

The relationships between of quality reporting and CoP, QAF and Quality audits

Component A: Quality Management of Official Statistics

Activity A.3: Quality reports, tools and methods

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From ToR

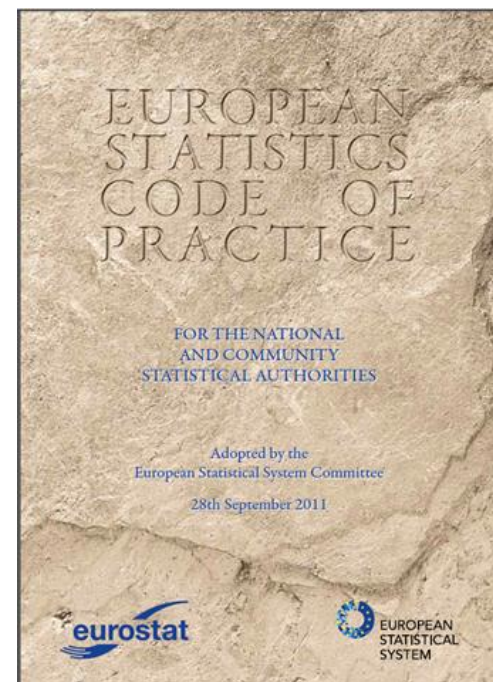
- ***The relationships between of quality reporting and CoP, QAF and Quality audits including integration and synergetic effect/benefit (e.g how text from the quality report can be used in self-assessment etc., reuse)***

Quality framework

- European frame:
 - European statistics Code of Practice (CoP)
 - ESS Quality Assurance Framework
 - Peer Reviews
- Local frame
 - Quality awareness in dissemination of statistics
 - Documentation of statistics
 - Other metadata
 - User involvement
 - Quality awareness in the production of statistics
 - EU cooperation
 - Guidance from the methods department
 - Extensive use of administrative registers
 - Quality audits

Code of Practice (CoP)

- European statistics code of practice
 - First published in 2005 and updated in 2011
- Builds on UN's Fundamental principles for Statistics
 - Published in 1994
- 15 principles
 - Institutional environment
 - Statistical processes
 - Statistical output
- A set of indicators for good practice for each principle



Institutional environment

- **Principle 1: Professional independence**
 - Professional independence of statistical authorities from other policy, regulatory or administrative departments and bodies, as well as from private sector operators, ensures the credibility of European Statistics.
- **Principle 2: Mandate for data collection**
 - Statistical authorities have a clear legal mandate to collect information for European statistical purposes. Administrations, enterprises and households, and the public at large may be compelled by law to allow access to or deliver data for European statistical purposes at the request of statistical authorities.
- **Principle 3: Adequate resources**
 - The resources available to statistical authorities are sufficient to meet European Statistics requirements.

....about quality

- **Principle 4: Commitment to quality**

- Statistical authorities are committed to quality. They systematically and regularly identify strengths and weaknesses to continuously improve process and product quality.
- **Indicator 4.1:** Quality policy is defined and made available to the public. **An organizational structure and tools are in place to deal with quality management.**
- **Indicator 4.2:** **Procedures are in place to plan and monitor the quality of the statistical production process.**
- **Indicator 4.3:** **Product quality is regularly monitored**, assessed with regard to possible trade-offs, and reported according to the quality criteria for European Statistics.
- **Indicator 4.4:** **There is a regular and thorough review of the key statistical outputs** using also external experts where appropriate.
- <http://dst.dk/en/OmDS/strategi-og-kvalitet/kvalitetspolitik>

Institutional environment (cont.)

- **Principle 5: Statistical confidentiality**

- The privacy of data providers (households, enterprises, administrations and other respondents), the confidentiality of the information they provide and its use only for statistical purposes are absolutely guaranteed.

- **Principle 6: Impartiality and objectivity**

- Statistical authorities develop, produce and disseminate European Statistics respecting scientific independence and in an objective, professional and transparent manner in which all users are treated equitably.

Statistical processes

- **Principle 7: Sound methodology**
 - **Sound methodology** underpins quality statistics. This requires adequate tools, procedures and expertise.
- **Principle 8: Appropriate statistical procedures**
 - **Appropriate statistical procedures**, implemented from data collection to data validation, underpin quality statistics.
- **Principle 9: Non-excessive burden on respondents**
 - The reporting **burden is proportionate to the needs of the users and is not excessive for respondents**. The statistical authorities monitor the response burden and set targets for its reduction over time.
- **Principle 10: Cost effectiveness**
 - **Resources are used effectively.**

Statistical output

- **Principle 11: Relevance**
 - European Statistics **meet the needs of users.**
- **Principle 12: Accuracy and reliability**
 - European Statistics **accurately and reliably portray reality.**
- **Principle 13: Timeliness and punctuality**
 - European Statistics are released in a timely and punctual manner.
- **Principle 14: Coherence and comparability**
 - European Statistics are consistent internally, over time and comparable between regions and countries; it is possible to combine and make joint use of related data from different sources.
- **Principle 15: Accessibility and clarity**
 - European Statistics are presented in a clear and understandable form, released in a suitable and convenient manner, available and accessible on an impartial basis **with supporting metadata and guidance.**

