical Heads of Profession. Statistical Head of Profession are responsible for overseeing their specific organisation's statistical functions, including maintaining public confidence in the official statistics and National Statistics (NS) produced by their organisation¹¹.

⁹ <http://www.legislation.gov.uk/ukpga/2007/18/contents>

¹⁰ <https://www.statisticsauthority.gov.uk/about-the-authority/what-we-do/>

¹¹ <https://gss.civilservice.gov.uk/about/governance-and-structure/roles-responsibilities-head-profession/>

Background to the Code

- 2.4 The Code of Practice for Official Statistics (the Code)¹² was published by the Authority in January 2009, following a public consultation in the preceding autumn. Since then it has been the basis of government statisticians' professional standards and the bedrock for the Authority's regulatory judgments – most notably the Authority's statutory Assessment function carried out by the Office for Statistics Regulation¹³, and its public statements on the use of statistics in the public domain ("casework") – and it has proved sufficiently flexible to allow the Authority and statistical producers to apply it in a wide range of statistical contexts.
- 2.5 The legal basis for the Code is set out in the Statistics and Registration Act 2007¹⁴, which requires the UK Statistics Authority to prepare and publish a Code of Practice and to assess compliance against it. This role is performed by the Office for Statistics Regulation.
- 2.6 The Statistics and Registration Act 2007 states that the Code applies to all UK bodies that produce official statistics. Also that compliance with the Code is a statutory requirement on bodies that produce statistics that are designated as National Statistics through the Office for Statistics Regulation's Assessment process. The Code is consistent with the United Nations Fundamental Principles of Official Statistics¹⁵ and, in turn, with the European Statistics Code of Practice¹⁶.

Code Stocktake aims and approach

- 2.7 The Stocktake of the Code of Practice was launched in late 2015 - building on prior work to develop standards and guidance in new areas such as 'Open Data', and following widespread discussion at the Authority's Regulation Committee and within the UK Statistics Authority's Office for Statistics Regulation - with the aim of raising the profile and enhancing the value of the Code. The Stocktake was carried out by the Office for Statistics Regulation on behalf of the Authority.
- 2.8 The Stocktake, overseen by a Steering Group (see Annex B) chaired by Dr Levy, a non-executive director of the Authority, comprised three distinct stages:

¹² <https://www.statisticsauthority.gov.uk/monitoring-and-assessment/code-of-practice>

¹³ The Office for Statistics Regulation is the regulatory arm of the UK Statistics Authority (taking over the role of the Monitoring and Assessment team).

<https://www.statistics.gov.uk/monitoring-and-assessment/>

¹⁴ <http://www.legislation.gov.uk/ukpga/2007/18/contents>

¹⁵ https://www.statisticsauthority.gov.uk/wp-content/uploads/2015/12/images-unfundamentalprinciples_tcm97-18281.pdf

¹⁶ <http://ec.europa.eu/eurostat/web/quality/european-statistics-code-of-practice>

- Consultation – via an online survey which elicited over 600 responses – supplemented by widespread engagement with producers, users, and other stakeholders
- Analysis of the survey results, workshop discussions, and detailed desk-research
- Development and reporting of Recommendations.

2.9 The Stocktake was conducted with an emphasis on engagement. This has itself contributed to raising the profile of the Code and has kept the statistical and user communities engaged in (and contributing to) our thinking about how we propose to increase the value of the Code in future. The Office for Statistics Regulation has devoted substantial effort to communication – including hosting over 30 workshops or presentations across the UK and over 35 bilateral meetings (see Annex C). And the Authority’s website was regularly updated¹⁷ with developments from the Stocktake, which were cross-posted on other sites to increase awareness and which encouraged further bilateral discussion with users.

Report structure

2.10 The key findings of the Code Stocktake are presented in Section 3: Main Findings and are structured around:

- National Statistics: Trustworthiness, Quality and Public Value
- Principle-based approach to the Code
- Enhancing Public Value by strengthening the role of Statistical Heads of Professions’ role
- ‘Digital’ and Data
- Quality and methods
- Presentation of the Code and supporting information
- Boundary and scope
- Statistical ecosystems
- The National Statistics ‘estate’
- The designation period.

¹⁷ For example <https://www.statisticsauthority.gov.uk/monitoring-and-assessment/code-of-practice/code-of-practice-stock-take-latest-news>

2.11 Following this, Section 4 sets out concluding remarks and proposals for next steps.

3 Main Findings

National Statistics: Trustworthiness, Quality and Public Value

- 3.1 The National Statistics (NS) designation represents a promise, evidenced by a formal process of Assessment against the Code of Practice that the statistics are:
- trustworthy - because they are produced by statisticians who are acting with professional integrity and objectivity, and are not swayed by any other interests
 - high quality - because the data are sound and well understood, methodologies appropriate, presentation effective, and strengths and limitations in relation to use clearly explained
 - of high public value - because they are relevant, going beyond merely counting things, to help decision makers to answer the big questions facing them and the public to understand what is going on in the world.
- 3.2 The brand of National Statistics is therefore linked closely to the Code of Practice itself. As part of the online survey (see paragraph 1.4) we asked respondents to summarise the Code in a single word – the top ten most frequent responses were: Essential, Professionalism, Integrity, Rules, Guidelines, Useful, Standards, Framework, Transparency, and Fundamental. This further demonstrates the clear alignment between the ways in which people think of the Code and the elements of the National Statistics brand.
- 3.3 Most of the people that we have spoken to as part of the Stocktake have a clear sense of what is meant by trustworthiness and quality but are less clear about what we mean by public value, and about which elements of the Code support our considerations of 'public value'. If 'public value' is to be articulated as a key element of statistical production then we must be transparent with producers and users about what it should mean in practice, what extensions to the Code might be required to capture 'public value', and how our application of a 'public value test' might impact on NS.

- 3.4 Additionally, the ownership of the NS brand is not always well understood. While the Authority Board is the statutory owner of the NS brand, ownership is delegated to the Regulation Committee and the power to give and take away the NS designation sits, operationally, with the Director General for Regulation. An implicit extension of 'ownership' happens at the point of designation of a NS, with an expectation that the producer will share responsibility for the brand and so safeguard its reputation for the period of time the statistics carry the NS designation. Statistical producers should provide a service to the users of the statistics by maintaining the standards of the statistics and keeping trust, quality and public value at the heart of what they do.
- 3.5 National Statistics status is conferred on those statistics which meet the highest standards of Trustworthiness, Quality and Public Value. Those we spoke to as part of the Stocktake were supportive of the philosophy of Trustworthiness, Quality and Public Value, and felt that a clear and consistent articulation of these attributes through the Code would help to enhance the Code.

Recommendation C1:

- a) The elements of the National Statistics brand - Trustworthiness, Quality and Public Value (TQV) - should be explained and emphasised more distinctly in the Code.
- b) The Code should be restructured so that it is clear that compliance with the Code supports statistics that achieve the outcomes of trustworthiness, quality and public value.
- c) The Code should provide more explicit support for Heads of Profession in Departments in raising any concerns they have relating to the trustworthiness, quality and public value of their statistics.

Principle-based approach to the Code

- 3.6 The Code was first launched in 2009, at which point both the Government Statistical Service (GSS), in its understanding of the Code, and the Regulation function, were in their infancy. Since 2009, and over 300 assessments later, there has been a growth in maturity on both sides, and a widespread view that the Code (as regulated via Assessment) can appear to be something of a checklist and not very transformational. As part of the Stocktake engagement activity we discussed whether there was an appetite for a wholesale change in approach - for example dropping the Code's practices entirely in favour of a shorter Code that sets out very high-level principles and which would therefore allow statistical professionals more flexibility in deciding how to comply with the Code. However, there was resistance to this proposal as the Code's practices are regarded as extremely important in helping to shape decision-making.
- 3.7 Several people who we spoke to suggested a halfway house - that there might be scope for a more principles-based *presentation* of the Code and hence greater use of a principle-based approach to Assessment. This more principles-based presentation of the Code would:
- Offer an opportunity to address the perception that some aspects of the Code (and Assessment) are inefficient and unduly bureaucratic
 - Seem appropriate to encourage positive behaviour, enabling us to support innovation and creation
 - Be more obviously relevant to professions other than statisticians across government (and beyond) who also publish statistical information
 - Help to ensure that the Code will continue to be fit-for-purpose in the medium term
 - Be supported by detailed practices, and additional standards and guidance, to support the interpretation and implementation of the Code. The standards and guidance could be updated more readily and regularly than the Code itself; they should be hosted together and it should be clear who owns and reviews them. The standards and guidance should be explicit about, for example, the interaction between the Code and national/European information law¹⁸.

¹⁸ The Code refers to the need to 'follow all statutory obligations and internationally endorsed guidelines' implying the Data Protection Act, the Freedom of Information Act, and European Data Protection Regulations - but does not provide further details on what is required. We have been told that there is a lack of clarity about how to interpret seemingly conflicting standards.

- 3.8 Ultimately there was widespread support for our proposal that the presentation of the Code should be more transformational, and have even less of a sense of providing a checklist for producer and regulator to follow.

Recommendation C2:

- a) The Code should be more overtly outcome- and principle-based (and less practice/rule-based).
- b) The Code should give greater prominence to an articulation of Trustworthiness, Quality and Public Value, and proportionately less prominence to (for example, by annexing/linking) the detailed practices.

