



ESS Quality Glossary

Developed by Unit B1 "Quality, Methodology and Research"

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<http://tinyurl.com/ESSQualityGlossaryinCODED>

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Accessibility

Quality, Description, Criteria

Accessibility is an attribute of statistics describing the set of conditions and modalities by which users can obtain data.

According to the European Statistics Code of Practice, European statistics should be presented in a clear and understandable form, disseminated in a suitable and convenient manner, available and accessible on an impartial basis with supporting metadata and guidance.

Source(s)

European Union, Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics (Official Journal of the European Union No L 87, 31.3.2009, p.164 - 173)

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:087:0164:0173:EN:PDF>

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Accuracy

Quality, Description, Criteria

Accuracy is an attribute of statistics measuring the closeness of estimates to the unknown true values.

According to the European Statistics Code of Practice, European statistics must accurately and reliably portray reality.

Source(s)

European Union, Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics (Official Journal of the European Union No L 87, 31.3.2009, p.164 - 173)

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:087:0164:0173:EN:PDF>

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Adequacy of resources

Quality, Description, Principles

Adequacy of resources is the characteristic of a statistical institute of authority which enables them to meet statistical requirements. These resources include staff, financial and computing resources and must be adequate both in magnitude and in quality.

Source(s)

Based on the European Statistics Code of Practice

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Appropriate statistical procedures

Quality, Description, Principles

Appropriate statistical procedures, implemented from data collection to data validation, are those procedures which underpin quality statistics.

Source(s)

Based on the European Statistics Code of Practice

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Balanced scorecard

Quality, Framework

The balanced scorecard is a strategic planning and management system that is used extensively in business and industry, government, and nonprofit organizations worldwide to align business activities to the vision and strategy of the organization, improve internal and external communications, and monitor organization performance against strategic goals.

The balanced scorecard has evolved from its early use as a simple performance measurement framework to a full strategic planning and management system.

The "new" balanced scorecard transforms an organization's strategic plan from an attractive but passive document into the "marching orders" for the organization on a daily basis. It provides a framework that not only provides performance measurements, but helps planners identify what should be done and measured. It enables executives to truly execute their strategies.

Source(s)

Website of the Balanced Scorecard Institute

<http://www.balancedscorecard.org/BSCResources/AbouttheBalancedScorecard/tabid/55/default.aspx>

Benchmarking

Quality, Evaluation, Assessments

Benchmarking is a methodology that is used to search for best practices. Benchmarking can be applied to strategies, policies, operations, processes, products, and organizational structures. By finding and adopting best practices you can improve your organization's overall performance.

Best practices can be found either within your own organization or within other organizations. It usually means identifying organizations that are doing something in the best possible way and then trying to emulate how they do it.

There are at least two types of external benchmarking: competitive benchmarking and generic benchmarking. Competitive benchmarking involves comparing how you do things with how your competitors do things while generic benchmarking involves comparing yourself with organizations in unrelated sectors.

In order to carry out benchmarking projects, you need to develop a benchmarking methodology. Your benchmarking methodology should define rules that control :

- 1. How the scope of each project is defined.*
- 2. How benchmarking partners are selected.*
- 3. How confidentiality is respected and ensured.*
- 4. How benchmarking characteristics are specified.*
- 5. How benchmarking indicators or metrics are chosen.*
- 6. How benchmarking data is collected and analyzed.*
- 7. How potential improvements are identified.*
- 8. How improvement plans are developed.*
- 9. How your benchmarking experience is added to your organization's knowledge base.*

Source(s)

Praxiom Research Group Limited, ISO Standards Translated into Plain English, based on ISO 9000, 9001 and 9004 Quality management definitions

<http://www.praxiom.com/iso-definition.htm>

Certification

Quality, Conformity

Certification is an activity which assesses whether a particular product, service or process or system (e.g. quality management system) complies with requirements defined by a standard or other document containing criteria. It is conducted by an external independent certification body. The result of the successful certification is the certificate awarded to the organisation by the certification body.

Source(s)

Based on International Organization for Standardization (ISO), ISO Standard 9000/2005: "Quality management systems - Fundamentals and vocabulary", Geneva, 2005

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42180

Clarity

Quality, Description, Criteria

Clarity is an attribute of statistics describing the extent to which easily comprehensible metadata are available, where these metadata are necessary to give a full understanding of statistical data.

Clarity is sometimes referred to as "interpretability". It refers to the data information environment: whether data are accompanied by appropriate metadata, including information on their quality, and the extent to which additional assistance is provided to users by data providers.

In the European Statistics Code of Practice, clarity is strictly associated to accessibility to form one single quality criteria: "accessibility and clarity": the conditions and modalities by which users can use and interpret data. European statistics should be presented in a clear and understandable form, disseminated in a suitable and convenient manner, available and accessible on an impartial basis with supporting metadata and guidance.

Source(s)

SDMX, Statistical Data and Metadata eXchange initiative, sponsored by Bank for International Settlements (BIS), European Central Bank (ECB), Eurostat, International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), United Nations Statistics Division (UNSD) and World Bank, 2009

<http://sdmx.org/>

European Union, Regulation (EC) No 223/2009 of 11 March 2009 on European statistics

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:087:0164:0173:EN:PDF>

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Coherence

Quality, Description, Criteria

Coherence is an attribute of statistics measuring the adequacy of the data to be reliably combined in different ways and for various uses.

European statistics should be consistent internally, over time and comparable between regions and countries; it should be possible to combine and make joint use of related data from different sources.

When originating from different sources, and in particular from statistical surveys using different methodology, statistics are often not completely identical, but show differences in results due to different approaches, classifications and methodological standards. There are several areas where the assessment of coherence is regularly conducted: between provisional and final statistics, between annual and short-term statistics, between statistics from the same socio-economic domain, and between survey statistics and national accounts.

The concept of coherence is closely related to the concept of comparability between statistical domains. Both coherence and comparability refer to a data set with respect to another. The difference between the two is that comparability refers to comparisons between statistics based on usually unrelated statistical populations and coherence refers to comparisons between statistics for the same or largely similar populations.

Coherence can be generally broken down into "Coherence - cross domain" and "Coherence - internal".

Users should be aware that, in the Data Quality Assessment Framework of the International Monetary Fund, the term "consistency" is used for indicating "logical and numerical coherence". In that framework, "internal consistency" and "intersectoral and cross-domain consistency" can be mapped to "internal coherence" and "cross-domain coherence" respectively.

