

Doc. Eurostat/A4/Quality/03/Glossary

Working Group "Assessment of quality in statistics" Sixth meeting Luxembourg, 2-3 October 2003 at 9 h 30 Room Ampere, Bech building

ITEM 4.2C: METHODOLOGICAL DOCUMENTS GLOSSARY

Glossary of Quality Terms

This glossary covers the main technical words used in the Eurostat handbook "How to make a Quality Report" (draft October 2003). It is intentionally limited to a short text for each definition including the source used. Readers who would like to obtain more complete understanding should refer to the main document. It replaces the Eurostat Glossary from May 2002 (Eurostat/A4/Quality/02/General/Glossary).

| NAME | ALTERNATIVE NAME | DEFINITION | SOURCE |
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| Accessibility | | Accessibility refers to the physical conditions in which users can obtain data: where to go, how to order, delivery time, clear pricing policy, convenient marketing conditions (copyright, etc.), availability of micro or macro data, various formats (paper, files, CD-ROM, Internet), etc | Eurostat, Oct. 2003, "DEFINITION OF QUALITY IN STATISTICS", (Eurostat/A4/Quality/03/General/ Definition) |
| Accuracy | | Accuracy in the general statistical sense denotes the closeness of computations or estimates to the exact or true values. | F.H.C. Marriott, 1990, A dictionary of statistical terms, Longman Scientific & Technical, Fifth edition, p.223 |
| Bias | | Generally, an effect which deprives a statistical result of representativeness by systematically distorting it, as distinct from a random error which may distort on any one occasion but balances out on the average. | F.H.C. Marriott, 1990, A dictionary of statistical terms, Longman Scientific & Technical, Fifth edition, p.223 |
| Clarity | | Clarity refers to the data's information environment whether data are accompanied with appropriate metadata, illustrations such as graphs and maps, whether information on their quality also available (including limitation in use) and the extend to which additional assistance is provided by the NSI. | Eurostat, Oct. 2003, "DEFINITION OF QUALITY IN STATISTICS", (Eurostat/A4/Quality/03/General/ Definition) |
| Coding | | Coding is a technical procedure for converting verbal information into numbers or other symbols, which can be more easily counted and tabulated | Federal Committee on Statistical Methodology, December 1978, - Glossary of Nonsampling Error Terms: An Illustration of a Semantic Problem in Statistic, Statistical Policy Working Paper 4. |
| Coding error | | The attribution of an incorrect code to a survey response. | Glossary, Previous version |
| Coefficient of variation | | A measure of spread for a set of data defined as the ratio of the standard deviation to the mean. | B.S.EVERITT, 2002,The Cambridge dictionary of Statistics, Cambridge Univercity Press. Second edition, p. 410 |
| Coherence | | Coherence of statistics is their adequacy to be reliably combined in different ways and for various uses. It is, however, generally easier to show cases of incoherence than to prove coherence. When originating from a single source, statistics are normally coherent in the sense that elementary results derived from the concerned survey can be reliably combined in numerous ways to produce more complex results. When originating from different sources, and in particular from statistical surveys of different nature and/or frequencies, statistics may not be completely coherent in the sense that they may be based on different approaches, classifications and methodological standards. Conveying neighbouring results, they may also convey not | Eurostat, Oct. 2003, "DEFINITION OF QUALITY IN STATISTICS", (Eurostat/A4/Quality/03/General/ Definition) |