Enhancing Public Value by strengthening the role of Statistical Heads of Profession

- 3.9 We were told that the Code is a powerful tool for supporting professional independence in ministerial departments, for example when ministers might want to exert pressure on the content or timing of statistical releases. However we have also heard a view that statisticians' professional independence is restricted by the necessity to gain ministerial approval for the introduction of new statistical releases. This reflects ministers' accountability for the use of resources, which is a well-established principle of public administration. At the same time it reflects the long shadow of the Rayner Doctrine¹⁹, which the introduction of the Statistics Authority and its "public good" objective was intended to replace.

¹⁹ Early in the 1980s, a review was undertaken by Derek Rayner, (a leading retail sector manager) at the request of the then Prime Minister Margaret Thatcher. "The Rayner Doctrine", as it became known, stated that the objective of the Government's statistical service should be that information should not be collected primarily for publication - it should be collected primarily because the Government needed it for its own business. This doctrine was at odds with professional advice and international opinion and was progressively abandoned over the following ten years - but its influence can be seen to the current day. More recently, there has been wide acceptance that statistics play a vital role across society – a view influenced by, and echoing, Principle 1 of the UN Fundamental Principles.

- 3.10 Statisticians in government departments have a dual responsibility – to meet the needs of policy and operational decision-makers, and to serve the public good. In principle there is no conflict between these roles, but we have heard that in some cases there can be a tension – for example, in decisions about which statistics or statistical analysis should be published and when and how ongoing statistical products are reviewed and improved. Where these questions arise, Statistical Heads of Profession and statistical producers generally discuss them with us in the Office for Statistical Regulation, with the National Statistician or with the GSS Good Practice Team, who are responsible for identifying, promoting and sharing good practice across the GSS. For example, one question raised during the Stocktake was about the release of statistical press notices – as opposed to ‘policy’ press notices – and we were able to clarify the Office for Statistics Regulation’s view that statistical press notices are part and parcel of the release of a new set of statistics, and hence decisions about whether to issue them (as well as their content) are the sole responsibility of the Head of Profession for Statistics within a Department.
- 3.11 Ultimately, Heads of Profession within Departments play a crucial role in supporting the publication of statistics of high public value, making final decisions on the content of statistical releases. However, Departments publish a wide range of other types of information, including management information and research, and in some cases the public value of this information might be enhanced if it complied more fully with the Code. Working with their Department’s policy and analysis function, Heads of Profession can help ensure that this wider body of information is released in a transparent and trustworthy manner.

Recommendation C4:

The Code currently expects Heads of Profession to play a key role on how statistics are published by their Departments. The Code should also emphasise a clearer responsibility for advising on what new statistics should be published. The Code should also recognise the important role played by Heads of Profession in advising on how Departments publish a wider range of numerical outputs.

'Digital' and Data

- 3.12 The Code was published in January 2009, in an era when most statistical information was disseminated in pdf bulletins and data tables. Since then the Office for Statistics Regulation has interpreted the Code in order to apply its principles to data visualisation and infographics (some 'published' on social media), and online/interactive databases/dashboards, where data can be updated readily and regularly (but where well-established concepts such as pre-announced release times and 'revisions' have little practical meaning²⁰).
- 3.13 Government holds a large amount of data which have the potential to describe the state of our society. The current data revolution – the emergence of new technology and techniques to use these data – sets the trajectory for a society which uses data more in products where the unit-level data are not readily visible but which enable easy interrogation. The increased re-use of data and a growing diversity of statistical products will ultimately increase the value of government data to the public.
- 3.14 While many government departments are investing in digital statistical products, they are at different stages of development. New statistical products are often expensive in terms of initiation and in building capability across teams; this, coupled with pressure on budgets, has challenged the development of products beyond the traditional designs in many departments. Through the Code we want to support and stimulate an increasing variety of new dissemination techniques, alongside traditional approaches to dissemination – recognising that this will require producers of statistics to ensure that their knowledge and skills are up-to-date.

²⁰ Although this could be addressed by version control arrangements, as in the digital world it is easy to make copies, to store copies and to provide different versions from one place.

- 3.15 The UK government promotes the transparency of numerical information used in decision making. The supporting Open Data White paper – Unleashing The Potential²¹ - published in 2012 has led to the release of large amounts of data in Open Data formats. The Office for Statistics Regulation has previously used the Berners-Lee²² five star scale to comment (in Assessment reports) on UK Government statisticians’ publication of information in Open Data formats, although this is a broad standard – there are some alternatives²³ - and it is not referred to in the Code. Best practice standards to develop and produce Open Data releases are still in development; statistical producers commented during the Code Stocktake on the need for more guidance to support the development of Open Data products.
- 3.16 As a regulator and an advocate of the importance of statistical information in decision making we strongly support the development of and adherence to standards – we see this as essential to enhancing public confidence and to encouraging innovation: it is often by adhering to standards that innovation can occur because the data can be used more easily.
- 3.17 Producers increasingly disseminate high level statistics through social media and statistical press notices. This dissemination activity can be effective in raising awareness and enhancing accessibility, though some producers did raise some concerns about the misuse and pitfalls of using social media.
- 3.18 The Code should continue to ensure the production of high quality statistics, regardless of the data source or method of production. It should not limit the scope of statistical production and dissemination but needs to address changes in the way that statistics are produced and in how the public consumes statistical information. During the course of the Stocktake it became clear that some producers see the Code as a barrier to improving the ways in which they disseminate their statistics and statistical data. This is a perception that we are keen to dispel by improving the content and presentation of the Code.
- 3.19 This could be achieved by emphasising high level principles or including new, relevant practices in the Code. The emphasis would be on the statistical producer demonstrating how they meet user needs through the dissemination of a range of statistical products and supporting documentation. In this way we would continue to support statistical producers in creating traditional statistical products, support creativity and innovation, and ensure that the Code is responsive to future developments.

²¹ <https://www.gov.uk/government/publications/open-data-white-paper-unleashing-the-potential>

²² <http://5stardata.info/en/>

²³ See for example Full Fact: <https://fullfact.org/news/make-official-figures-more-useful-and-accessible-say-mps/>. More generally, W3C as an international body for web standards - <https://www.w3.org/standards/semanticweb/data>

- 3.20 Alongside this we envisage adopting standards and guidance to support best practice (written by us²⁴, or by other experts (which we could endorse)), which would evolve to keep pace with best practice. We have concluded that additional standards are necessary to support statistical dissemination in these areas. Some of this guidance may exist across the GSS or externally. Other guidance could be developed by us, or through procurement of a subject matter expert.
- 3.21 For the Code to remain relevant, we will need to keep abreast of evolving dissemination techniques, and to be able to distinguish high and low quality statistical products consistently. As part of this we are likely to be leading work on standards relating to new statistical developments and determining acceptable standards for the underlying quality of data in these new products, particularly when data come from a source external to government and when multiple sources of data are brought together. To achieve these aims we will consider whether a Digital Advisory Group comprising GSS and external experts might help us keep abreast of developments – in particular to help us identify where standards and guidance need to evolve. We will also seek out appropriate collaborations with groups such as the ONS’ Quality Centre, the GSS Good Practice Team, relevant GSS working groups, and experts external to government.

Recommendation C6 (parts ‘a’ and ‘c’):

- a) The Code should stimulate innovation and creativity in the exploitation of data and technology, and the development of statistical products and visualisations that users want.
- c) It should be accompanied by updateable standards and guidance for the compilation, use and release of data, and examples of best practice.

Quality and methods

Quality: in particular, ‘accuracy’ versus ‘timeliness’ and ‘coherence’

- 3.22 The Code approaches the subject of ‘quality’ largely by emphasising the importance of published documentation and reporting on the strengths and limitations of a set of statistics in relation to their use: the logic is that this supports users in their decision-making.

²⁴ For example, prior to the initiation of the Stocktake we started work on a draft Open Data standard. This compares the common open data guidelines against the current Code, justifying what assurances producers would need to supply during the Assessment of an open data product.

- 3.23 The Code also requires statistics to be produced to a level of quality that meets users' needs. This is not straightforward, given that statistical quality is multi-dimensional²⁵. One of the classic trade-offs is between accuracy and timeliness – but the Code says little about this other than “release statistical reports as soon as they are judged ready”. During the Stocktake, we were told that the absence of guidance about how to make judgments about ‘readiness’ exacerbates the MI issues described in the ‘Boundary and scope’ sub-section (paragraphs 3.46-3.61) and can make statisticians seem ponderous and bureaucratic. Guidance about ‘readiness’ should clarify the need to take a holistic approach, balancing the needs of users and of different parts of the statistical production process (such as the production of the numbers, the development of interpretive text and charts, quality assurance, and digital presentation).
- 3.24 Arguably one of the main ways in which statistical work can add value (to simple counts of observations) is by drawing upon multiple sources of information in order to present a coherent picture. The Code mentions ‘coherence with other statistical products’, but does not talk about coherence within a set of statistics – for example, between estimates derived from surveys and from administrative sources. This is an omission which should be addressed as we focus increasingly on public value.
- 3.25 Statistics cannot be of public value if they are not trustworthy and of high quality. The need for statistics to be relevant, accurate and reliable means, in essence, that we are confident that the patterns shown by the statistics reflect real-world phenomena, and are not artifacts of the way that the statistics have been assembled. These factors also need to take into consideration that without being accessible or timely, statistics fail to add as much public value as they might otherwise. Assured, sound methods are needed to establish a bedrock for statistical production. Quality assurance procedures need to be appropriate to identify and deal with erroneous data that may materially affect the statistics in such a way that they do not reflect real-world phenomena. And of course, producer bodies need to describe the quality of their statistics in ways that promote beneficial use, and prevent inappropriate use.