Source(s)

SDMX, Statistical Data and Metadata eXchange initiative, sponsored by Bank for International Settlements (BIS), European Central Bank (ECB), Eurostat, International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), United Nations Statistics Division (UNSD) and World Bank, 2009

<http://www.sdmx.org/>

European Union, Regulation (EC) No 223/2009 of 11 March 2009 on European statistics

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:087:0164:0173:EN:PDF>

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Commitment to quality

Quality, Description, Principles

Commitment to quality is the characteristic of a statistical institute of authority through which they systematically and regularly identify strengths and weaknesses to continuously improve process and product quality.

Source(s)

Based on the European Statistics Code of Practice

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Common Assessment Framework

Quality, Framework

The Common Assessment Framework (CAF) is a common European quality management instrument for the public sector developed by the public sector.

The CAF is an easy-to-use, free tool to assist public-sector organisations across Europe in using quality management techniques to improve their performance. The CAF is a total quality management (TQM) tool which is inspired by the major Total Quality models in general, and by the Excellence Model of the European Foundation for Quality Management (EFQM) in particular. It is especially designed for public-sector organisations, taking into account their characteristics.

The model is based on the premise that excellent results in organisational performance, citizens/customers, people and society are achieved through leadership driving strategy and planning, people, partnerships, resources and processes. It looks at the organisation from different angles at the same time; a holistic approach to organisation performance analysis.

Source(s)

Website of the European Institute of Public Administration (EIPA)

<http://www.eipa.eu/en/topic/show/&tid=191>

Comparability

Quality, Description, Criteria

Comparability is an attribute of statistics measuring the extent to which differences between statistics can be attributed to differences between the true values of the statistical characteristics.

Comparability aims at measuring the impact of differences in applied statistical concepts, definitions, measurement tools and procedures on the comparison of statistics between geographical areas, non-geographical dimensions, sectoral domains or over time. Comparability of statistics, i.e. their usefulness in drawing comparisons and contrast among different populations, is a complex concept, difficult to assess in precise or absolute terms. In general terms, it means that statistics for different populations can be legitimately aggregated, compared and interpreted in relation to each other or against some common standard. Metadata must convey such information that will help any interested party in evaluating comparability of the data, which is the result of a multitude of factors.

In some quality frameworks, for instance in the European Statistical Code of Practice, comparability is strictly associated with the coherence of statistics.

The concept can be further broken down into:

- (a) Comparability - geographical, referring to the degree of comparability between statistics measuring the same phenomenon for different geographical areas*
- (b) Comparability over time, referring to the degree of comparability between two or more instances of data on the same phenomenon measured at different points in time.*
- (c) Comparability between domains, referring to the comparability between different survey results which target similar characteristics in different statistical domains.*

According to the European Statistics Code of Practice, European statistics should be consistent internally, over time and comparable between regions and countries; it should be possible to combine and make joint use of related data from different sources.

Source(s)

SDMX, Statistical Data and Metadata eXchange initiative, sponsored by Bank for International Settlements (BIS), European Central Bank (ECB), Eurostat, International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), United Nations Statistics Division (UNSD) and World Bank, 2009

<http://www.sdmx.org/>

European Union, Regulation (EC) No 223/2009 of 11 March 2009 on European statistics

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:087:0164:0173:EN:PDF>

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Consistency

Quality, Description, Criteria

Consistency is an attribute of statistics measuring the logical and numerical coherence, i.e. the adequacy of the data to be reliably combined in a logical and numerical way.

An estimator is called consistent if it converges in probability to its estimand as sample increases (The International Statistical Institute, "The Oxford Dictionary of Statistical Terms", edited by Yadolah Dodge, Oxford University Press, 2003).

Consistency over time, within datasets, and across datasets (often referred to as inter-sectoral consistency) are major aspects of consistency. In each, consistency in a looser sense carries the notion of "at least reconcilable".

There are other types of consistency: consistency between preliminary and final data (also called continuity), consistency between micro data and aggregated, consistency between annual, quarterly and monthly data, consistency between statistics and National Accounts, non deterministic consistency e.g. consistency between economic growth and employment (also called plausibility).

For example, if two series purporting to cover the same phenomena differ, the differences in time of recording, valuation, and coverage should be identified so that the series can be reconciled. Inconsistency over time refers to changes that lead to breaks in series stemming from, for example, changes in concepts, definitions, and methodology. Inconsistency within datasets may exist, for example, when two sides of an implied balancing statement - assets and liabilities or inflows and outflows - do not balance. Inconsistency across datasets may exist when, for example, exports and imports in the national accounts do not reconcile with exports and imports within the balance or payments.

Within the IMF definition of quality, "consistency" is one of the elements of "serviceability".

Source(s)

International Monetary Fund, "Data Quality Assessment Framework - DQAF - Glossary", unpublished

<http://www.imf.org/>

Cost effectiveness

Quality, Description, Principles

Cost effectiveness is a characteristic of a process where the costs of producing the statistics are in proportion to the importance of the results and the benefits sought, the resources are optimally used and the response burden minimised. Where possible, the information requested is readily extractable from available records or sources.

Source(s)

Based on European Union, Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics (Official Journal of the European Union No L 87, 31.3.2009, p.164 - 173)

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:087:0164:0173:EN:PDF>

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Credibility

Quality, Description, Principles

Credibility is the confidence that users place in statistical products based simply on their image of the data producer, the statistical authority i.e., the brand image.

Confidence by users is built over time. One important aspect is trust in the objectivity of the data. This implies that the data are perceived to be produced professionally in accordance with appropriate statistical standards, and that policies and practices are transparent. For example, data are not manipulated, nor their release timed in response to political pressure.

Credibility is determined in part by the integrity of the production process. Principle 2 of the Fundamental Principles of Official Statistics states: to retain trust in official statistics, the statistical agencies need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data.

Source(s)

Organisation for Economic Co-operation and Development (OECD), "Quality Framework and Guidelines for OECD Statistical Activities", Paris, 2003

http://ec.europa.eu/eurostat/ramon/coded_files/Quality_Frame_OECD_Stat_Act.pdf

European Foundation for Quality Management

Quality, Framework

The European Foundation for Quality Management (EFQM) is a not for profit membership foundation.

The EFQM Excellence Model is the most widely used organisational framework in Europe and it is the basis for the majority of national and regional Quality Awards. Used as a tool for assessment, it delivers a picture of how well the organisation compares to similar or very different kinds of organisation. Used as a management model it can be used to define aspirations for the organisation's capability and performance.

Through the network of over 600 members comprising private and public organisations of every size and sector, many active around the world, EFQM applies its know-how and extracts outstanding approaches by engaging with executives and front-line managers.