Quality Assurance Framework (QAF)

- QAF is developed to assist the implementation of CoP
- In QAF possible activities, methods and tools to help achieving the goals in the principles of CoP
- A distinction is made between initiatives at the institutional level and at the level individual statistics
- Not all 15 principles are referred to
 - 4 Commitment to quality
 - Principles for statistical processes
 - Principles for statistical output

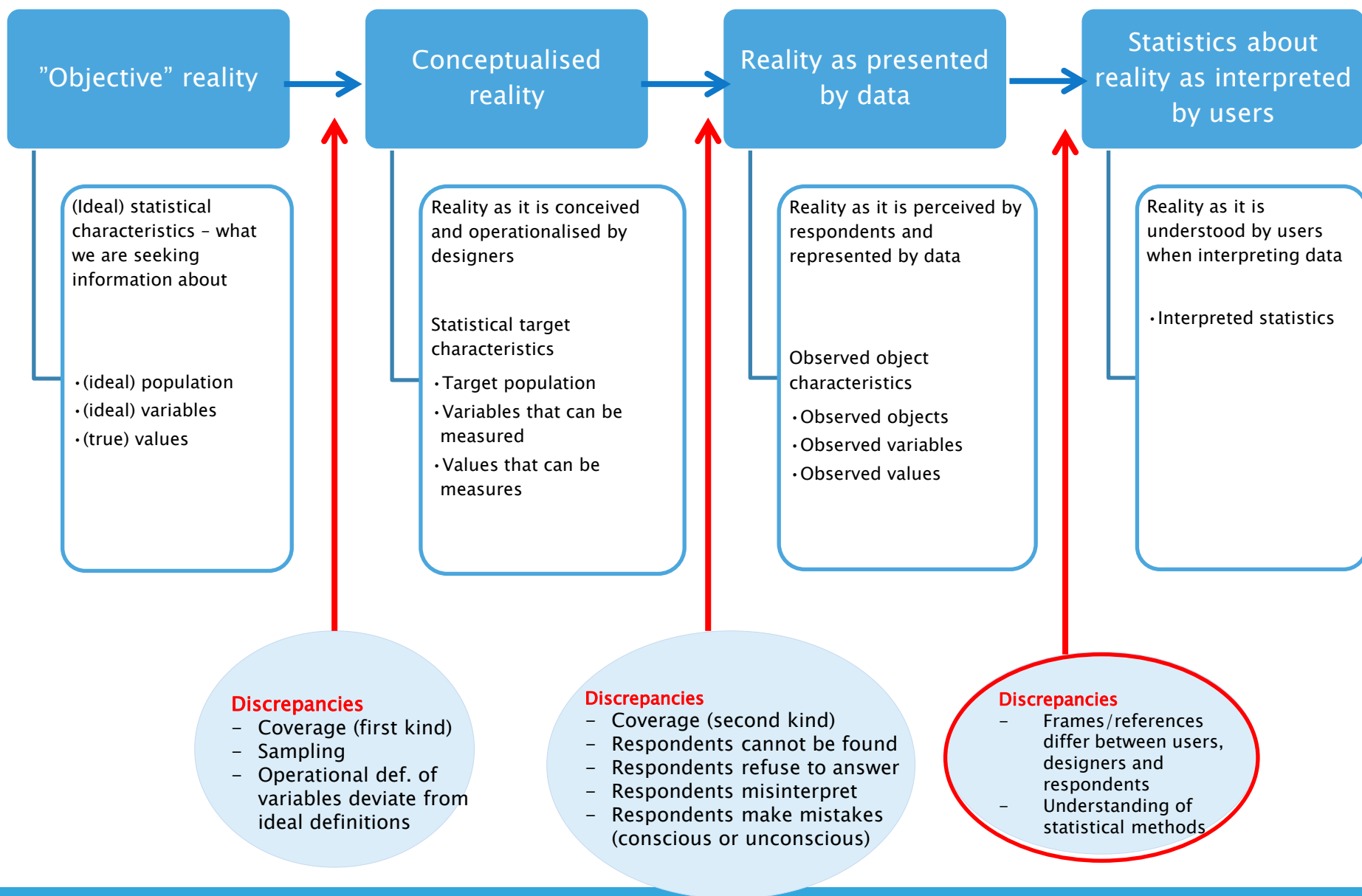


Peer reviews in 2005/6 and 20014/15

- Carried out to assess the compliance with CoP
- ...to enhance the credibility and capacity of the ESS
- The process starts with a self evaluation form (350 questions) based on CoP and QAF
- This is followed up by a 5 days visit with three experts where users and data suppliers are involved
- A review report is delivered by the expert group with comments from the NSI
- The NSI formulates some improvement actions on the grounds of the report
- Eurostat delivers a comprehensive report to the European Parliament and ECOFIN-council

Producing statistics

- Producing statistics is about describing phenomena in the society
- Not just anything – but some important phenomena in the society – something that some users seek information about
 - Population
 - Education
 - The economy
 - Etc.
 - An illustration is given by the Swede Bo Sundgren in *Statistical systems: Some fundamentals*