²⁵ The five quality dimensions of the European Statistical System (ESS) are: Relevance; Accuracy and Reliability; Timeliness and Punctuality; Accessibility and Clarity; and Coherence and Comparability

Embracing new and emerging methodologies

- 3.26 Since the Code was published in 2009 there have been developments both in the use of data and in methodologies to support more varied data use. The capability to link two or more data sets using common identifiers increases the inferential power of the resultant data set and expands the reuse potential of the original data sets, which are often administrative sources. Linked data will be used to develop population estimates to reduce the response burden on UK residents for the 2021 Census and is being used to link Further Education attainment to resultant salary to understand the impact of qualifications on earnings across England and Wales.
- 3.27 While the Code encourages the use and re-use of administrative data for statistical purposes, it does not explicitly address the use of data from sources outside government, or data linkage techniques to join multiple data sets. In addition, arranging data sharing agreements between government departments has traditionally been a lengthy process and as such data linkage is used relatively infrequently in the production of official statistics.
- 3.28 The current development of data sharing legislation²⁶ (in the Digital Economy Bill) and investment in data linkage establishments through the Administrative Data Research Network²⁷ could make data sharing easier and hence lead to greater data sharing activity by statistical producers. With this the analytical power (and hence the value) of data could be increased substantially across government, and the costs of surveys and the survey burden could be reduced. The challenge will then be to increase the accuracy of the linkage and the quality of the resultant data set.
- 3.29 Potential new data sources have emerged due to increases in processing capability. Big Data sets are significantly larger in terms of size and complexity than traditional data sets. The use of Big Data is thought to be able to add unique inference to a data set, and the ability to update this data in real time or short time intervals has wide, currently unexplored, potential. Big Data is currently being trialed for use in economic statistics using data scraped from supermarkets' websites to estimate price changes.

²⁶ <http://datasharing.org.uk/>

²⁷ <https://adm.ac.uk/>

- 3.30 Whilst Big Data has considerable potential to supplement existing data sources it also presents challenges, largely in the storage, accuracy, analysis, statistical disclosure control and visualisation of the product. In particular, compared to traditional statistical production, Big Data is difficult to replicate for a given time period and thus the development of longitudinal data sets based solely on Big Data may not be possible. Whilst the utility of Big Data to official statistics is not fully understood, its potential is recognised. Again, the emphasis on the production of high quality products, coupled with new, developing methodologies makes the adoption of these processes necessarily iterative and it is important to keep abreast of developments across the sector.
- 3.31 The Office for Statistics Regulation recognises the potential tension between an emphasis on ‘sound methods’ and on ‘innovation’. We will continue to support producers who embrace the concept of ‘experimental statistics’ – defined in the Code²⁸ as “new official statistics undergoing evaluation. They are published in order to involve users and stakeholders in their development and as a means to build in quality at an early stage”. The use of ‘experimental statistics’ can help producers to explore the use of innovative methods which, by virtue of their novelty, have not yet become established with users – for example, the billion prices project²⁹ is an index which tracks more conventional measures of inflation, but is not identical. However, it has other merits, such as timeliness. In such an instance it is important to understand users’ views about the trade-off between the quality dimensions of accuracy and timeliness.

Recommendation C6 (part ‘b’):

- b) The Code should support experimentation in methods through a clearer articulation of the purpose and benefits of experimental statistics.

- 3.32 Several sets of ONS’s economic statistics already draw on private sector sources, and the use of private sector data is likely to increase in the next few years, especially if data sharing legislation is approved as it may give ONS specific powers to acquire private sector data to produce NS. While the Code requires producers to quality assure the data used in producing statistics, it was originally envisaged that this would apply only to public sector data and there may be challenges in quality assuring data and processing systems from outside government.

²⁸ See Principle 4 practice 5

²⁹ <http://bpp.mit.edu/>

- 3.33 In 2015 we published the Quality Assurance of Administrative Data guidance³⁰, setting out a framework to help producers to address the systemic issues identified in our Assessment of Statistics on Crime in England and Wales³¹. We have recently published guidance on ways to apply the underlying principles more broadly to other data types such as management information³².

Methods – is the Code (and the assessment regime) too superficial?

- 3.34 The Code requires the use of scientific methods, and regular methodological review. While methodological choices are normally non-controversial, there are a few sets of statistics – for example price indices – for which different methodologies are propounded by different groups of experts, and for which there is clearly no single ‘right’ method.
- 3.35 We need to ensure that the Code of Practice, its supporting guidance and standards, and its application through Assessment, are sufficient to offer appropriate reassurances to users of official statistics about their quality. This will include all aspects of methods used, quality management (including assurance) processes, statisticians’ documentation about methods and quality, and that regular reviews are undertaken. Our aim is to maximise the impact that the Code and Assessment have in enhancing the quality and public value of official statistics.
- 3.36 This desire was reinforced by the recent Bean Review, which made observations such as:

“Despite recent progress, greater emphasis on quality issues – in their broadest sense – is needed. The Review team was told repeatedly by producers of statistics that the current assessment process did not fully cover all dimensions of ‘quality’, as described in the five dimensions contained in the ESS.”

and

“Looking forward then, it seems clear that a further strengthening of emphasis on assessing quality – in its broadest sense – is called for.”

³⁰ <https://www.statisticsauthority.gov.uk/monitoring-and-assessment/monitoring/administrative-data-and-official-statistics/>

³¹ <https://www.statisticsauthority.gov.uk/publication/statistics-on-crime-in-england-and-wales>

³² <https://www.statisticsauthority.gov.uk/publication/qami-guidance/>

- 3.37 In many assessments the Office for Statistics Regulation has investigated and identified aspects of some methodological issues. Most recently, Assessment Report 322³³ covered Consumer Price Inflation including Owner Occupiers' Housing Costs (CPIH). This assessment dealt extensively with the concepts and methods that are used to produce CPIH. Our exploration of methodological and quality issues – albeit our focus was on the transparency of decision-making - was in direct response to a lack of widespread user acceptance of the index.
- 3.38 We are actively considering methods and quality issues as we develop our thinking about the role of the Office for Statistics Regulation, engaging with ONS' Quality Centre and others. Our thinking includes:
- exploring greater alignment between regulatory work and existing methodological and quality review activity
 - ensuring that the Office and the producer community have a clear understanding of the circumstances in which a methodological deep-dive might be appropriate
 - commissioning methodological input from external experts (though we would need to be mindful of the possibility that the same experts could advise both regulators and producers)
 - explicitly asking users (as part of the assessment) to raise any methodological concerns that they may have, for us to follow up with the statisticians
 - developing detailed recommendations that will lead to a fuller description of methods and quality issues in assessment reports, including changing the format of assessment reports in order to draw out quality issues more clearly.
- 3.39 The Code emphasises the importance of using sound methods, and explaining the quality of statistics. We think that it should be enhanced - to emphasise the importance of embracing new and emerging methodologies, and to support deeper methods reviews. This enhancement will support producers in improving and explaining the quality of their statistics for the benefit of guiding users on how far they can rely on statistics. This is likely to require the addition of new practices in the Code, as well as the development of supporting material which might be readily updated over time.

³³ <https://www.statisticsauthority.gov.uk/wp-content/uploads/2016/03/Assessment-Report-322-Statistics-on-Consumer-Price-Inflation-including-Owner-Occupiers-Housing-Costs.pdf>

Recommendation C7:

The Code should be accompanied by updateable standards and guidance about aspects of methods and quality; these are likely to be rooted in new practices

For methods this should include:

- the importance of using sound methods
- the importance of methodological review and innovation to ensure that methods keep pace with changes in society
- the merits of trialing new methodologies
- agreed standards for documenting methods and methodological choices accessibly
- the need to engage with users and other experts about methods used.

In relation to quality, the Code should:

- be more explicit about the need for effective and proportionate quality management and assurance arrangements
- be accompanied by standards for reporting the various aspects of the quality of statistics in ways that help users to understand the strengths and limitations of the statistics in the context of their potential use.

The Code should make explicit the responsibility of statistical Heads of Profession to continuously improve the statistics produced by their organisations.

Presentation of the Code and supporting information

- 3.40 The Code is published in pdf form, and supported by a range of (pdf) documents providing guidance and (out-of-date) examples of how producers have complied with different elements of the Code. There is an argument that the Code should be brought to life and its value enhanced by more modern dissemination techniques – while recognising that many people value having a hard copy of the Code.

- 3.41 The Code applies to organisations that produce statistics – not just to statisticians but also, for example, to communications professionals. However it does not have a high profile. Some statisticians are unaware of its existence, or they use it only when their statistics are undergoing assessment. Many non-statisticians in government (policy professionals, economists, ministerial support teams) are unaware of the obligations of the Code, which can lead to conflict between statisticians and their colleagues, for example about the presentation or release of statistical information which does not meet the standards of the Code. It is also fair to note that people from different disciplines/professions may interpret the Code differently simply because some common terminology – such as “data” – means different things to different people.
- 3.42 The Office for Statistics Regulation proposes that the Code be re-developed as a searchable interactive electronic document where, alongside the principles and practices, we can embed examples of good practice and ensure that the relevance of the practices are clear and in context³⁴. However, the Code should continue to be republished in a paper version. During the Code Stocktake, GSS members told us that there is high value in a paper version of the Code that can be shown to ministerial teams and given to new staff.
- 3.43 Increasing the profile of the Code across the GSS, across other professional groups, and ministers and their offices will enhance its impact and use. However, it is fundamental to increasing public value that we create a Code which people want to engage with, find easy to engage with, and which is helpful to them in their work. Versions or summaries of the Code that are in Plain English and that are focused on the particular interests of ministers, press offices and users and highlight essential practices would be helpful.
- 3.44 The revised Code will need to be successfully launched back into government departments to achieve the aim of increasing its profile and ensuring its effective implementation. We think that this would best be achieved in partnership with statistical Heads of Profession to bolster their profile in each producer body. The launch activities should be targeted more widely than the GSS; they should encompass other analysts, policy professionals, communications teams, and ministerial offices. The Office for Statistics Regulation will support ongoing Code-awareness events run by statistical Heads of Profession.