The EFQM Excellence Model:

- *Is a structure for the organisation's management system*
- *Can be used as part of a self-assessment*
- *Provides a framework for comparison with other organisations*
- *Helps to identify areas for Improvement*

The EFQM Excellence Model is a non-prescriptive framework based on 9 criteria. Five of these are "Enablers" and four are "Results". The "Enabler" criteria cover what an organisation does and how it does it.

The "Results" criteria cover what an organisation achieves. "Results" are caused by "Enablers" and "Enablers" are improved using feedback from "Results".

The Model, which recognises there are many approaches to achieving sustainability, is based on the premise that:

Excellent Key Results, Customer Results, People Results and Society Results are achieved through Leadership driving the Strategy, that is delivered through People, Partnerships and Resources, and Processes, Products and Services.

Source(s)

Website of the European Foundation for Quality Management

<http://www.efqm.org/en/tabid/108/default.aspx>

European Statistics Code of Practice

Quality, Framework

The European Statistics Code of Practice (CoP, Code) is the European Statistical System (ESS) quality framework, providing a structure for supporting improvements of quality for the ESS.

The Code provides an encompassing conceptual ground for quality management and is based on 15 principles. Governance authorities and statistical authorities in the European Union commit themselves to adhering to the principles fixed in the Code covering the institutional environment, statistical processes and statistical outputs for the ESS. A set of indicators of good practice for each of the 15 principles provides a reference for reviewing the implementation of the Code.

Source(s)

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Impartiality

Quality, Description, Principles

Impartiality is an attribute confirming that statistics are developed, produced and disseminated in a neutral manner, and that all users must be given equal treatment.

Source(s)

Based on European Union, Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics (Official Journal of the European Union No L 87, 31.3.2009, p.164 - 173)

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:087:0164:0173:EN:PDF>

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Institutional environment

Quality, Documentation, Measurement

Institutional environment is the set of rules and the organisational structures that are used as the basis for producing statistics.

Quality is the degree to which a set of inherent characteristics fulfils requirements.

According to the European Statistics Code of Practice ("Code"), quality is determined by three major factors: the institutional environment, the statistical processes and the statistical output.

The Code distinguishes between six quality components for the institutional environment:

- professional independence
- mandate for data collection
- adequacy of resources
- quality commitment
- statistical confidentiality
- impartiality and objectivity

Source(s)

International Organization for Standardization (ISO), ISO Standard 9000/2005: "Quality management systems - Fundamentals and vocabulary", Geneva, 2005

http://www.iso.org/iso/catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42180

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Integrity

Quality, Description, Principles

Integrity is the set of values and related practices of a statistical authority that maintain confidence in the eyes of users in the agency producing statistics and ultimately in the statistical product.

Under the SDDS framework, "integrity" is the third of four dimensions of the standard (i.e., data, access, integrity, and quality) for which evidence of a subscribing member's observance of the standard can be obtained.

Integrity refers to the description of the policy on the availability of the terms and conditions under which statistics are collected, processed, and disseminated. It also describes the policy of providing advanced notice of major changes in methodology, source data, and statistical techniques; the policy on internal governmental access to statistics prior to their release; the policy on statistical products' identification.

One important aspect, in integrity, is the trust in the objectivity of statistics. It implies that professionalism should guide policies and practices and it is supported by ethical standards and by transparency of policies and practices.

Source(s)

International Monetary Fund (IMF), "Data Quality Assessment Framework - DQAF - Glossary", unpublished

<http://www.imf.org/external/index.htm>

ISO 20252:2006

Quality, Framework

ISO 20252:2006 is a set of international standards establishing the terms and definitions as well as the service requirements for organizations and professionals conducting market, opinion and social research.

ISO (International Organization for Standardization) is the world's largest developer and publisher of International Standards. ISO is a network of the national standards institutes of 161 countries, one member per country, with a Central Secretariat in Geneva, Switzerland, that coordinates the system.

ISO is a non-governmental organization that forms a bridge between the public and private sectors. On the one hand, many of its member institutes are part of the governmental structure of their countries, or are mandated by their government. On the other hand, other members have their roots uniquely in the private sector, having been set up by national partnerships of industry associations.

Therefore, ISO enables a consensus to be reached on solutions that meet both the requirements of business and the broader needs of society.

Source(s)

International Organization for Standardization (ISO), ISO Standard 20252:2006: "Market, opinion and social research - Vocabulary and service requirements", Geneva, 2005

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=39339

ISO 9000:2005

Quality, Framework

ISO 9000:2005 is a set of international standards describing fundamentals of quality management systems, which form the subject of the ISO 9000 family, and defines related terms.

ISO (International Organization for Standardization) is the world's largest developer and publisher of International Standards. ISO is a network of the national standards institutes of 161 countries, one member per country, with a Central Secretariat in Geneva, Switzerland, that coordinates the system.

ISO is a non-governmental organization that forms a bridge between the public and private sectors. On the one hand, many of its member institutes are part of the governmental structure of their countries, or are mandated by their government. On the other hand, other members have their roots uniquely in the private sector, having been set up by national partnerships of industry associations.

Therefore, ISO enables a consensus to be reached on solutions that meet both the requirements of business and the broader needs of society.

ISO 9000 is a family of standards that addresses quality management; this means what the organisation does to fulfil:

- the customer's quality requirements, and
- applicable regulatory requirements, while aiming to
- enhance customer satisfaction, and
- achieve continual improvement of its performance in pursuit of these objectives.

According to ISO definition the customer is: organisation or person that receives a product, it can be user, client, consumer, retailer, beneficiary, purchaser; a customer can be internal or external to the organisation.

Source(s)

International Organization for Standardization (ISO), ISO Standard 9000/2005: "Quality management systems - Fundamentals and vocabulary", Geneva, 2005

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42180

Labelling

Quality, Conformity

The labelling method means that a label is attached to some statistics. The label has a message about these statistics, a message that is related to quality and quality assessment.

Source(s)

Eurostat, "Handbook on Data Quality Assessment Methods and Tools (DatQAM)", Eurostat-granted project led by FSO Germany with project members: Statistics Sweden, Hungarian Central Statistical Office, State Statistical Institute Berlin-Brandenburg, National Statistical Institute of Portugal, and Statistics Norway, 2007

http://ec.europa.eu/eurostat/ramon/statmanuals/files/Handbook_on_data_qual_assess_tools.pdf

Mandate for data collection

Quality, Description, Principles

Mandate for data collection is the characteristic of a statistical institute of authority to have the legal power to collect information for statistical purposes.