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| | | completely coherent messages, the possible effects of which, users should be clearly informed of. | |
| Comparability | | Comparability is the extent to which differences between statistics from different geographical areas, non- geographical domains, or over time, can be attributed to differences between the true values of the statistics | Eurostat, Oct. 2003, "DEFINITION OF QUALITY IN STATISTICS", (Eurostat/A4/Quality/03/General/ Definition) |
| Completeness | | Completeness is the extend to which all statistics that are needed are available. It is usually described as a measure of the amount of available data from a statistical system compared to the amount that was expected to be obtained | Eurostat, Oct. 2003, "DEFINITION OF QUALITY IN STATISTICS", (Eurostat/A4/Quality/03/General/ Definition) |
| Confidence Interval | | A a% confidence interval for an unknown population parameter θ , is an interval, calculated from sample values by a procedure such that if a large number of independent samples is taken, a% of the intervals obtained will contain θ . | Oxford dictionary of statistics" ′ |
| Consistent estimator | | An estimator which converges in probability, as the sample size increases, to the parameter of which it is an estimator. | F.H.C. Marriott, 1990, A dictionary of statistical terms, Longman Scientific & Technical, Fifth edition, p.223 |
| Constant scope | | Constant scope refers to a frame population. It should not include births, deaths, mergers and demergers and the population should be identical for both periods from which indexes are estimated. The contrary of full scope. | Glossary, Previous version |
| Coverage error | | Coverage error is the error associated with the failure to included some population units in the frame used for sample selection (undercoverage) and the error associated with the failure to identify units represented on the frame more than once (overcoverage). The source of coverage error is the sampling frame itself. | |
| Cut-off threshold | | A cut-off threshold is used, mainly for cost or burden reasons, to exclude from the target population (hence from the frame) units contributing very little to the requested statistics, small businesses for instance. the contribution from the population below the threshold can either be deemed negligible or be estimated by using a model | Glossary, Previous version (revised) |
| Editing, Edits | | Data <i>editing</i> is the application of checks that identify missing invalid or inconsistent entries or that point to data records that are potentially in error. | , (Statistics Canada Quality Guidelines, 3rd edition, October 1998, page 35) |
| data | Electronic document interchange | Electronic Data Interchange (EDI) is the computer-to- computer exchange of business data in a publicly published and globally standardised format. | Wikipedia, the free encyclopedia available athttp://www.wikipedia.org/ |
| Ērror | | In general, a mistake or error in the colloquial sense. There may, for example, be a gross error or avoidable mistake; an error of reference, when data concerning one phenomenon are attributed to another; copying errors; an error of interpretation. In a more limited sense the word error is used in statistics to denote the difference between an occurring value and its true or expected value. There is here no imputation of mistakes on the part of a human agent; the deviation is a chance effect. In this sense we have, for example, errors of observations, errors in equations, errors of the first and second kinds in the testing hypothesis, and the error band surrounding an estimate; and also the Normal curve of errors itself. | |
| Estimate | | In the strict sense an estimate is the particular value yielded by an estimator in a given set of circumstances. | F.H.C. Marriott, 1990, A dictionary of statistical terms, Longman Scientific & |

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| | | | Technical, Fifth edition, p.223 |
| Estimator | | An estimator is a rule or method of estimating a constant of a population. It is usually expressed as a function of sample values and hence is a variate whose distribution is of great importance in assessing the reliability of the estimate to which it leads. | |
| Expected Value | expectation value, expectation | The hypothetical averages from the conceived replicates of the survey all conducted under the same essential conditions. | Federal Committee on Statistical Methodology, December 1978, - Glossary of Nonsampling Error Terms: An Illustration of a Semantic Problem in Statistic, Statistical Policy Working Paper 4. |
| Frame | | The frame consists of previously available descriptions of the objects or material related to the physical field in the form of maps, lists, directories, etc., from which sampling units may be constructed and a set of sampling units selected; and also information on communications, transport, etc., which may be of value in improving the design for the choice of sampling units, and in the formation of strata, etc. | Federal Committee on Statistical |
| Full scope | | Full scope refers to a frame population, it should cover births, deaths, mergers and demergers, during the period from which indexes are estimated. The contrary of constant scope. | Glossary, Previous version |
| Hedonic Method | | The hedonic method is a regression technique used to estimate the prices of qualities or models that are not available on the market in particular periods, but whose prices in those periods are needed in order to be able to construct price relatives. | UN, Statistics Division, Glossary, available at <u>http://unstats.un.org/unsd/s</u> na1993/glossary.asp |
| Imputation | | <i>Imputation</i> is the process used to resolve problems of missing, invalid or inconsistent responses identified during editing. This is done by changing some of the responses or missing values on the record being edited to ensure that a plausible, internally coherent record is created. | (Statistics Canada Quality Guidelines, 3rd edition, October 1998, page 38) |
| Inlier | | An inlier is a data value that lies in the interior of a statistical distribution and is in error. Because inliers are difficult to distinguish from good data values they are sometimes difficult to find and correct. A simple example of an inlier might be a value in a record reported in the wrong units, say degrees Fahrenheit instead of degrees Celsius. | UNECE, CES, 1997, Work Session on Statistical Data Editing, Working Paper 22, PROBLEMS WITH INLIERS, US Bureau of Census, William E. Winkler. |
| Interviewer error | | Interviewer error are associated with effects on respondents' answers stemming from the different ways that interviewers administer the same survey. Examples of these errors include the failure to read the question correctly (leading to response errors by the respondent), delivery of the question with an intonation that influences the respondent's choice of answer, and failure to record the respondent's answer correctly. | Groves, Lars E. Lyberg, Nancy A. Mathiowetz, Seymour Sudman,1991,"Measurement errors in survey", John Wiley & |
| Item non- response | | Item non-response occurs when a respondent provides some, but not all, of the requested information, or if the reported information is not usable. | Statistical Policy working paper 31, "Measuring and reporting sources of error in survey", FCSM, Subcommitte on Measuring and Reporting the Quality of Survey Data |
| Item response rate |) | The item response rate is the ratio of the number of eligible units responding to an item to the number of responding units eligible to have responded to the item. | Madow, W., Nisselson, H., and Olkin, I., 1983, Incomplete Data in Sample Surveys, New York: Academic Press |
| Marco-editing | | A macro-edit detects individual errors by checks on | UNECE, Glossary of Terms on |