³⁴ We will consider the approach taken by the GDS. This sets out the principles (<https://www.gov.uk/service-manual/service-standard>), and links to guidance on assessment against that principle (<https://www.gov.uk/service-manual/service-standard/understand-user-needs>) and further guidance (<https://www.gov.uk/service-manual/agile-delivery/writing-user-stories>). GDS also provides links to information on a community of interest to support practitioners (<https://www.gov.uk/service-manual/communities/agile-delivery-community>). The homepage for the Service Manual (<https://www.gov.uk/service-manual>) also links to guides and resources by profession (such as <https://www.gov.uk/service-manual/designers>).

- 3.45 The value and application of the Code is currently limited by the way it is presented as a stand-alone PDF. It could be enhanced by improving its presentation, while retaining the existing hard copy/pdf format which is valued particularly by producers.

Recommendation C8:

- a) The Office for Statistics Regulation should support producers and users by releasing an interactive Code that:
- explains the rationale for each specific practice
 - provides examples of ways in which different organisations have complied with the principles and practices of the Code
 - links to standards and guidance
 - links to a catalogue of case studies that illustrate (for example) the proportional application of the Code (see Recommendation A3); and
 - supports the proposed approach to voluntary compliance (see Recommendation A4).
- b) This should be supplemented by alternative presentations of the Code that make it more accessible to stakeholders beyond the statistical production team

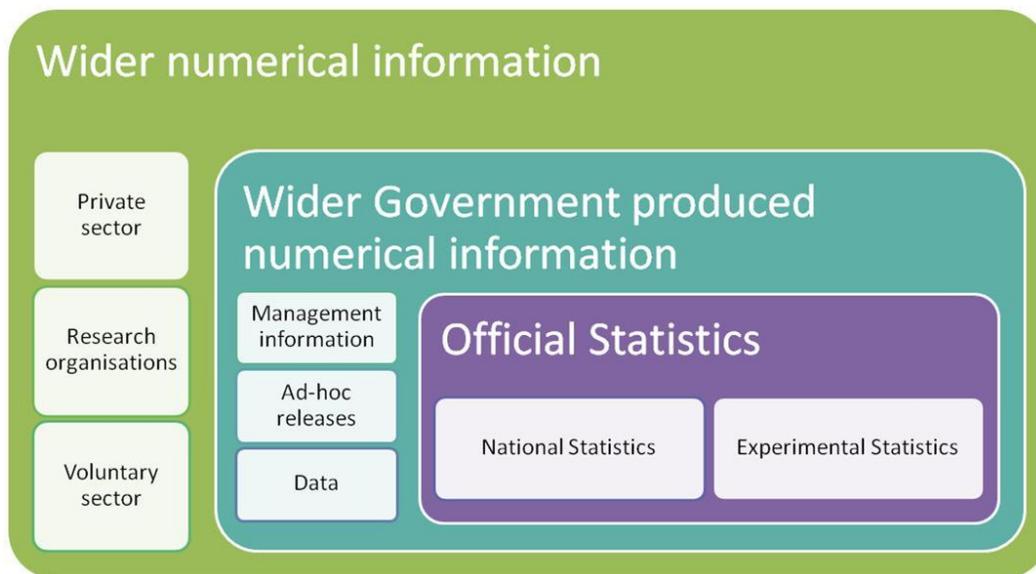
Boundary and scope

Which statistics does the Code apply to?

- 3.46 Official statistics (OS) are defined in the legislation as statistics produced by the UK Statistics Authority (ONS), by government, or by another organisation specified by a minister. While the "official" aspect is clear, the legislation does not define "statistics".

3.47 The Authority’s statutory reach, and the scope of the Code of Practice, is “official statistics”. By implication numerical information that is labelled in other ways is currently considered to be technically beyond the Authority’s scope. However, this boundary is largely recognised only by those involved in statistical production - not by the public, nor many users of statistics. Since 2009 the Authority has seen the publication of a range of numerical information - including aggregated information (typically drawn from government’s administrative systems) published as “management information” (MI) or ‘transparency data’ and sometime as ‘ad hoc’ statistical releases; and also examples of “research” covering the outputs of surveys and of analytical work on modelling and forecasting (see Figure 1).

Figure 1: The relationship between the range of numerical information produced by government and by other organisations



3.48 Despite this statutory reach the Authority (and the Office for Statistics Regulation as the Authority’s regulatory arm) has increasingly commented on aspects of MI, analytical research and ad hoc statistical releases from the perspective of the principles of the Code in an attempt to raise the standards of production of numerical information. For example:

- In January 2014 we were contacted by a Member of Parliament raising concerns about the validity of figures about government spending on flood defences that he had been given in answers to a series of PQs. In response³⁵ the Chair of the Authority noted that the Department for Food and Rural Affairs (Defra) did not publish figures for flood defence spending as official statistics, and hence there was no obligation for Defra to comply with the Code, but that he felt it would serve the public good if Defra were to consider publishing official statistics on expenditure by the relevant organisations on aspects of flooding and coastal erosion management in future. Defra published the first set of official statistics on this topic in February 2015, and has published subsequent updates³⁶.
- In April 2015, in response to correspondence from a Member of the Scottish Parliament about the publication by Scottish Government of an analysis of 'improved economic performance' – the outcome of economic forecasts based on modelling analysis, the Chair of the Authority said³⁷:

"Although the Code of Practice relates to official statistics, it sets high standards, especially in relation to the quality and presentation of statistical information, which might also be adopted for other pieces of official analysis to help increase public trust and confidence in that analysis.

Voluntary adherence to the spirit and the high standards of parts of the Code of Practice when publishing non-statistical analysis might be beneficial, in particular relating to its orderly release, including:

- adopting clear labelling and presentation of such publications to make them readily distinguishable from official statistics releases, making it clear to readers that the analysis comprises economic estimates based on judgements and assumptions;
- setting out, as far as possible, advice to readers about how they might replicate the analysis contained within; and,
- adopting professional standards in the presentation of the analysis and setting out its strengths and limitations."

³⁵ https://www.statisticsauthority.gov.uk/wp-content/uploads/2015/12/letterfromsirandrewdilottohughbayleym1902201_tcm97-43643.pdf

³⁶ <https://www.gov.uk/government/statistics/funding-for-flood-and-coastal-erosion-risk-management-in-england#history>

³⁷ https://www.statisticsauthority.gov.uk/wp-content/uploads/2015/11/letterfromsirandrewdilottojackiebailliemsp15041_tcm97-44561.pdf

- In July 2016 the Director General for Regulation responded³⁸ to a complaint raised with the Authority about two ad hoc releases published by Her Majesty's Revenue and Customs (HMRC), explaining their limitations in relation to the Code:

"Turning to your specific point, we have considered the two ad hoc publications in the light of the Code of Practice for Official Statistics, particularly Principle 8 on frankness and accessibility⁹ and the Release Practices Protocol¹⁰. The practices that support Principle 8 include providing a range of information on the quality and reliability of the statistics; and making statistics available in as much detail as is reliable and practicable. The release protocol seeks orderly release of statistical reports and providing equality of access to all. We consider that the ad hoc publications could do more to comply with all these elements. In particular, they contain limited information about quality and, as you point out, contain only very limited analytical detail, without any explanation as to why a more comprehensive analysis has not been reported. We are thus disappointed to conclude that, in relation to these elements of good statistical practice, these documents fall short of compliance the Code. We shall be raising this with HMRC."

- 3.49 Numerical information is more likely to be trusted, and hence used, if that information is produced by organisations that are demonstrably trustworthy, if the information is of a level of quality that is fit-for-purpose; and if the information adds value by informing public debate, policy making, and decision making. At the same time, the public value of OS, and statistics produced by Government bodies in general, would be likely to become progressively diminished if government's use of non-OS sources of quantitative information – produced in ways that are not demonstrably consistent with the notion of trustworthiness, quality and public value – in preference to existing OS on a particular topic, becomes established.