Administrations, enterprises and households, and the public at large may be compelled by law to allow access to or deliver data for statistical purposes at the request of statistical institutes or authorities.

Source(s)

Based on the European Statistics Code of Practice

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Methodological soundness, sound methodology

Quality, Description, Principles

Methodological soundness is the extent to which the methodology used to compile statistics complies with the relevant international standards.

According to the European Statistics Code of Practice, sound methodology underpins quality statistics. This requires adequate tools, procedures and expertise.

Source(s)

Statistical Data and Metadata eXchange (SDMX) initiative, sponsored by BIS, ECB, Eurostat, IMF, OECD, UNSD and World Bank, 2009

Based on the European Statistics Code of Practice

<http://sdmx.org/>

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Non-excessive burden on respondents

Quality, Description, Principles

Non-excessive burden on respondents is the reasonable effort, in terms of time and cost, which is required for respondents to provide satisfactory answers to a survey.

In the European Statistics Code of Practice, it is a reporting burden which is proportionate to the needs of the users and in the same time is not excessive for respondents. It is monitored by the statistical institute or authority and targets are set for its reduction over time.

Source(s)

Based on the Statistical Data and Metadata eXchange (SDMX) initiative, sponsored by BIS, ECB, Eurostat, IMF, OECD, UNSD and World Bank, 2009

Based on the European Statistics Code of Practice

<http://sdmx.org/>

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Objectivity

Quality, Description, Principles

Objectivity is an attribute confirming that statistics are developed, produced and disseminated in a systematic, reliable and unbiased manner. It implies the use of professional and ethical standards, and that the policies and practices followed are transparent to users and survey respondents.

Source(s)

Based on European Union, Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics (Official Journal of the European Union No L 87, 31.3.2009, p.164 - 173)

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:087:0164:0173:EN:PDF>

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Object-oriented Quality and Risk Management model

Quality, Framework

A model that is used to compare, integrate and develop quality frameworks, is used to assure the quality of objects the user of the model selects and is used to manage risks.

The Object-oriented Quality and Risk Management model has been developed and widely used by Statistics Netherlands. Important concept of the model is, that inside and outside the organization objects can be distinguished that are interrelated e.g. users, output, process, data, metadata, methodology, staff, information systems, suppliers.

Each object has an unique set of attributes. A combination of an object and one associated attribute is called a focus area e.g. accuracy of data, efficiency of processes, soundness of methodology, satisfaction of users.

A focus area defines the scope the user wants to manage or control. Focus areas are the building blocks of a quality framework or quality assurance program. Each principle and indicator of the ESCoP (European Statistics Code of Practice) can be mapped on a focus area.

For each focus area a set of standard questions can be answered like what is the definition of the focus area, what are the requirements for the focus area, what are causes and effects of problems with the focus area (risk analysis), what are possible or implemented indicators, what are possible or implemented measures. Key question in case of assurance is if the organization in control of the focus area. If not, what extra measured should be taken. Which questions are relevant is dependant of the application of the model.

The model can be used at any organization, at any level, at any field of expertise and at any scale. It is an "empty" model like balanced scorecard. It does not contain any domain knowledge (poor in content, but rich in structure). It is meant for custom made frameworks or quality assurance programs. Risk analysis is integrated in the model.

Source(s)

Nederpelt, Peter W.M. (2012). Object-oriented Quality and Risk Management (OQRM). A practical, scalable en generic method to manage quality and risks. Alphen aan den Rijn, The Netherlands: MicroData.

<http://www.oqrm.org/English>

Statistics Netherlands, "Object Oriented Quality Management (OQM). A management model for quality",

<http://www.cbs.nl/NR/rdonlyres/B2FAB686-5AFD-4345-84D6-332E46C063B4/0/2009objectorientedqualitymanagementart.pdf>

Output (product) quality

Quality, Documentation, Measurement

Output (product) quality is the degree to which a set of inherent characteristics fulfils output requirements.

According to the European Statistics Code of Practice ("Code"), quality is determined by three major factors: the institutional environment, the statistical processes and the statistical output.

The Code distinguishes between nine output quality components:

- relevance
- accuracy and reliability
- timeliness and punctuality
- coherence and comparability
- accessibility and clarity

Source(s)

International Organization for Standardization (ISO), ISO Standard 9000/2005: "Quality management systems - Fundamentals and vocabulary", Geneva, 2005

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42180

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Peer review

Quality, Evaluation, Assessments

The peer review is a special kind of external audit, carried out e.g. by a National Statistical Institute (NSI) for another NSI (=peers). In general, it is less formal than an audit. It aims rather at assessing the general quality than at controlling the conformity with an external quality standard.

Source(s)

Eurostat, "Handbook on Data Quality Assessment Methods and Tools (DatQAM)", Eurostat-granted project led by FSO Germany with project members: Statistics Sweden, Hungarian Central Statistical Office, State Statistical Institute Berlin-Brandenburg, National Statistical Institute of Portugal, and Statistics Norway, 2007

http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/quality_reporting

Eurostat, "The Eurostat Quality Assurance Framework"

<http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/documents/QAF%20leaflet.pdf>

Pre-release access

Quality, Description, Principles

The pre-release access is the practice of giving certain individuals or organisations access to data under embargo before those data are released to the public

This entails the transparent recording of persons or officials holding designated positions within the government, but outside the statistical system producing the data, who have pre-release access to the data and the reporting of the schedule according to which they receive access. Also called "internal access" in the Data Quality Assessment Framework of the IMF.

Source(s)

SDMX, Statistical Data and Metadata eXchange initiative, sponsored by Bank for International Settlements (BIS), European Central Bank (ECB), Eurostat, International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), United Nations Statistics Division (UNSD) and World Bank, 2009

<http://www.sdmx.org/>

Prerequisites of quality

Quality

Prerequisites of quality are institutional conditions for the pursuit of data quality.

The Data Quality Assessment Framework (DQAF) groups the indicators of this kind into four elements: legal and institutional environment, resources, relevance and other quality management. These elements and indicators are identified to reinforce the idea that data users, who often cannot replicate or otherwise verify data, must place their trust in the institutions that produce statistics and the people who staff them. Typically, these pointers refer to the larger institution (called the "umbrella institution" in the DQAF) of which the compiling unit, such as a national accounts division or a balance of payments department, is a part. Further, these prerequisites typically influence more than one of the five dimensions in the DQAF.

In the framework of the European Statistics Code of Practice, the prerequisites of the quality are the institutional environments.