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| | | aggregated data, or checks applied to the whole body of records. The checks are typically based on the models, either graphical or numerical formula based, that determine the impact of specific fields in individual records on the aggregate estimates. | base/glossary/g-source.ntm |
| Mean square error | | The expected value of the square of the difference between an estimator and the true value of a parameter. If the estimator is unbiased then the mean square error is simply the variance of the estimator. For a biased estimator the mean squared error is equal to the sum of the variance and the square of the bias. | B.S.EVERITT, 2002,The Cambridge dictionary of Statistics, Cambridge Univercity Press. Second edition, p. 410 |
| Measurement error | | Measurement error refers to error in survey responses arising from the method of data collection, the respondent, o the questionnaire (or other instrument). It includes the error in a survey response as a result of respondent confusion, ignorance, carelessness, or dishonesty; the error attributable to the interviewer, perhaps as a consequence of poor or inadequate training, prior expectations regarding respondents' responses, or deliberate errors; and error attributable to the wording of the questions in the questionnaire, the order or context in which the questions are presented, and the method used to obtain the responses. | Mathiowetz, Seymour Sudman,1991,"Measurement |
| Micro editing | | Finding errors by inspection of individual observations. Editing done at the record, or questionnaire level. | UNECE, Glossary of Terms on Statistical Data Editing, CES Methodological material, Geneva, 2000, also available at http://amrads.jrc.cec.eu.int/k- base/glossary/g-source.htm |
| Misclassificati on | | Misclassification refers to allocating statistical units in a wrong class, in relation to a given classification. For instance, a business is classified in Trade instead of Industry. | Glossary, Previous version |
| Model assumption error | | Model assumption are errors that occur due the use of methods, such as calibration, generalized regression estimator, calculation based on full scope or constant scope, benchmarking, seasonal adjustment and other models not included in the preceding accuracy components, in order to calculate statistics or indexes. | Glossary, Previous version |
| | Non-random Sample | Non-probability Sample is a sample in which the selection of units is based on factors other than random chance, e.g. convenience, prior experience or the judgment of the researcher. Examples of non-probability samples are: convenience, judgmental, quota and snowball. | ESOMAR, Glossary of Marketing Research Terms, <u>http://www.esomar.nl</u> |
| Non response | | Non response is a form of nonobservation present in most surveys. Nonresponse means failure to obtain a measurement on one or more study variables for one or more elements k selected for the survey. The term | Carl-Erik Sarndal, Bengt Swensson, Jan Wretman, 1992, "Model assisted survey sampling", Springer - Verlag New York, p.694 |
| Non response bias | | see non response error | |
| Non response error | | Nonresponse errors, which occur when the survey fails to get a response to one, or possibly all, of the questions. | Statistics Canada, October 1998, "statistics Canada Quality |