³⁸ <https://www.statisticsauthority.gov.uk/wp-content/uploads/2016/07/Letter-from-Ed-Humpherson-to-Michael-OConnor-200716.pdf>

- 3.50 There are inconsistent approaches by departments to the release and labelling of aggregated administrative data (some labelling them as MI, while others label them as 'ad hoc' statistics or as OS). Taking the perspective of users when releasing information is vital – users do not and cannot be expected to understand subtle distinctions between OS and MI (or indeed other 'classes' of numeric information as is demonstrated by the range of casework issues raised with us). Additionally some organisations that produce numerical information about which the Authority (and the Office for Statistics Regulation as the Authority's regulatory arm) has commented publicly – see paragraph 3.48 – might feel concern that this has been done without the Authority (and the Office for Statistics Regulation as the Authority's regulatory arm) first clarifying those aspects of the Code that MI, for example, should comply with (see later subsection about proportionality).
- 3.51 Some broad areas of concern, relating to statistics not labelled as official statistics and relevant to the main principles of the Code, include:
- Equality of access / timely decision-making: Frequently MI is incorporated into regularly published OS releases, which are subject to statutory pre-release access arrangements. Ministers have access to the underlying MI as of right, and hence have prior sight of the numbers that will later appear as published statistics. We accept this as a fact of life, but note that it can be challenging (and appear restrictive) for statisticians to argue that 'Ministers should not use the latest information publicly because much the same information is scheduled for subsequent release as statistics'. Relatedly, government is keen to share MI between departments, to improve decision making – this tends to exacerbate the within-department issues. A recent ONS-led cross-departmental task force has prepared guidance, published³⁹ by the National Statistician, to clarify the ways in which civil servants should address requests to use MI publicly, for example prior to the release of related OS.
 - Unstructured release arrangements: When answering FOI requests and Parliamentary or Assembly Questions, officials will often be in a position – should they choose to – to provide the latest MI data, rather than quoting the most recently published OS. If they use the latest MI – which would seem to be more helpful - then they are making that information publicly available and there is a risk that they might provide an indication of the content of a forthcoming statistical release.

³⁹ <https://www.statisticsauthority.gov.uk/wp-content/uploads/2016/06/National-Statisticians-Guidance-Management-Information-and-Official-Statistics.pdf>

- Fitness-for-purpose: The balance between different aspects of statistical quality – for example, accuracy and timeliness - is important in relation to delivering public value. The argument that MI is ‘quick and dirty’, and that time-consuming quality assurance and contextualization are the hallmarks of OS, might become increasingly tenuous in a world in which many decision makers purport to be happy with ‘quick and dirty’.
- Inconsistent standards relating to numerical information: There are a number of analytical professions (such as social researchers, and economists) within Government, all releasing numerical information. The Government Social Research (GSR) Publication Protocol (2015) sets out the independence and publication criteria for social research conducted by or for government and applies to government departments and devolved administrations in the UK, in relation to the publication of all social research not defined as OS or NS (and not including MI). The Protocol references the Code of Practice for Official Statistics and incorporates some of its values (in particular trust, transparency and independence). It may not be obvious to a user of a GSR output that some standards associated with official statistics do not apply.

3.52 These broad issues illustrate the difficulty of regulating within an artificially restricted scope. Therefore, during the Stocktake we have considered whether it would be feasible to re-classify all numerical information produced by public bodies as ‘official statistics’ – so that all numerical information would automatically fall under the purview of the Code. However, this approach might not sit comfortably with section 6 of the Statistics and Registration Service Act. Instead to achieve the objective of enhancing trustworthiness, quality and public value the Office for Statistics Regulation could advocate the extension of the reach of the core principles of the Code and clarify the inter-relationships between the Code and other related guidance across government, such as the Aqua Book⁴⁰ (quality analysis) and the Magenta Book⁴¹ (policy evaluation).

⁴⁰ <https://www.gov.uk/government/publications/the-aqua-book-guidance-on-producing-quality-analysis-for-government>

⁴¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220542/magenta_book_combined.pdf

3.53 Ultimately, to meet the Authority’s objective of safeguarding official statistics that serve the public good the Authority (and the Office for Statistics Regulation as the Authority’s regulatory arm) has increasingly commented on the public use of other numerical information from the perspective of the Code. It has done so because concerns about this sort of information can spill over to affect perceptions of official statistics and users cannot be expected to distinguish between official statistics, as defined by Departments, and other types of numerical information published by Government. For other types of numerical information such as management information and research, there are benefits in terms of public confidence in compliance with the core principles of the Code, particularly relating to transparent publication. And the Bean Review⁴² recommended that “high-profile releases of management information by departments should be treated as official statistics and be compliant with the Code”.

⁴² See Recommendation 18 - https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/507081/29049_36_Bean_Review_Web_Accessible.pdf: “the government should delegate to UKSA the power to decide that a piece of data be classified as an official statistic; high-profile releases of management information by departments should be treated as official statistics and be compliant with the Code; UKSA should decide whether official statistics should be assessed against the Code for the purposes of National Statistic status”

Recommendation C5:

- a) The formal scope of the Code should continue to be official statistics (as defined by the Statistics and Registration Service Act 2007). Formal regulation, of compliance with the new Code – through assessment – would continue to focus on official statistics produced by public bodies.
- b) But the Code should recognise that Government publishes a wider range of outputs that might be commonly understood by the public as ‘statistical information’ – aggregated statistics and underlying data. The Code should advocate to Government departments the benefits of wider applicability of the core principles around transparency to other categories of numerical information (produced by official bodies) and also recognise the potential application of these principles to statistics and other numerical information produced by non-official bodies.
- c) To reflect this emphasis on wider applicability of core principles, the Code could be renamed as the “Code of Practice for Statistics”, in line with the Statistics and Registration Act 2007.
- d) In some cases this flexible and voluntary approach should be supplemented by the Authority formally recognising specific Government information releases as official statistics, in line with the Bean Review recommendation. The Code should explain the criteria the Authority will adopt to determine when and how it will recognise Government outputs as official statistics, in line with the Bean Review and building on the existing National Statistician's guidance.

Proportionality in the application of the Code to wider numerical information

- 3.54 An increasing range and volume of numerical information will be published by government in the future. The quality of numerical information released will vary depending on its purpose and the needs of its users. The Authority and Office for Statistics Regulation, as the Authority's regulatory arm, recognises that different elements of the Code are relevant to different types of numerical information, and in particular that higher standards apply to official statistics than, for example, to management information. Figure 2 provides an illustrative example of this:

Figure 2: Schematic illustration of the potential relationship between different elements of the Code and different types of numerical information.

Code of Practice Standards of:	Data	Management Information	Research/ ad hoc analysis	Official Statistics	National Statistics
Trustworthiness					
Quality					
Public value					

3.55 Producers of official statistics should comply with the Code; those responsible for other numerical information would be encouraged to explain how they comply. However the Office for Statistics Regulation has not published its position on which elements of the Code ought to apply to different types of information and therefore how compliance should be explained by those publishing the information. By doing so we will help producers of numerical information to understand the situations in which we might intervene.

Recommendation A3:

The Office of Statistics Regulation should clarify its expectations around proportionality – to help organisations decide how they should comply with the Code in relation to different types of numerical information being published for different purposes. While this guidance should be rooted in the enhancement of the public value of numerical information, it should not be unduly prescriptive. We regard two aspects of trustworthiness - equality of access, and the protection of confidentiality – as fundamental.

3.56 The successful implementation of this Recommendation will require clear communication and collaborative working across government. These will be important features of the way that we take this activity forward. We think that the our approach to the Performance Tables (published by the Department for Education) – see Annex E – might be a useful illustration of the ways in which the statistical standards embodied in the Code can be applied in different settings.

What organisations does the Code apply to: Voluntary Compliance

3.57 The production and quality assurance of many official statistics is dependent upon sources external to government. The use of ‘external’ data is likely to increase in the future – particularly where suitable sources exist to reduce respondent burden from surveys, increase the quality of the statistics, and reduce the production time. The Office for Statistic Regulation’s report Quality Assurance of Administrative Data⁴³, published in 2015, provides a framework for producers of official statistics to ensure the quality of ‘external’ sources, but there is likely to be increasing interest among external (non-OS) producers in being able to provide informed assurance to their users that their statistics are of a high quality.

3.58 We consider that the underlying philosophy of Trustworthiness, Quality and Public Value, and the principles of the Code of Practice, are relevant to many external organisations⁴⁴ which are not classed as ‘producers of official statistics’ in law. We have discussed with some such organisations the idea that they might voluntarily comply with the principles of the Code, ideally setting out publicly the extent of this compliance (and the rationale for any non-compliance, in the interests of transparency). This approach seems to have been positively received:

- From the perspective of the external organisation, voluntarily compliance offers the opportunity to compare existing practices with those that apply to government-funded agencies, to draw attention to its high standards of statistical activity, and to demonstrate an aspirational commitment to trustworthiness, quality and public value.
- From the perspective of producers of official statistics that draw upon these non-official sources, documented voluntary compliance provides a degree of assurance about the trustworthiness of the organisation and the quality of the source.

⁴³ <https://www.statisticsauthority.gov.uk/wp-content/uploads/2015/12/Setting-the-Standard.pdf>

⁴⁴ See for example https://www.statisticsauthority.gov.uk/wp-content/uploads/2015/11/letterfromedhumphersontohelenbuckingham11111_tcm97-44989-1.pdf

- From our regulatory perspective, voluntary compliance would enhance the profile and value of the Code, and would serve the public good by tending to raise statistical standards and so better inform debate. However, we recognise that the risks associated with voluntary compliance need to be managed carefully in order to avoid undermining the brand of National Statistics.

3.59 We are still in the early days of this exploration. As such there are still some areas to think through, for example whether it will be a self-certification exercise or whether it will be an element of independent evaluation. We are keen to learn from similar approaches in other fields and to explore these questions with those who are interested in voluntary compliance.

3.60 Ultimately, organisations outside government produce information which is used in the compilation of official statistics, or otherwise has the potential to enhance debate – and a number are keen to comply with the Code. We consider that such an application ambition has the potential to raise standards and to enhance the profile of the Code.