Source(s)

International Monetary Fund (IMF), "Data Quality Assessment Framework (DQAF) Glossary", unpublished

<http://www.imf.org>

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Process approach

Quality, Documentation, Measurement

The process approach is the systematic identification and management of the processes in the organisation and particularly of the interactions between such processes.

Applying the principle of process approach leads to:

- *Systematically defining the activities (sub-processes) necessary to obtain a desired result.*
- *Establishing clear responsibility and accountability for managing key activities (sub-processes).*
- *Analysing and measuring of the capability of key activities (sub-processes).*
- *Identifying the interfaces of key activities (sub-processes) within and between the functions of the organization.*
- *Focusing on the factors such as resources, methods, and materials that will improve key activities (sub-processes) of the organization.*
- *Evaluating risks, consequences and impacts of activities on interested parties.*

Source(s)

International Organization for Standardization (ISO), ISO Standard 9000/2005: "Quality management systems - Fundamentals and vocabulary", Geneva, 2005

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42180

Process description

Quality, Documentation, Measurement

Process description is a document which describes:

- the name and the aim of the process
- who is the process owner and operators
- inputs (and the process they come from); outputs (and the process they go to)
- sub-processes (activities) that transform inputs into outputs
- regulatives (internal, external) that characterise the regulated environment
- resources that are used in the transformation
- how the process is managed and improved (performance and quality indicators with target values; the way of monitoring, measurement, analysis; improvements; records stating results achieved or providing evidence of activities performed).

Source(s)

Based on International Organization for Standardization (ISO) process definition, ISO Standard 9000/2005: "Quality management systems - Fundamentals and vocabulary", Geneva, 2005

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42180

Process quality

Quality, Documentation, Measurement

Process quality is the degree to which a set of inherent characteristics fulfils process requirements.

According to the European Statistics Code of Practice ("Code"), quality is determined by three major factors: the institutional environment, the statistical processes and the statistical output.

The Code distinguishes between four process quality components:

- sound methodology
- appropriate statistical procedures
- non-excessive burden on respondents
- cost effectiveness

Source(s)

International Organization for Standardization (ISO), ISO Standard 9000/2005: "Quality management systems - Fundamentals and vocabulary", Geneva, 2005

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42180

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Process variable

Quality, Documentation, Measurement

Process variable gives an indication of the quality of the process.

Key process variables are those factors that can vary with each repetition of the process and have the largest effect on critical product characteristics, i.e. those characteristics that best indicate the quality of the product.

Source(s)

Eurostat, "Handbook on improving quality by analysis of process variables" produced by ONS-UK, INE Portugal, NSS of Greece and Statistics Sweden, 2004

http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/quality_reporting

Process-based quality management system

Quality, Framework

A process-based quality management system (QMS) uses a process approach to manage and control how its quality policy is implemented and how its quality objectives are achieved. A process-based QMS is a network of interrelated and interconnected processes.

Each process uses resources to transform inputs into outputs. Since the output of one process becomes the input of another process, processes interact and are interrelated by means of such input-output relationships. These process interactions create a single integrated process-based QMS.

Source(s)

Praxiom Research Group Limited, ISO Standards Translated into Plain English, based on ISO 9000, 9001 and 9004 Quality management definitions

<http://www.praxiom.com/iso-definition.htm>

Professional independence

Quality, Description, Principles

Professional independence is the characteristic of a statistical institute or authority to develop, produce and disseminate statistics in an independent manner, particularly as regards the selection of techniques, definitions, methodologies and sources to be used, and the timing and content of all forms of dissemination, free from any pressures from political or interest groups or from Community or national authorities, without prejudice to institutional settings, such as Community or national institutional or budgetary provisions or definitions of statistical needs.

Source(s)

Based on European Union, Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics (Official Journal of the European Union No L 87, 31.3.2009, p.164 - 173)

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:087:0164:0173:EN:PDF>

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Professionalism

Quality, Description, Principles

Professionalism is the set of standard, skill and ability of a statistical authority that are suitable for producing statistics of good quality.

To retain trust in official statistics, the statistical agencies need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data (Fundamental Principles of Official Statistics, principle 2).

"Professionalism" describes the elements providing assurances that: statistics are produced on an impartial basis; elements providing assurances that the choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations; elements providing assurances that the recruitment and promotion of staff are based on relevant aptitude; elements providing assurances that the statistical entity is entitled to comment on erroneous interpretation and misuse of statistics, guidelines for staff behaviour and procedures used to make these guidelines known to staff; other practices that provide assurances of the independence, integrity, and accountability of the statistical agency.

This concept can be further broken down into: Professionalism - code of conduct; Professionalism - impartiality; Professionalism - methodology; Professionalism - statistical commentary.

SDMX cross-domain concept.

Source(s)

SDMX, Statistical Data and Metadata eXchange initiative, sponsored by Bank for International Settlements (BIS), European Central Bank (ECB), Eurostat, International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), United Nations Statistics Division (UNSD) and World Bank, 2009

<http://www.sdmx.org/>

Punctuality

Quality, Description, Criteria

Punctuality is an attribute of statistics measuring the delay between the date of the release of the data and the target date (the date by which the data should have been delivered or released).

According to the European Statistics Code of Practice, European statistics must be disseminated in a timely and punctual manner.

Source(s)

European Union, Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics (Official Journal of the European Union No L 87, 31.3.2009, p.164 - 173)

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:087:0164:0173:EN:PDF>

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Quality

Quality

Quality is the degree to which a set of inherent characteristics fulfils requirements.

Quality is a multi-faceted concept. The dimensions of quality that are considered most important depend on user perspectives, needs and priorities, which vary across groups of users. Several statistical organisations have developed lists of quality dimensions, which, for international organisations, are being harmonised under the leadership of the Committee for the Coordination of Statistical Activities (CCSA).

The European Statistics Code of Practice defines quality in terms of the institutional environment, statistical processes and statistical output.

Source(s)

International Organization for Standardization (ISO), ISO Standard 9000/2005: "Quality management systems - Fundamentals and vocabulary", Geneva, 2005

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42180

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Quality assessment

Quality, Implementation, Tools

Quality assessment is a part of quality assurance that focuses on assessment of fulfilling quality requirements (need or expectation that is stated, generally implied or obligatory).

Source(s)

Based on International Organization for Standardization (ISO), ISO Standard 9000/2005: "Quality management systems - Fundamentals and vocabulary", Geneva, 2005

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42180

Quality assurance

Quality, Framework

Quality assurance is an organisation's guarantee that the product or service it offers meets the accepted quality standards. It is achieved by identifying what "quality" means in context; specifying methods by which its presence can be ensured; and specifying ways in which it can be measured to ensure conformance.

