# Quality within ONS – Providing a framework for statistical producers and assurance for our users

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#### Abstract

A requirement of the European Code of Practice is that National Statistics Institutes must define their quality policy and make this available to the public.

To ensure this requirement is met, ONS have a Quality Management Strategy in place which is publicly available to provide assurance to the users of our statistics and includes activities which monitor, improve and report on the quality of statistical products. It also serves as a useful framework for the producers of statistics within ONS. The strategy has recently been updated and re-launched.

The updated strategy reflects the activities that we have in place as an organisation to manage quality and sets out goals for improvement. It is designed to reflect the organisational approach and is such relevant to all areas of the office. The strategy is supported by a statistical quality framework which sets out the quality initiatives in place for quality assurance, quality control, quality improvement and quality reporting.

This paper/presentation will provide more detail on the quality strategy and provide additional information around the quality frameworks. We will report on the how things have progressed since the launch of the strategy and how the quality management culture is being embraced in the ONS.

**Keywords:** quality management, strategy, framework.

## 1. Background

1.1 The Office for National Statistics created a Quality Management Strategy in October 2011 to support the requirements of the Code of Practice for Official Statistics – specifically Principle four - "Sound methods and assured quality" and also to provide assurance to users

that activities are in place to monitor, improve and report on the quality of statistical products. This strategy covered the period up until March 2015.

It was proven to be a useful framework for quality management at the ONS but had become out of date and no longer reflected all of the activities that were in place to assure, improve and report on quality across the organisation.

The requirement to renew the strategy therefore provided an excellent opportunity to ensure that the strategy was relevant and reflected current activities and aspirations.

- 1.2 The ONS Quality Centre began updating the strategy in February 2015. A network of divisional quality champions had already been created. Their role included:
  - being an ambassador for quality
  - promoting the Quality Management Strategy (QMS) within business area
  - promoting quality training
  - sharing good practice
  - networking with other quality champions and the ONS Quality Centre on a regular basis

This network was used to provide feedback on the earlier strategy, and how it had been received in each division.

1.3 The outcomes of these discussions highlighted that the links between the strategy and day-to-day activities were difficult to see. In addition to these discussions, a stakeholder group with an interest in the Quality Management Strategy was also identified by Quality Centre. This group included representatives from: Internal Audit, Continuous Improvement Zone, Enterprise Architecture, Statistical Training Service, Good Practice Team, Classification and Harmonisation Unit, Digital Publishing and Stakeholder Communications.

A meeting of these stakeholders identified what had worked well and what had not worked so well from the previous strategy. The scope of the QMS was discussed, with the idea that a high-level strategy with a supporting framework may be the most appropriate way forwards.

1.4 Quality Centre drafted a revised QMS¹ and, based on existing material developed a supporting statistical quality framework² both of which incorporated the initial feedback from the quality champions and other stakeholders. An implementation and communication plan was also developed and both groups were invited to comment on these proposals. All feedback was reviewed and adjustments made where applicable. The finalized documentation was presented to the Director General of the Office for National Statistics.

## 2 The updated strategy

2.1 The updated QMS has been modernised and shortened. The strategy now reflects the activities that we have in place as an organisation to manage quality as well as setting out goals for improvement. The QMS is designed to reflect the organisational approach to quality and as such is relevant to all areas of the office (i.e. those involved in producing statistical outputs and those not). The strategy is supported by a statistical quality framework which sets out the quality initiatives in place for quality assurance, quality control, quality improvement and quality reporting.

2.2 The updated QMS sets out an organisational commitment to quality, which was not present in the previous strategy.

This commitment to quality states that as an organisation we are committed to further developing a culture of quality to ensure that we:

- Produce statistical outputs that meet user needs to a level of quality that is fit-forpurpose
- Explain the quality of our statistics to our users by providing up-to-date metadata

 $<sup>^1\</sup> http://web.ons.gov.uk/ons/guide-method/method-quality/quality/quality-strategy/index.html$ 

<sup>&</sup>lt;sup>2</sup> A link to the statistical framework is included in the page linked above

• Improve the quality of our statistical outputs and processes through standardisation, continuous improvement and quality reviews

The updated QMS also suggests the organisational approach to quality through the following themes

## 2.3 Governance and leadership

The strategy is owned by the ONS Business Group which is a senior committee comprising of senior civil servants. The senior ONS Quality Champion is Tricia Dodd who is the Chief Methodology Officer of the organisation.