Recommendation A4:

The Office for Statistics Regulation should formalise and implement a proposition for voluntary compliance with the Code to support the extension of the reach of the Code. Organisations which produce, for example, data sources underpinning the Sustainable Development Indicators or other numerical information would be able to commit to compliance with the Code and to publish information about the extent to which they (voluntarily) comply with the Code.

3.61 We have started to consider what such a ‘proposition for voluntary compliance’ might look like.

Statistical ecosystems

3.62 Previously in the boundary and scope sub-section we addressed two boundary issues – relating to different types of numerical information, and relating to different types of organisations. This subsection summarises our thinking about how they might be brought together, as statistical ecosystems as part of the Office for Statistics Regulation’s approach to systemic issues.

- 3.63 We are defining a statistical ecosystem in the following way - the complex and changing relationships between the elements of the statistical system (producer bodies; datasets; methods, metadata, registers; classifications; publication calendars; policies; procedures; and statistics), all interacting with each other, and also with their external environment (operational context; user communities' needs; and the important questions posed by society). It follows that a statistical ecosystem includes official statistics and other types of numerical information, and statistical information produced by 'official' bodies and other organisations. It encompasses Big Data, linked data, and the outputs of data science.
- 3.64 In practice, we have already begun to explore some aspects of statistical ecosystems in our assessment work. For example, in our assessment of Statistics on Homelessness and Rough Sleeping in England⁴⁵ we noted:
- "DCLG publishes three separate sets of statistics about Homelessness and Rough Sleeping but does not bring them together to provide a more complete and coherent picture for users. It could also do more to draw on other data sources – both official statistics (such as the Census and household surveys) and other sources (for example, LAs and third sector organisations), to extract more value from the statistics and provide a better insight for users."
- 3.65 The Office for Statistics Regulation will use the concept of statistical ecosystems to inform our wider systemic approach. For example as we look at the health of the statistical system – we will also consider the effectiveness of the set of relationships that need to be cultivated in order to exploit opportunities and build effectively on data to deliver statistics that will shine a light on society's key questions. This set of relationships would include those between producer bodies and users, stakeholders such as frontline staff, resourcing bodies, policy/decision makers, regulators, academics, and other experts.

⁴⁵ https://www.statisticsauthority.gov.uk/wp-content/uploads/2015/12/images-assessmentreport320statisticsonhomelessnessandroughsleepinginenglan_tcm97-45078.pdf

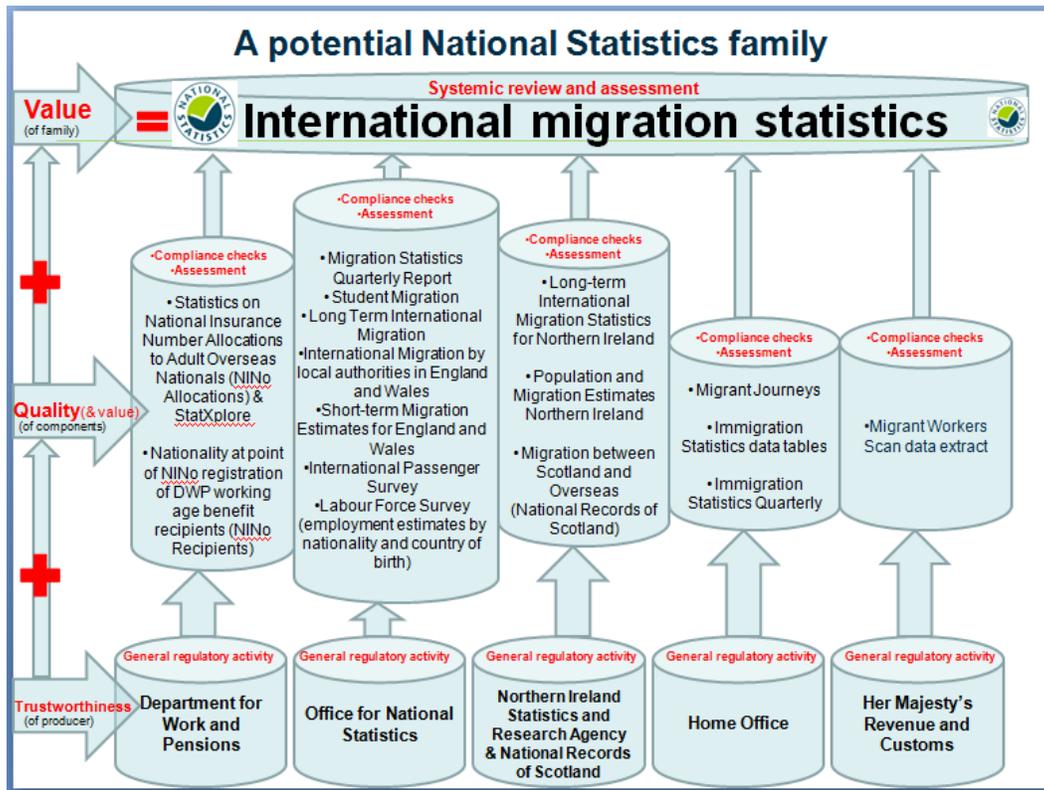
The National Statistics 'estate'

- 3.66 The NS concept was introduced in 2000. Statistical Heads of Profession (HoPs) identified which of their statistical outputs should be considered in scope⁴⁶ as NS; by default all of ONS's outputs were so classified. In total, over 1200 statistical outputs were given the NS label. During the period 2009 to 2012, the Statistics Authority assessed all of those 'legacy' NS in a major programme of assessment⁴⁷, and has continued to re-assess some of the higher profile NS while at the same time assessing and designating a range of other official statistics: the upshot of this activity is that there are now about 800 sets of National Statistics. It is unlikely that we would re-assess some of these outputs, so by default some sets of statistics designated as NS through that first programme could retain their NS designation for an unlimited period without further intervention from us.
- 3.67 During the Stocktake, the Office for Statistics Regulation considered arguments for and against an exercise to reduce the number of sets of statistics badged as NS. We concluded that the large number and low individual value of some of the 800 sets of NS tends to dilute the power of the brand - particularly because many of them, while produced by trustworthy organisations and of a level of quality that meets most users' needs, do not meet the highest levels of public value. This does not imply deterioration in the level of compliance with the Code of some of the NS estate; rather it reflects the evolution of our thinking about what we mean by 'National Statistics'.
- 3.68 One approach to reducing the size of the NS estate would be to evaluate each against our thinking about public value: only those that scored highly should continue to be regarded as NS. However, such an exercise could be difficult to undertake objectively, may not be future-proofed, and could leave the lower public value statistics with an ambiguous status.
- 3.69 An alternative approach could be to work with producers and users to identify a considerably smaller number of sets or 'families' of NS that are demonstrably high in terms of trustworthiness, quality, and public value – those that shine a light on society's big questions. In this scenario the 'family' of statistics would be the NS; statistical series or indicators in the family would be regarded as components of the NS (see Figure 3) although some single-source statistics and components may well be of sufficiently high public value that they themselves could be regarded as NS.

⁴⁶ <http://www.paris21.org/sites/default/files/1088.pdf>

⁴⁷ <https://www.statisticsauthority.gov.uk/publication/the-assessment-of-uk-official-statistics-2009-2012>

Figure 3: Outline of a potential National Statistics family of international migration statistics



3.70 As Figure 3 illustrates, 'families' of statistics will often be produced by a number of organisations: in such cases it is implicit that a degree of standardisation supported by cross-organisation working would be appropriate. Responsibility for quality would sit firmly with the relevant statistical Heads of Profession, while the National Statistician could be responsible for ensuring that a clear view on a topic was provided. In other cases, a 'family' will be the responsibility of a single organisation. A 'family' of statistics might also include statistical information produced by organisations that do not, technically, produce official statistics. A particular statistical series may be regarded as part of more than one 'family' of National Statistics.

- 3.71 Such an approach enables the prioritisation and rationalisation of statistical and regulatory investment and effort and would be consistent with the increasingly systemic focus of the Office for Statistics Regulation. More generally this ‘families’ approach builds upon the decision⁴⁸ by the Office for National Statistics to move to the publication of economic statistics on particular themes, from January 2017 – the themes being: Productivity; Short term output indicators; Inflation; Labour market; Public Sector Finances; Retail Sales; and National Accounts and Balance of Payments. The approach is also consistent with New Zealand’s ‘Tier 1’ statistics⁴⁹.
- 3.72 It is important to re-emphasise that such an approach would not represent a de-designation of existing NS. Instead it would be a re-definition of what is meant by NS: an evolution of the position established when the legislation came into force.
- 3.73 Ultimately, it is hard to argue that each of the current 800 sets of National Statistics are all of equally high public value – many have important but ‘niche’ uses. And there is considerable support for the proposition that the Office for Statistics Regulation should apply the Code more systemically than previously and move away from any sense that Assessment is a checklist exercise, in favour of a demonstrable focus on public value.

Recommendation A1:

The Office for Statistics Regulation should work collaboratively with producers of official statistics to explore opportunities for clarifying the use of the National Statistics designation within their overall portfolio of statistics. This exploration could focus on the most valuable statistics, perhaps by reviewing the uses made of them and interactions between ‘families’ of statistics - that is, groups of statistics that address the same policy or societal questions.

- 3.74 In addition, the Code currently encourages producers to consider statistical series in isolation from related statistics that describe similar or complementary phenomena. This tendency can appear to give insufficient weight to the coherence of statistics at a broader, more systemic level. The concept of ‘families’ can add value as the coherence of each statistical product within a family is more obvious to users and assessment can use this concept to determine whether each statistical product within a family is unique and consistent with the family theme.