Reporting quality to users – Documentation of statistics

- Help for the user to understand the statistics – giving the user information about the frame we have worked within
- Explain the content of the statistics
 - History
 - Purpose of the statistics
 - Content – population, variables etc.
- Quality = Fitness for use
- Quality of contents:
 - Relevance, Accuracy & reliability, Timeliness and punctuality, Coherence & comparability, Accessibility and clearness

Documentation of Statistics

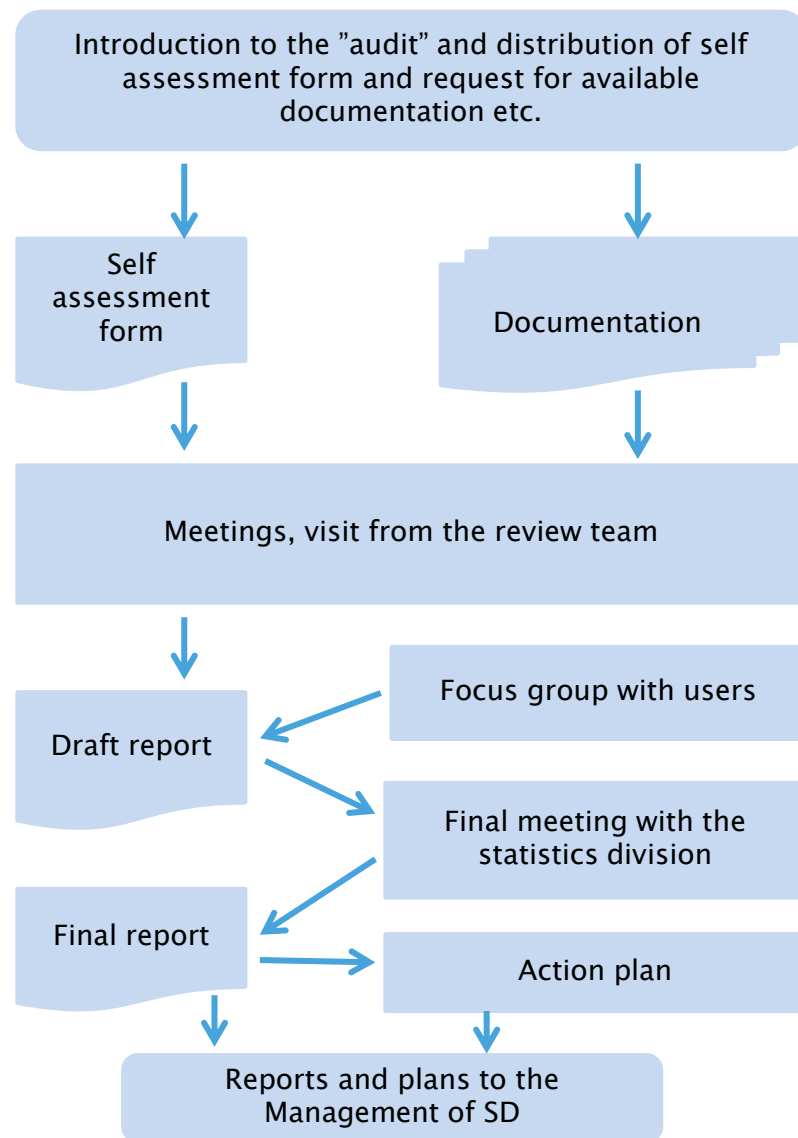
- Re-organisation 2014 following the ESS handbook
- Three levels
 1. “Front page” to appear at the webpage of Statistics Denmark, with a short description of the 9 headlines in the Structure. From the front page one can open around 100 specified topics (SIMS)
 2. SIMS topics cover the more detailed quality report (see guidelines in Annex 2). From level 2 one can open annexes for further description
 3. Annexes
- The idea is in one product to cover all customers (national, international, EU).
- Prepared in Danish and English

Starting point for quality reports

- Starting point is Code of Practise and ESS Quality assurance framework
 - Indicator 4.3 – reporting of quality
 - Indicator 15.5 – metadata are documented according to standardised metadata systems
- Standards:
 - SIMS
 - ESQR
 - ESMS
 - GSBPM

Quality audits

- Started in SD in 2015
- Audit based on CoP
- Team of experts
- Self assessment
- Examination of documentation
- Audit – the GSBPM is used to assist
- Report
- Action list



Self evaluation in SD

- Se the CoP as basis
- Each of the indicators from Principle 4 are evaluated
- QAF is used for inspiration on the level of single statistics
- Degree of compliance
 - A – Most of the demands fulfilled, including documentation
 - B – Some of the demands fulfilled, but still some missing
 - C – Only few of the demands fulfilled, much missing
 - X – not relevant

Quality reports

- The quality reports are used in the preparation
- They give information on
 - Background (introduction), content (statistical presentation)
 - Statistical processing
 - Relevance
 - Accuracy and reliability
 - Timeliness and punctuality
 - Comparability and coherence
 - Accessibility and clarity