# 2.4 Capability

The strategy outlines that all staff have a responsibility for understanding the importance of quality for their work and are supported through:

- Receiving training in quality management and how it can be applied. The ONS Quality Centre currently offers several QM courses. Some of these include:
  - o a basic course ('Quality @ ONS') covering statistical quality which all staff are encouraged to attend
  - o a course specifically for staff involved in the statistical output production process ('QA for statistical outputs')
  - o a higher level course aimed at Statistical Analysts ('Quality and Statistics'.)
- The availability of a central database to store desk instructions, descriptions of processes and methodologies with the use of this database being processed and monitored. Options are currently being considered in how this central database (known as the Standards and Guidance Database or STaG) can be improved to assist in the standardisation of methods and processes. This will address a recommendation from the ESS Peer Review of the UK Statistical System conducted in 2015.

#### 2.5 Environment

- The strategy states that the ONS Quality Centre operates as a centre of expertise for statistical quality and quality management, providing advice and support to business areas and having responsibility for carrying out quality reviews and related activities
- The strategy also refers to the Continuous Improvement Zone, a centre of expertise encouraging a culture of continuous improvement. It also provides support to Lean Six Sigma (LSS) Practitioners and assistance to Divisional Continuous Improvement Champions in the development and delivery of Continuous Improvement Initiatives for their area
- Internal Audit is in place to provide independent assurance of processes and procedures across ONS.

#### 2.6 Co-ordination

The ONS Quality Centre co-ordinates, promotes and communicates the Quality Management Strategy across ONS and provides updates on progress to the ONS Business Group every six months.

As mentioned earlier, the network of quality champions, with a representative from each division is also maintained and co-ordinated by the Quality Centre

#### 2.7 Communication

The results from user engagement activities and the UK Statistics Authority (UKSA) assessments will inform if our statistics are of the level of quality required by our users.

The ONS Quality Centre will share examples of good practice across the ONS and more widely across the Government Statistical Service (GSS).

## 3. Quality Initiatives

3.1 The ONS Quality Management Strategy is supported by a statistical quality framework which sets out the initiatives in place at an organizational level for:

- Quality assurance describes how we anticipate and avoid problems
- Quality control how we respond to observed problems
- Quality reporting how we inform users on the quality of our statistics
- Quality improvement how we make improvements to our statistical quality

This statistical framework (see footnote 2) shows each of the initiatives and includes detail including:

- What it is, what it covers and why it is conducted? (For example: A structured quality
  assurance walk-through of production procedures is conducted to ensure QA procedures
  are reviewed, prove suitable and are robust.)
- Who does it and who is it for? (For example: The Output manager conducts the walk-through with their director to satisfy the director that procedures are fit-for-purpose)
- Where does it sit within the Generic Statistical Business Process Model (GSBPM)? (For example: The walk-through covers both the Process and Analyze stage of the GSBPM)
- How often it is done? (For example: The walkthrough's are conducted at least every three years or sooner if there are changes to the output manager or the director, or if there are any key methodological changes to the output.)

Quality Centre have supported divisional quality champions to develop a division-led quality framework that sets out any additional local activities, carried out within their business area, against the four quality headings.

## 4. Quality Goals

- 4.1 To further establish our commitment to quality, there are three quality goals that we will work towards achieving over the next three years:
- i) Continue to embed a culture where quality is seen as everyone's responsibility
- ii) Improve how we communicate quality to our users

iii) Further harmonise and standardise statistical processes and outputs where appropriate.

4.2 Work is underway to address each of these goals, for example, progress of work on Goals two and three are being presented at this conference by other members of the ONS Quality Team.

### 5. Conclusion

5.1 The updated QMS makes a clearer connection between day-to-day activities and the organisation's commitment to quality, and provides a framework for the activities of Quality Centre. This hierarchical structure means that day-to-day activities can be clearly linked to the overall commitment of the organisation to quality, making it more relevant and achievable for all staff within ONS.

We are in discussions with the network of quality champions to decide on the most effective means of measuring progress against each of the three goals.

5.2 Whilst the QMS was intended for ONS purposes it has been shared with the network of quality champions that Quality Centre manage across all Government Departments in the UK and Departments have been encouraged to adopt a similar approach.

Information has been shared by other UK Government Departments where they have adopted the ONS QMS and how it is working successfully within their areas.