⁴⁸ <https://www.ons.gov.uk/news/news/changestopublicationscheduleforeconomicstatistics>

⁴⁹ A similar approach has worked successfully in New Zealand, where a selected group of ‘Tier 1’ statistics provides a coherent set of the country’s most important statistics that can be relied on as an authoritative, high quality, relevant and trustworthy source of information on which to base critical decisions.

Recommendation C3:

The Code should include practices that explicitly support the concept of public value, particularly the importance of ensuring coherence within 'families' of statistics and across statistical domains.

The designation period

- 3.75 As mentioned above (paragraph 3.73) there are now about 800 sets of National Statistics. It is unlikely that we would re-assess some of these outputs - reflecting a widespread view that to do so would not be an efficient use of resources – so there is a risk that some existing NS would retain their designation for an unlimited period, despite likely changes in organisational arrangements, methods, and user needs.
- 3.76 Arranging NS into families would allow us to tailor our compliance activity (particularly Assessment) to ensure that the NS designation remains relevant and authoritative - for example by giving it a defined shelf-life of perhaps three to five years (though this could vary according to the nature and context of the statistics) – while using less resource-intensive compliance checks to check some component series and as a means of identifying risks that might trigger an immediate re-assessment. This approach is likely to represent an apparent increase in workloads, although the increase could be less substantial than it appears at first sight because there are likely to be efficiency savings from more streamlined and complementary regulatory services associated with the introduction of compliance checks⁵⁰. However, this proposed approach to a shelf-life for NS designation is subject to the availability of resources: if these were reduced then our regulatory work might not support the implied programme of Assessment and other activity.
- 3.77 Ultimately, many sets of statistics have been designated as NS for several years, and are unlikely to be re-assessed. Those spoken to during the Stocktake encouraged exploration of the idea that designation – the immediate outcome of the application of the Code though assessment – should be time-limited, though it was recognised that we would need to be mindful of the Office's future resource position.

⁵⁰ <https://www.statisticsauthority.gov.uk/monitoring-and-assessment/assessment/programme-of-assessment/compliance-checks/>

Recommendation A2:

The Office of Statistics Regulation should explore the feasibility of a defined shelf-life for the National Statistics designation – which could be different for different sets of statistics.

4 Concluding remarks and next steps

- 4.1 The Stocktake of the Code has been a rewarding programme of activity, identifying many changes which will enhance our regulatory work and lead to the production of statistics that provide better public value. And it has also been rewarding in that it has been a collaborative exercise, drawing extensively on the insights of statistical professionals in government and a range of other stakeholders and subject-matter experts.
- 4.2 At the same time, it has been a substantial exercise. It has been resource-intensive for the Office for Statistics Regulation, and it is likely – by virtue of a refreshed Code of Practice – to lead to substantial change for producers of statistical information. While substantial one-off reviews may be necessary in future, we are keen to build on the collaborative spirit of the Stocktake in such a way that we can update and refine the Code and supporting information on an ongoing basis. Therefore, as part of our recent launch of the Office for Statistics Regulation we will include a team, responsible for policy and standards, which will keep the Code under review and support Code awareness raising activities across the GSS.
- 4.3 Based on the work of the Code Stocktake to date, the Office for Statistics Regulation concludes that the high level principles of the Code are robust: they, and the majority of the detailed practices in the Code, have stood the test of time well. However, the Code needs to be updated to reflect the changing channels for the distribution of statistics, the increasing sophistication of users, and the capabilities presented by new technology. We also propose changes to the ways that we apply the Code to enhance the public value of statistics. This is an optimum time to develop and launch a refreshed Code, with an engaged community and alongside our recent launch as the Office for Statistics Regulation.

4.4 The Statistics and Registration Service Act 2007 says that the Authority “may at any time revise the Code ... in preparing or revising the Code the [Board] must consult the Scottish ministers, the Welsh ministers, the Department of Finance and Personnel for Northern Ireland, and any such other persons as it thinks fit”. Although some small changes to the Code might not require extensive formal consultation, the Office for Statistics Regulation thinks that changes of the scale recommended by the Stocktake should be managed consistently with the Act. We also note that the consultation on the Exposure Draft Report⁵¹ setting out its proposals for a new regulatory standard for the quality assurance of administrative data resulted in a substantially improved approach, as well as helping to secure support.

Recommendation A5:

The Board of the UK Statistics Authority should commission the Director General for Regulation to consult widely on a new Code of Practice for Statistics, including supporting standards and guidance, and to develop an ongoing communications role that would raise and maintain its profile. Proposals for a new Code and supporting standards and guidance should not be unduly prescriptive, reflecting the importance of flexibility in the application of the Code.

4.5 We consider it good practice to review the resource (and other) implications of a refreshed Code of Practice. We mention resources in Annex A of this report, and would note in addition that we would not want to develop a revised Code that had the unintended consequence of weakening the role of statisticians in Departments. Therefore we will consider the impact of any changes as we develop our proposals. We will also engage with other analytical professional groups within government – particularly social researchers and economists – to explain the recommendations of the Stocktake and to ensure that any implications for other analytical professionals are managed coherently.

⁵¹ <https://www.statisticsauthority.gov.uk/monitoring-and-assessment/monitoring/administrative-data-and-official-statistics/>

Annex A: Other Issues

- A.1 Whilst the broad recommendations for change affect the Code at a conceptual level there were a number of more detailed issues flagged up by statistical producers during the Stocktake. These are not specifically covered in the key findings, but should be considered if a revised Code of Practice is commissioned.
- A.2 Access to official statistics before publication is restricted by pre-release access (PRA) arrangements set out in legislation. Early access to the latest statistics should be restricted to a privileged few and statisticians are the 'gate-keepers' to this access. Enforcing PRA rules can make government statisticians appear 'unhelpful' to colleagues from other professions. Some communications professionals across government, for example, feel sidelined and unduly constrained by PRA processes and feel unable to work in partnership with statisticians to promote and highlight their department's statistics. While PRA is governed by legislation (and is not in the gift of the Authority, or Office for Statistics Regulation as the Authority's regulatory arm, to change), guidance to explain the roles and responsibilities of statisticians and professions supporting the publication of statistics would be welcomed.
- A.3 Although there is overwhelming support for the 'orderly' production of statistics, the current standard release time of 9:30am is seen by some producers as arbitrary and historic. Many of those spoken with during the Code Stocktake argued it was neither necessary nor helpful to have a single prescriptive release time that missed for example, morning news programmes – they expressed a preference for flexible publication times dependent on the statistical product and the likely media interest. Some producers would prefer an earlier release time, or more use of embargoes. Others, typically from ministerial departments that release many sets of statistics, argued in favour of the consistency of a 9.30am release across all statistical products – such consistency makes the task of managing the actual publication of the statistics easier, and helps manage the interaction with supporting professions and ministers. We tend to favour the status quo.
- A.4 The Code requires producers of official statistics to 'Promote a culture within which statistical experts in government can comment publicly on statistical issues' [Principle 3.7] However some of the statisticians who provided feedback during the Code Stocktake would like the Code to be more explicit in requiring them to work with the media to help a wider audience better understand the data and its appropriate use.

Resource implications

- A.5 A few statistical Heads of Profession raised a concern about the resource implications of the Recommendations in this report, in particular about if there are any extensions to the scope of the Code. Their concern was that they are only resourced to produce statistical publications (together with associated statistical development and user engagement), associated Parliamentary Questions and Freedom of Information responses, analysis and briefing, and are not resourced (and do not have the managerial reach) to apply the Code of Practice to the full range of numerical information produced by their organisations.
- A.6 We recognise the validity of this concern, and the reality of resource constraints in the public sector. At the same time we think it vital not to approach the whole issue of statistical good practice in terms of what can be achieved with the resources currently available, as this might offer perverse incentives – hence Principle 7 of the Code says that “The resources made available for statistical activities should be sufficient to meet the requirements of this Code ...”.
- A.7 As part of the Office for Statistics Regulation’s clarification of its expectations about proportionality in relation to compliance with the Code for different types of numerical information, we will explore in more detail the potential resource implications. This will include considering the impact of any changes as we develop our proposals.
- A.8 We noted above that the Code is consistent with the European Statistics Code of Practice (ESCOP). There have been two rounds of peer review across the ESS, the most recent in 2013-15. The report of the UK’s peer review, published⁵² in March 2015, recommended – endorsing proposals by the Authority – that we “should review and update the Code of Practice for Official Statistics, based on the experience gained so far and with a view to harmonising it with the principles and indicators of the European code ...”. The Office for Statistics Regulation will reflect on the scope for further harmonisation.

Minor changes to the content of the Code

- A.9 There are some elements of the Code that need updating to reduce duplication and ambiguity, and to respond to operational changes. Several detailed points have been raised during the course of the Code Stocktake engagement activity, including to:

⁵² <http://ec.europa.eu/eurostat/documents/64157/4372828/2015-UK-report/d44f7d3f-64c1-4450-8a37-bfad8542607>

- Modernise the language in the Code and define ambiguous vocabulary – for example ‘signing of confidentiality declarations’ (P5.2); ‘production process’; and ‘operational purposes’.
- Update references to the European Statistical System’s quality dimensions and remove reference to the National Statistics Publication Hub which is out of date.
- Develop our thinking about ‘equality of access’ – commonly understood to refer to the time at which statistics are made available – to encompass the digital world – for example: accessibility for people with disabilities; accessibility on all devices and browsers; and download speeds on the lowest specification connections.
- Reconsider what ‘pre-announcement’ means in a world of real time data and push notifications – whether the opportunity to sign up for notifications is a valid alternative.