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| | NAME | Nonresponse causes both an increase in variance, due to the decrease in the effective sample size and/or due to the use of imputation, and may cause a bias if the non- respondents and respondents differ with respect to the characteristic of interest. | Guidelines", 3rd edition,Catalogue no. 12-539- XIE, p. 101 |
| Non sampling error | | An error in sample estimates which cannot be attributed to sampling fluctuations. Such errors may arise from many different sources such as defects in the frame, faulty demarcation of sample units, defects in the selection of sample units, mistakes in the collection of data due to personal variations or misunderstandings or bias or negligence or dishonesty on the part of the investigator or of the interviewee, mistakes at the stage of the processing of the data, etc. | F.H.C. Marriott, 1990, A dictionary of statistical terms, Longman Scientific & Technical, Fifth edition, p.223 |
| Out of scope units | | Units that should not be included in the sampling frame because they do not belong to the target population in the reference period. If enumerated, they cause over-coverage. | Glossary, Previous version |
| Outlier | | In a sample of <i>n</i> observations it is possible for a limited number to be so far separated in value from the remainder that they give rise to the question whether they are not from a different population, or that the sampling technique is a fault. Such values are called outliers. | F.H.C. Marriott, 1990, A dictionary of statistical terms, Longman Scientific & Technical, Fifth edition, p.223 |
| Over coverage | | Over-Coverage arises from the presence in the frame of units not belonging to the target population and of units belonging to the target population that appear in the frame more than once. | Ad-Hoc |
| Population | | Population is the total membership or population or "universe" of a defined class of people, objects or events. There are two types of population, viz, target population and survey population. A target population is the population outlined in the survey objects about which information is to be sought and a survey population is the population from which information can be obtained in the survey. The target population is also known as the scope of the survey and the survey population is also known as the coverage of the survey. For administrative records the corresponding populations are: the "target" population as defined by the relevant legislation and regulations, and the actual "client population". | International Economic and Social Classifications.Available at: www.un.org/Depts/unsd/class/glo |
| Probability sample | | Probability sampling is an approach to sample selection that satisfies certain conditions, which, for the case of selecting elements directly from the population, are described as follows: 1)we can define the set of sample, {S1, S2,,Sm}, that are possible to obtain with the sampling procedure. 2)a known probability of selection $p(s)$ is associated with each possible sample s . 3) the procedure gives every element in the population a nonzero probability of selection. 4)we select one sample by a random mechanism under which each possible s receives exactly the probability $p(s)$. A sample realized under these four requirements is called probability sample. | Swensson, Jan Wretman, 1992, "Model assisted survey sampling", Springer - Verlag New York, p.694 |
| Processing error | | Once data have been collected, they pass through a range of processes before the final estimates are produced: coding, keying, editing, weighting, tabulating, etc. Errors introduced at these stages are called processing errors. | Glossary, Previous version |
| Punctuality | | Punctuality refers to the time lag existing between the actua delivery date of data and the target date when it should have | |

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| | | been delivered, for instance, with reference to dates announced in some official release calendar, laid down by Regulations or previously agreed among partners. | STATISTICS", (Eurostat/A4/Quality/03/General/ Definition) |
| Quality control survey | | A replicated survey 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. | Glossary, Previous version |
| Quality index | | A one-dimension synthetic information on quality, possibly calculated as a weighted mean of all available quality indicators. | Glossary, Previous version |
| Reference period | reference time | The period of time for which data are collected | F.H.C. Marriott, 1990, A dictionary of statistical terms, Longman Scientific & Technical, Fifth edition, p.223 |
| Refusal rate | | In the sampling of human populations, the proportion of individuals who, through successfully contacted, refuse to give the information sought. The proportion is usually and preferably calculated by dividing the number of refusals by the total number of the sample which it was originally desired to achieve. | F.H.C. Marriott, 1990, A dictionary of statistical terms, Longman Scientific & Technical Fifth edition, p.223 |
| Register | | A written and complete record containing regular entries of items and details on particular set of objects. Administrative registers come from administrative sources and become statistical registers after passing through statistical processing in order to make it fit for statistical purposes (production of register based statistics, frame creation, etc.) | COMMON TERMINOLOGY OF METIS, Version of: 29 September, 1999 Page: 7 Editor: Daniel W. Gillman & ad hoc addition |
| Relative standard error | | The relative standard error (RSE) is a measure of an estimate's reliability. The RSE of an estimate is obtained by dividing the standard error of the estimate (SE(r)) by the estimate itself (r). This quantity is expressed as a percent of the estimate and is calculated as follows: RSE=100 x (SE(r)/r). | National center for health statistics, "Data definitions", <u>http://www.cdc.gov/nchs/d</u> <u>atawh/nchsdefs/list.htm</u> |
| Relevance | | Relevance is the degree to which statistics meet current and potential users' needs. It refers to whether all statistics that are needed are produced and the extent to which concepts used (definitions, classifications etc.) reflect user needs. | Statistics Canada, October 1998, "statistics Canada Quality Guidelines", 3rd edition,Catalogue no. 12-539- XIE, p. 101 |
| Reweighting | | Reweighting consists of raising the original weights for the respondent values when estimates are computed. Reweighting concerns mainly unit non-response. It may also be used to increase precision through the use of auxiliary information. Standard methods include post-stratification, calibration and response propensity modelling. | Glossary, Previous version |
| Sampling error | | The part of the difference between a population value and ar estimate thereof, derived from a random sample, which is due to the fact that only a sample of values is observed; as distinct from errors due to imperfect selection, bias in response or estimation, errors of observation and recording, etc. | F.H.C. Marriott, 1990, A dictionary of statistical terms, Longman Scientific & Technical, Fifth edition, p.223 |
| Standard error | | The positive square root of the variance of the sampling distribution of a statistic. | F.H.C. Marriott, 1990, A dictionary of statistical terms, Longman Scientific & Technical, Fifth edition, p.223 |
| Statistical characteristics | | A numerical value (like turnover, average income) defined by a statistical measure that is used to summarise the values for a specific quantitative variable (like turnover, disposable income) for all statistical units in a specific group. | |
| Statistical measure | | A summary (mean, mode, total, index, etc.) of the individual quantitative variable values for the statistical units in a | Glossary, Previous version |