According to the ISO, quality assurance is a part of quality management, providing confidence that quality requirements (need or expectation that is stated, generally implied or obligatory) will be fulfilled.

Source(s)

Eurostat, "Handbook on improving quality by analysis of process variables" produced by ONS-UK, INE Portugal, NSS of Greece and Statistics Sweden, 2004

http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/quality_reporting

ISO Standard 9000/2005: "Quality management systems - Fundamentals and vocabulary", Geneva, 2005

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42180

Quality audit

Quality, Evaluation, Assessments

The quality audit is a systematic, independent and documented process for obtaining quality audit evidence (records, statements of fact or other information, which are relevant to the quality audit criteria and verifiable) and evaluating it objectively to determine the extent to which the quality audit criteria (set of policies, procedures or requirements) are fulfilled.

Source(s)

Eurostat, "Handbook on Data Quality Assessment Methods and Tools (DatQAM)", Eurostat-granted project led by FSO Germany with project members: Statistics Sweden, Hungarian Central Statistical Office, State Statistical Institute Berlin-Brandenburg, National Statistical Institute of Portugal, and Statistics Norway, 2007

http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/quality_reporting

Quality control

Quality, Evaluation, Assessments

1) Quality Control of the data collection process assures that the underlying statistical assumptions of a survey are not violated, i.e. the meaning of the principal statistical measures and the assumptions which condition their use is maintained.

2) Quality Control in data review process measures the impact of data adjustment on the data.

According to the ISO, quality control is a part of quality management that focuses on fulfilling quality requirements (need or expectation that is stated, generally implied or obligatory).

Source(s)

Economic Commission for Europe of the United Nations (UNECE), The Knowledge Base on Statistical Data Editing, Online glossary developed by the UNECE Data Editing Group, 2000

<http://www1.unece.org/stat/platform/display/kbase/Glossary>

ISO Standard 9000/2005: "Quality management systems - Fundamentals and vocabulary", Geneva, 2005

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42180

Quality control survey

Quality, Evaluation, Assessments

The quality control survey is a replicated survey which is carried out on a small scale by very experienced staff in order to obtain some "zero-default" results with which the actual results of the survey can be compared.

Source(s)

Eurostat, "Handbook on Data Quality Assessment Methods and Tools (DatQAM)", Eurostat-granted project led by FSO Germany with project members: Statistics Sweden, Hungarian Central Statistical Office, State Statistical Institute Berlin-Brandenburg, National Statistical Institute of Portugal, and Statistics Norway, 2007

http://ec.europa.eu/eurostat/ramon/statmanuals/files/Handbook_on_data_qual_assess_tools.pdf

Quality framework

Quality

Quality framework is a management system to direct and control an organisation with regard to quality - ranging from generally applicable, basic quality management systems and advanced forms referred to as excellence models, to systems or models developed for the concrete areas (e.g. for statistical production and dissemination).

Source(s)

Based on International Organization for Standardization (ISO), ISO Standard 9000/2005: "Quality management systems - Fundamentals and vocabulary", Geneva, 2005

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42180

Quality improvement (actions)

Quality, Evaluation, Assessments

Quality improvement refers to anything that enhances an organization's ability to meet quality requirements. Quality improvement is one part of quality management.

Source(s)

Praxiom Research Group Limited, ISO Standards Translated into Plain English, based on ISO 9000, 9001 and 9004 Quality management definitions

<http://www.praxiom.com/iso-definition.htm>

Quality index

Quality, Documentation, Measurement

The quality index is a one-dimension synthetic information on quality, possibly calculated as a weighted mean of all available quality indicators.

Source(s)

Eurostat, Working Group "Assessment of Quality in Statistics", item 4.2C "Methodological documents, Glossary", Luxembourg, 2-3 October 2003

http://ec.europa.eu/eurostat/ramon/coded_files/QGLOSSARY%202003.pdf

Quality indicator

Quality, Documentation, Measurement

Quality indicators are statistical measures that give an indication of output quality. However, some quality indicators can also give an indication of process quality, like e.g. response rates.

Source(s)

Eurostat, "Handbook on improving quality by analysis of process variables" produced by ONS-UK, INE Portugal, NSS of Greece and Statistics Sweden, 2004

http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/quality_reporting

Quality management

Quality, Framework

Quality management is the set of systems and frameworks which are in place within an organisation to manage the quality of statistical products and processes.

Quality management is an SDMX "cross-domain concept".

According to the ISO, quality management includes all the activities that organizations use to direct, control, and coordinate quality. These activities include formulating a quality policy and setting quality objectives. They also include quality planning, quality control, quality assurance, and quality improvement.

"Quality management" refers to the application of a formalised system that documents the structure, responsibilities and procedures put in place for satisfying users, while continuing to improve the data production and dissemination process. It also includes how well the resources meet the requirement.

This concept can be broken down into: "Quality management - quality assurance"; "Quality management - assessment"; "Quality management - documentation".

"Quality assurance" refers to all the planned and systematic activities implemented that can be demonstrated to provide confidence that the processes will fulfil the requirements for the statistical output. This includes the design of programmes for quality management, the description of planning process, scheduling of work, frequency of plan updates, and other organisational arrangements to support and maintain planning function.

"Quality assessment" contains the overall assessment of data quality, based on standard quality criteria. This may include the result of a scoring or grading process for quality. Scoring may be quantitative or qualitative.

"Quality documentation" contains documentation on methods and standards for assessing data quality, based on standard quality criteria such as relevance, accuracy and reliability, timeliness and punctuality, accessibility and clarity, comparability, and coherence.

Source(s)

SDMX, Statistical Data and Metadata eXchange initiative, sponsored by Bank for International Settlements (BIS), European Central Bank (ECB), Eurostat, International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), United Nations Statistics Division (UNSD) and World Bank, 2009

<http://www.sdmx.org/>

ISO Standard 9000/2005: "Quality management systems - Fundamentals and vocabulary", Geneva, 2005

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42180

Praxiom Research Group Limited, ISO Standards into Plain English, based on ISO 9000, 9001 and 9004

<http://www.praxiom.com/iso-definition.htm>

Quality management system

Quality, Framework

A quality management system (QMS) is a set of interrelated or interacting elements that organizations use to direct and control how quality policies are implemented and quality objectives are achieved.

A process-based QMS uses a process approach to manage and control how its quality policy is implemented and quality objectives are achieved. A process-based QMS is a network of many interrelated and interconnected processes (elements).