Annex B: Terms of Reference, and Membership, of the Code Stocktake Steering Group

Terms of Reference

B.1 The regulatory function of the UK Statistics Authority – the Monitoring and Assessment (M&A) Team⁵³ – is leading a Stocktake of the Code of Practice.

The objectives are to:

- identify ways to raise the profile of the Code; and
- to enhance its value.

B.2 A Steering Group has been established to help shape the way M&A conducts the Stocktake – bringing together expert knowledge of the Code from across the Government Statistical Service and external perspectives on the statistical system and on wider regulatory experiences - and to advise on priorities for further work. Once the Stocktake has been completed, proposals (to raise the profile and enhance the value of the Code) will be presented to the UK Statistics Authority's Regulation Committee.

B.3 The Steering Group, chaired by Dr David Levy (non-executive Director of the UK Statistics Authority) will, in line with the above objectives:

- c) Advise on the coherence of M&A's Stocktake activity, including the extent to which planned work will meet the objective of raising the profile and enhancing the value of the Code, and how the impact of the Stocktake might be evaluated.
- d) From May 2016, this will include recognition that the Stocktake work is to be developed in conjunction with the change of the organisation to the Office for Statistics Regulation, as recommended in the Bean Independent Review of UK Economic Statistics⁵⁴
- e) Suggest additional work, including further analytical/research projects and external contacts with whom M&A might usefully engage.
- f) Advise on the communications aspects of Stocktake work, particularly in relation to the implementation of any proposed change and /or re-launch.

⁵³ Now known as the Office for Statistics Regulation. The Office for Statistics Regulation is the regulatory arm of the UK Statistics Authority (taking over the role of the Monitoring and Assessment team). <https://www.statistics.gov.uk/monitoring-and-assessment/>

⁵⁴ <https://www.gov.uk/government/publications/independent-review-of-uk-economic-statistics-final-report>

- g) Challenge M&A's approach to managing the risks associated with the Stocktake.
- h) Comment on draft reports of Stocktake activity – both emerging progress reports and the final report to the Regulation Committee.

B.4 The Steering Group will meet three times, during 2016. The first meeting will be on 23 February. The second meeting is proposed to be on 17 May. The third meeting is proposed to be on 7 September. All meetings will be held at UK Statistics Authority, Drummond Gate, Pimlico, commencing at 2.30pm. It is expected that the Steering Group will disband by the end of October 2016.

Membership

Name	Position
Chair	
Dr David Levy	Non-Executive Director, UK Statistics Authority
Members	
Paul Allin	Chair, Statistics User Forum, Royal Statistical Society
Phoebe Arnold	Head of Communications, Full Fact
Roeland Beerten / Mike Hughes	Director of Policy & Public Affairs, RSS
David Blunt	Head of Profession, Home Office
June Bowman	Head of Profession, Department for Transport
Laura Dewis	Deputy Director, Digital Technology, Office for National Statistics
Tricia Dodd	Deputy Director, Chief Methodologist, Office for National Statistics
Lara Fielden	Visiting Fellow- Reuters & IPSO
Chris Francis	Director of Government Relations, SAP
Tegwen Green	GSS Good Practice Team
Neil Greenwood	Director of Strategy, Ofsted
Ed Humpherson	Director General Regulation, UK Statistics Authority
Johanna Hutchinson	Statistical Assessor, M&A (Secretary to the Steering Group)
Richard Laux	Deputy Director, M&A

Annex C: Workshops and meetings

Workshops/Presentations

Month 2016	Location/Event	Audience
Feb	Edinburgh	Scottish GSS
Feb	Cardiff	Welsh GSS
Feb	Leeds (4 meetings)	Northern England GSS
Feb	Titchfield	ONS GSS
Mar	Belfast	Northern Ireland Statistics and Research Agency
Mar	London (2 meetings)	London & the South GSS
Mar	Newport	ONS GSS
Apr	Internal team workshop	M&A
May	GSS Presentation & Dissemination Symposium	GSS
June	RSS Statistics User Forum	Statistical users
June	Inter-administration committee	Senior statisticians from the four UK administrations
June	UK Statistics Authority Board	Board members
July	UK Statistics Authority Board	Board members
July	Statistical Policy & Standards Committee	Members from across GSS
Aug	Belfast	Mixed professions from across the administration
Aug	Edinburgh	Mixed professions from across the administration

Aug	Cardiff	Mixed professions from across the administration
Aug	Dept. of Culture, Media & Sport	Mixed professions from across the department
Aug	Dept of Education	Mixed professions from across the department
Aug	Dept for Transport*	Mixed professions from across the department
Aug	Business, Innovation & Skills*	Mixed professions from across the department
Aug	Home Office*	Mixed professions from across the department
Aug	London – Boundary – sense checking the recommendations	Invited experts

*postponed until Autumn due to Machinery of Government changes

Bilateral meetings

Person	Organisation
Paul Allin	Imperial College London
Helen Barnard	Joseph Rowntree Foundation
June Bowman	Dept. for Transport
Siobhan Carey	Northern Ireland Statistics and Research Agency
Kate Chamberlain	Healthcare Inspectorate Wales
Roma Chappell	ONS Titchfield
Kate Davies	ONS Newport
Pam Davies	ONS Newport
Laura Dewis	ONS Newport
Glenn Everett	ONS Newport

Sophie Elfar	ONS Newport
Lara Fielden	IPSO/Reuters
Franck Fourniol	The Royal Society
David Freeman	ONS Newport
David Fry	Dept for Communities and Local Government
Neil Greenwood	Ofsted
Roger Halliday	Scottish Government
Scott Heald	Information Services Directorate Scotland
Ben Humberstone	ONS Titchfield
Glyn Jones	Welsh Government
David Levy	University of Oxford
Jay Lindop	ONS Titchfield
Chris Lines	ONS Newport
David Marshall	Northern Ireland Statistics and Research Agency
Will Moy	Full Fact
Tracy Power	Northern Ireland Statistics and Research Agency
Mike Prestwood	ONS Newport
Clive Richardson	Government Digital Service
Ruth Studley	Health inspectorate Wales
Kate Sweeney	Public Health England
Lucy Vickers	ONS Titchfield
Emma Wright	ONS Titchfield

Annex D: List of Analytical Work Packages

Stocktake Work Packages
1. Analysis of the responses to the online survey
2. Analysis of the Code of Practice
3. Strengthening our thinking about the NS Brand
4. Categories of quantitative information
5. Reduction of the NS estate
6. Voluntary compliance
7. What might an organisational assessment look like?
8. Challenging the Code of Practice
9. Analysis of other statistical and non-statistical codes of practice / evaluation frameworks
10. The Code and Information
11. Standards and Guidance
12. Perceptions and reality: myths, and successes
13. Revisiting earlier proposals to revise the Code
14. Analysis of the themes emerging from workshops

Annex E: Case study: The Authority's approach to the regulation of the Performance Tables published by the Department for Education (DfE)

- E.1 DfE's Performance Tables make statistics available by school - on education attainment and on school and pupil characteristics - through an online, web-based tool. DfE also publishes aggregate statistics for England and data at case-level for research and other uses that it judges promote the education or wellbeing of children. The statistics in the Performance Tables use data collected as management information to measure school performance.
- E.2 Through our work to date examining these statistics we can say that:
- published statistics of performance like these could - and should - be considered as official statistics subject to the Code, and could, if they met the requirements of the Code - be awarded National Statistic status
 - the purpose of the statistics and data should be made clear, not least because performance measures that are linked directly to policy - and the statistics - change frequently as policy changes
 - we would expect to see as full a picture as possible on a particular topic across all of the ways that the statistics and data are made available - including the on-line web-based version - with the separate formats tailored to different use
 - we would not expect to see detailed commentary that interprets the statistics for each unit (school); we would expect that brief guidance for use should include explanations of purpose, along with brief descriptions of important limitations that might affect the use of the statistics
 - we would expect a producer to publish detailed supporting information - for example about data quality assurance - in what they determine is an appropriate place, taking into account likely use of the different formats.

- E.3 The statistics in the Performance Tables and the other available formats meet clear user needs. Ongoing development and user testing of the Performance Tables is likely to increase their public value further. The statistical and data teams demonstrate a commitment to continuous improvement of the various outputs and to high standards of data quality. DfE demonstrates trustworthiness through an open and transparent approach that includes being open and proactive in reporting when standards fall below those the teams expect to maintain, and its work to develop a stronger independent statistical voice in the media. DfE has told us that it is working to improve access to underlying data while ensuring appropriate safeguards to balance the competing requirements of confidentiality and open data.
- E.4 We have considered the statistics that are presented in the Performance Tables on four separate occasions. Initially we looked at them in isolation. In our recent work we looked across the various ways in which DfE presents statistics and data about schools and pupil and considered the needs that the various formats meet as a whole. The recent casework started our thinking about examining suites of statistics and the questions they answer, and the new Assessment report format led us further towards a more strategic view. Both of these pieces of work helped us to refine our interpretation of the legislation and the Code in the case of statistics presented in an online, web-based format for use by the wider public. All of this recent work took place in the wider context of us examining our working practices and was influenced by and has played a part in developing our thinking in this area.