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| Statistical unit | | specific group (study domains). An object of statistical survey and the bearer of statistical characteristics. The statistical unit is the basic unit of | COMMON TERMINOLOGY OF METIS, Version of: 29 |
| | | statistical observation within a statistical survey | September, 1999 Page: 7 Editor: Daniel W. Gillman |
| Study domains | | Statistics are presented for different sub-groups of the population, so called study domains. These study domains are usually defined according to some classification (e.g territorial units, economic activity etc.) | Glossary, Previous version |
| | Sampling plan, Sample design | etc. The term "sampling plan" may be restricted to mean all steps taken in selecting the sample; the term "sample design" may cover in addition the method of estimation; and "survey design" may cover also other aspects of the survey, e.g. choice and training of interviewers, tabulation plans, etc. "Sample design" is sometimes used in a clearly defined sense, with reference to a given frame, as the set of rules or specifications for the drawing of a sample in an unequivocal manner. | |
| Target population | | The <i>target population</i> is the population we wish to study, that is, the set of elements about which estimates are required. | Carl-Erik Sarndal, Bengt Swensson, Jan Wretman, 1992, "Model assisted survey sampling", Springer - Verlag New York, p.694 |
| Timeliness | | Timeliness of information reflects the length of time between its availability and the event or phenomenon it describes | Eurostat, Oct. 2003, "DEFINITION OF QUALITY IN STATISTICS", (Eurostat/A4/Quality/03/General/ Definition) |
| True value | | The actual population value that would be obtained with perfect measuring instruments and without committing any error of any type, both in collecting the primary data and in carrying out mathematical operations. | Glossary, Previous version |
| Under coverage | | Undercoverage results from the omission from the frame of units belonging to the target population. | Ad-hoc |
| Unit non response | | Unit non response is a complete failure to obtain data from a sample unit. | 31, "Measuring and reporting sources of error in survey", FCSM, Subcommitte on Measuring and Reporting the Quality of Survey Data |
| Unit response rate | | The ratio, expressed in percentage of the number of interviews to the number of eligible units in the sample. The weighted response rate calculates the ratio using the inverse probability of inclusion in the sample as a weight for each unit. In some occasions a value that reflects the importance of the unit is also used as a weighting factor (like size of workforce for establishments). | |
| User satisfaction survey | | A statistical survey aiming to assess the satisfaction of users of statistics. | Glossary, Previous version |
| Variance | | The variance is the mean square deviation of the variable around the average value. It reflects the dispersion of the | Glossary, Previous version |