Each process uses resources to transform inputs into outputs. Since the output of one process becomes the input of another process, processes interact and are interrelated by means of such input-output relationships. These process interactions create a single process-based QMS.

Source(s)

International Organization for Standardization (ISO), ISO Standard 9000/2005: "Quality management systems - Fundamentals and vocabulary", Geneva, 2005

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42180

Praxiom Research Group Limited, ISO Standards into Plain English, based on ISO 9000, 9001 and 9004

<http://www.praxiom.com/iso-definition.htm>

Quality manual

Quality, Documentation, Measurement

A quality manual documents an organization's quality management system (QMS). It can be a paper manual or an electronic manual.

According to ISO 9001 section 4.2.2, a quality manual should :

- *Define the scope of the QMS: Explain reductions in the scope of the QMS and Justify all exclusions (reductions in scope)*
- *Describe how the QMS processes interact*
- *Document the quality procedures or refer to them.*

Source(s)

Praxiom Research Group Limited, ISO Standards Translated into Plain English, based on ISO 9000, 9001 and 9004 Quality management definitions

<http://www.praxiom.com/iso-definition.htm>

Quality objective

Quality, Documentation, Measurement

A quality objective is a quality oriented goal. A quality objective is something you aim for or try to achieve.

Quality objectives are generally based on or derived from an organization's quality policy and must be consistent with it. They are usually formulated at all relevant levels within the organization and for all relevant functions.

Source(s)

Praxiom Research Group Limited, ISO Standards Translated into Plain English, based on ISO 9000, 9001 and 9004 Quality management definitions

<http://www.praxiom.com/iso-definition.htm>

Quality plan

Quality, Documentation, Measurement

A quality plan is a document that is used to specify the procedures and resources that will be needed to carry out a project, perform a process, realize a product, or manage a contract. Quality plans also specify who will do what and when.

Source(s)

Praxiom Research Group Limited, ISO Standards Translated into Plain English, based on ISO 9000, 9001 and 9004 Quality management definitions

<http://www.praxiom.com/iso-definition.htm>

Quality planning

Quality, Documentation, Measurement

Quality planning involves setting quality objectives and then specifying the operational processes and resources that will be needed to achieve those objectives. Quality planning is one part of quality management.

Source(s)

Praxiom Research Group Limited, ISO Standards Translated into Plain English, based on ISO 9000, 9001 and 9004 Quality management definitions

<http://www.praxiom.com/iso-definition.htm>

Quality policy

Quality, Documentation, Measurement

An organization's quality policy defines top management's commitment to quality. A quality policy statement should describe an organization's general quality orientation and clarify its basic intentions.

Quality policies should be used to generate quality objectives and should serve as a general framework for action. Quality policies can be based on the ISO 9000 Quality Management Principles and should be consistent with the organization's other policies.

Source(s)

Praxiom Research Group Limited, ISO Standards Translated into Plain English, based on ISO 9000, 9001 and 9004 Quality management definitions

<http://www.praxiom.com/iso-definition.htm>

Quality profile

Quality, Documentation, Measurement

The quality profile is a user-oriented summary of the main quality features of indicators.

Quality profiles are developed and disseminated by Eurostat for structural (sustainable development) indicators, Euro indicators (PEEIs) and for the Europe 2020 indicators.

In line with the Eurostat quality concept, quality is defined along several dimensions. For the structural indicators, the quality profile aims at a quick overview on how far a structural indicator is deemed "fit for use" with regard to its key objectives. More information on quality of the indicators, including for some surveys, detailed quality reports and explanations of the applied concepts and methodologies are available under explanatory texts.

Source(s)

Eurostat website

http://epp.eurostat.ec.europa.eu/portal/page/portal/structural_indicators/quality

Quality report

Quality, Documentation, Measurement

A quality report is a report conveying information about the quality of a statistical product or process.

Source(s)

Eurostat, "Handbook on Data Quality Assessment Methods and Tools (DatQAM)", Eurostat-granted project led by FSO Germany with project members: Statistics Sweden, Hungarian Central Statistical Office, State Statistical Institute Berlin-Brandenburg, National Statistical Institute of Portugal, and Statistics Norway, 2007

http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/quality_reporting

Eurostat, "ESS Standard and Handbook for Quality Reports", 2009 edition

http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/quality_reporting

Relevance

Quality, Description, Criteria

Relevance is an attribute of statistics measuring the degree to which statistics meet current and potential needs of the users.

SDMX cross-domain concept

Relevance is concerned with whether the available information sheds light on the issues that are important to users. Assessing relevance is subjective and depends upon the varying needs of users. The Agency's challenge is to weight and balance the conflicting needs of current and potential users to produce statistics that satisfy the most important needs within given resource constraints. In assessing relevance, one approach is to gauge relevance directly, by polling users about the data. Indirect evidence of relevance may be found by ascertaining where there are processes in place to determine the uses of data and the views of their users or to use the data in-house for research and other analysis. Relevance refers to the processes for monitoring the relevance and practical usefulness of existing statistics in meeting users' needs and how these processes impact the development of statistical programmes.

This concept can be broken down into: "Relevance - completeness"; "Relevance - user needs"; "Relevance - user satisfaction".

"Completeness" refers to the extent to which all statistics that are needed are available. The measurement of the availability of the necessary statistics normally refers to data sets and compares the required data set to the available one.

"User Needs" refers to the description of users and their respective needs with respect to the statistical data. The main users (e.g. official authorities, the public or others) and user needs should be stated, e.g. official authorities with the needs for policy indicators, national users, etc.

"User Satisfaction" refers to the measure to determine user satisfaction. This concerns how well the disseminated statistics meet the expressed user needs. If user satisfaction surveys have been conducted, the domain manager should mention them. Otherwise, any other indication or measure to determine user satisfaction might be used.

Source(s)

European Union, Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics (Official Journal of the European Union No L 87, 31.3.2009, p.164 - 173)

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:087:0164:0173:EN:PDF>

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

SDMX, Statistical Data and Metadata Exchange initiative

<http://www.sdmx.org/>

Reliability

Quality, Description, Principles

Reliability is an attribute of statistics that measure as faithfully, accurately and consistently as possible the reality that they are designed to represent and implying that scientific criteria are used for the selection of sources, methods and procedures.

Source(s)

Based on European Union, Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics (Official Journal of the European Union No L 87, 31.3.2009, p.164 - 173)

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:087:0164:0173:EN:PDF>

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Rolling review

Quality, Evaluation, Assessments

The rolling review is an in-depth assessment done by an external expert, including a user survey and a partner survey.