| NAME | ALTERNATIVE | DEFINITION | SOURCE |
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| | NAME | empirical values around its mean. | |
| Variance estimation | | The task of estimating the value of the variance of an estimate. Methods employed are commonly classified in: - analytic methods: use and compute the proper formulae of the variance - approximate methods: methods which use approximations for complex and multi-stage sample designs. These methods can classified in three categories: - simplifying assumptions: setting assumptions which allow use of straightforward formulae (as if an analytic method could be applied) Taylor's linearisation techniques: estimation of non-linear statistics is simplified in using a Taylor's development of the concerned statistics Replication or re-sampling methods: a large number of subsamples are derived from the initial sample and variance is estimated from the variability of the results in this set of subsamples. Several methods are based on re-sampling, such as the jackknife, the bootstrap and the balanced repeated replication methods (BRR). | Glossary, Previous version |
| Working group "Assessment of Quality in Statistics" | | Eurostat modified in spring 1998 the terms of reference of the former Working Group on the quality evaluation of structural business statistics, thereby creating the « Working Group on Assessment of Quality in Statistics ». The mandate of the WG is to: 1. harmonise the definition of quality in statistics, 2. standardise Quality Reports, 3. address methodological problems for measuring the quality of statistics, and 4. co-ordinate all activities related to quality within Eurostat and the NSIs. | Glossary, Previous version |

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- 2 B.S.EVERITT, 2002, The Cambridge dictionary of Statistics, Cambridge University Press. Second edition, pp. 410
- 3 Graham Upton, Ian Cook, 2002, A dictionary of statistics, Oxford University Press, First edition, pp.420
- 4 Johanna Laiho, Leena Hietaniemi, 2002, Quality Guidelines for Official Statistics, Statistics Finland, pp.134
- 5 FCSM, July 2001, Measuring and Reporting Sources of Error in Surveys, Subcommittee on Measuring and Reporting the Quality of Survey Data, Statistical working paper 31
- 6 Carl-Erik Sarndal, Bengt Swensson, Jan Wretman, 1992, "Model assisted survey sampling", Springer Verlag New York, pp.694
- 7 Paul P. Biemer, Robert M. Groves, Lars E. Lyberg, Nancy A. Mathiowetz, Seymour Sudman,1991,"Measurement errors in survey", John Wiley & Sons, pp. 760
 - 8 National center for health statistics, "Data definitions", available at http://www.cdc.gov/nchs/datawh/nchsdefs/list.htm
- 9 Federal Committee on Statistical Methodology, December 1978, Glossary of Nonsampling Error Terms: An Illustration of a Semantic Problem in Statistic, Statistical Policy Working Paper 4.
- 10 Statistics Canada, October 1998, "Statistics Canada Quality Guidelines", 3rd edition, Catalogue no. 12-539-XIE, pp . 101
- 11 Daniel W. Gillman, 1999, COMMON TERMINOLOGY OF METIS, STATISTICAL COMMISSION and ECONOMIC COMMISSION FOR EUROPE, Version of: 29 September, 1999, Paper No. 10, pp. 45
- 12 Eurostat, Oct. 2003, "DEFINITION OF QUALITY IN STATISTICS", (Eurostat/A4/Quality/03/General/Definition)sixth meeting Luxembourg – 2-3 October 2003.
- 13 Handbook of Household Surveys, Revised Edition, Studies in Methods, Series F, No. 31, United Nations, New York, 1984, Para. 8.3
- 14 EPA/Office of Research and Development: Guidance for Quality Assurance Project Plans (QA/G-5), EPA/ 600/R-98/018
- 15 Wikipedia, the free encyclopaedia available at http://www.wikipedia.org
- 16 UN, Statistics Division, Glossary, available at http://unstats.un.org/unsd/sna1993/glossary.asp
- 17 William E. Winkler, 1997, "PROBLEMS WITH INLIERS" Work Session on Statistical Data Editing, US Bureau of Census, Working Paper 22,
- 18 Madow, W., Nisselson, H., and Olkin, I., 1983, Incomplete Data in Sample Surveys, New York: Academic Press
- 19 UNECE, Glossary of Terms on Statistical Data Editing, CES Methodological material, Geneva, 2000, also available at http://amrads.jrc.cec.eu.int/k-base/glossary/g-source.htm
- 20 ESOMAR, Glossary of Marketing Research Terms, available at http://www.esomar.nl
- 21 United Nations Glossary of Classification Terms. Prepared by the Expert Group on International Economic and Social Classifications. Available at: www.un.org/Depts/unsd/class/glossary_short.htm