Source(s)

Eurostat, "The Eurostat Quality Assurance Framework"

<http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/documents/QAF%20leaflet.pdf>

Self assessment

Quality, Evaluation, Assessments

The self assessment is a comprehensive, systematic and regular review of an organisation's activities and results referenced against a model/framework, carried out by the organisation itself.

According to ISO 9004, a self-assessment is a comprehensive and systematic review of an organization's overall maturity and is used to help achieve and sustain organizational success.

Maturity self-assessments evaluate an organization's practices and performance and identify improvement and innovation opportunities. Self-assessment results are used to identify and recognize best practices and to encourage innovation and improvement.

Source(s)

Eurostat, "Handbook on Data Quality Assessment Methods and Tools (DatQAM)", Eurostat-granted project led by FSO Germany with project members: Statistics Sweden, Hungarian Central Statistical Office, State Statistical Institute Berlin-Brandenburg, National Statistical Institute of Portugal, and Statistics Norway, 2007

http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/quality_reporting

Eurostat, "The Eurostat Quality Assurance Framework"

<http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/documents/QAF%20leaflet.pdf>

Praxiom Research Group Limited, ISO Standards into Plain English, based on ISO 9000, 9001 and 9004

<http://www.praxiom.com/iso-definition.htm>

Serviceability

Quality, Description, Principles

Serviceability is the set of practical aspects describing how well the available data meet users' needs.

Serviceability is a term that captures the practical aspects of usability of data. The emphasis on "use" thus assumes that data are available. Thus, key aspects of usability are relevance, timeliness and frequency, consistency, and revision policy and practices.

Source(s)

International Monetary Fund (IMF), "Data Quality Assessment Framework (DQAF) Glossary", unpublished

<http://www.imf.org/external/index.htm>

Six Sigma

Quality, Framework

Six Sigma is a metric, methodology and a management system and has literal, conceptual and practical definitions.

Six Sigma is a business management strategy originally developed by Motorola, USA in 1981. It seeks to improve the quality of process outputs by identifying and removing the causes of defects (errors) and minimizing variability in manufacturing and business processes. It uses a set of quality management methods, including statistical methods, and creates a special infrastructure of people within the organization who are experts in these methods. Each Six Sigma project carried out within an organization follows a defined sequence of steps and has quantified targets. These targets can be financial (cost reduction or profit increase) or whatever is critical to the customer of that process (cycle time, safety, delivery, etc.)

The term six sigma originated from terminology associated with manufacturing, specifically terms associated with statistical modelling of manufacturing processes. The maturity of a manufacturing process can be described by a sigma rating indicating its yield, or the percentage of defect-free products it creates. A six-sigma process is one in which 99.99966% of the products manufactured are free of defects. Motorola set a goal of "six sigmas" for all of its manufacturing operations and this goal became a byword for the management and engineering practices used to achieve it.

Source(s)

Wikipedia

http://en.wikipedia.org/wiki/Six_Sigma

Motorola website

http://www.motorola.com/staticfiles/Business/_Moto_University/_Documents/_Static_Files/What_is_SixSigma.pdf

Statistical (production/business) process

Quality, Documentation, Measurement

Statistical (production/business) process is the complete set of sub-processes that are needed to support statistical production.

Statistical (production/business) process is a set of interrelated or interacting sub-processes (activities) which transforms inputs into outputs / statistical products in the regulated environment (characterised by external or internal regulative) using necessary resources (HR, financial, infrastructure, etc.).

Source(s)

SDMX, Statistical Data and Metadata eXchange initiative, sponsored by Bank for International Settlements (BIS), European Central Bank (ECB), Eurostat, International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), United Nations Statistics Division (UNSD) and World Bank, 2009

http://sdmx.org/?page_id=11

ISO Standard 9000/2005: "Quality management systems - Fundamentals and vocabulary", Geneva, 2005

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42180

Statistical confidentiality

Quality, Description, Principles

The statistical confidentiality is a principle according to which confidential data related to single statistical units, obtained directly for statistical purposes or indirectly from administrative or other sources, are protected and their use for non-statistical purposes and their unlawful disclosure prohibited.

Source(s)

Based on European Union, Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics (Official Journal of the European Union No L 87, 31.3.2009, p.164 - 173)

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:087:0164:0173:EN:PDF>

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Supported self assessment

Quality, Evaluation, Assessments

The supported self assessment is a special type of self assessment, conducted within Eurostat by the statistical production units, with the active participation of the "Quality" unit.

Source(s)

Eurostat "Quality" unit

Eurostat, "The Eurostat Quality Assurance Framework"

<http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/documents/QAF%20leaflet.pdf>

Timeliness

Quality, Description, Criteria

Timeliness is an attribute of statistics measuring the period between the availability of the information and the event or phenomenon it describes.

Source(s)

European Union, Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics (Official Journal of the European Union No L 87, 31.3.2009, p.164 - 173)

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:087:0164:0173:EN:PDF>

Eurostat, "European Statistics Code of Practice", Luxembourg, 2011

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-32-11-955

Total Quality Management

Quality, Framework

Total Quality Management (TQM) is a management philosophy that is driven by customer needs and expectations. TQM aims to create a Quality Culture, and is based on a number of core values such as: customer orientation; leadership; participation of all staff; process orientation; teamwork; staff development; and continuous improvement.

Source(s)

Eurostat, "Handbook on improving quality by analysis of process variables" produced by ONS-UK, INE Portugal, NSS of Greece and Statistics Sweden, 2004

http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/quality_reporting

Transparency

Quality, Description, Principles

Transparency shall mean the right of respondents to have information on the legal basis, the purposes for which the data are required and the protective measures adopted. The authorities responsible for collecting Community statistics shall take every step to supply such information.

Source(s)

European Union, Council Regulation (EC) No 322/97 of 17 February 1997 on Community statistics (Official Journal of the European Union No L 52, 22.2.1997, p. 1 - 7)

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997R0322:EN:HTML>

User satisfaction survey

Quality, Documentation, Measurement

A user satisfaction survey is a survey which aims at assessing the satisfaction or the perception of the users, normally as a basis for improvement actions.

Source(s)

Eurostat, "Handbook on Data Quality Assessment Methods and Tools (DatQAM)", Eurostat-granted project led by FSO Germany with project members: Statistics Sweden, Hungarian Central Statistical Office, State Statistical Institute Berlin-Brandenburg, National Statistical Institute of Portugal, and Statistics Norway, 2007

http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/quality_reporting