European Statistics Code of Practice

For the National Statistical Authorities and the European Union Statistical Authority

Adopted by the European Statistical System Committee

16<sup>th</sup> November 2017

**Eurostat** 

European Statistical System

#### **Preamble**

#### The European Statistics Code of Practice

The European Statistics Code of Practice is the cornerstone of the common quality framework of the European Statistical System. It is a self-regulatory instrument and is based on 16 Principles covering the institutional environment, statistical processes and statistical outputs. A set of indicators of best practices and standards for each of the Principles provides guidance and reference for reviewing the implementation of the Code of Practice, increasing transparency within the European Statistical System.

Statistical authorities, comprising the European Union Statistical Authority (Eurostat), the National Statistical Institutes and other national authorities responsible for the development, production and dissemination of European Statistics, commit themselves to adhere to the Code of Practice.

An independent Advisory Board, the European Statistical Governance Advisory Board<sup>1</sup> (ESGAB, the Board) provides an overview of the European Statistical System as regards the implementation of the Code of Practice. The Board analyses the implementation of the Code of Practice by the European Union Statistical Authority (Eurostat) and the European Statistical System as a whole every year; and advises on appropriate measures to facilitate the implementation of the Code of Practice, on its communication to users and data providers as well as on its possible updates.

This 2017 edition is the second revision of the Code of Practice, originally adopted in 2005. It aims at reflecting the latest changes and innovations in the development, production and dissemination of official statistics in the European Statistical System and beyond, such as emerging new data sources, use of new technologies, modernisation of the legal framework, and the results of the peer reviews on the implementation of the Code of Practice.

A Glossary explaining the main terms used in the Code of Practice is available online at http://ec.europa.eu/eurostat/web/quality/overview.

#### The common quality framework of the European Statistical System

The common quality framework of the European Statistical System is composed of the European Statistics Code of Practice, the Quality Assurance Framework of the European Statistical System and the general quality management principles (such as continuous interaction with users, commitment of leadership, partnership, staff satisfaction, continuous improvement, integration and harmonisation).

This self-regulatory common quality framework complements the extensive legal framework of the European Statistical System based on the Regulation (EC) No 223/2009 on European statistics which itself derives from the Treaty on the Functioning of the European Union. High-quality European statistics and services are therefore developed, produced and disseminated in a very robust legal and quality framework.

The Quality Declaration of the European Statistical System, included in the subsequent pages of this brochure, demonstrates the quality awareness that exists in the European Statistical System as well as the self-commitment of all its members to continuously developing, producing and disseminating high-quality European statistics and services in order to sustainably provide value to its users.

<sup>&</sup>lt;sup>1</sup> European Statistical Governance Advisory Board: <a href="http://ec.europa.eu/eurostat/web/esgab/introduction">http://ec.europa.eu/eurostat/web/esgab/introduction</a>

# QUALITY DECLARATION OF THE EUROPEAN STATISTICAL SYSTEM

The European Statistical System is a partnership in which Eurostat and the national statistical authorities of each EU Member State and EFTA country cooperate. Together, our mission is to provide independent high quality statistical information at European, national and regional levels and to make this information available to everyone for decision-making, research and debate.

The programme and priorities of European statistics are discussed and agreed by ESS members with the final decisions taken in a democratic manner according to European legislative procedures.

We operate under a strict legal regime<sup>1</sup> supplemented by a robust, world-class and self-regulatory quality framework, the backbone of which is the European Statistics Code of Practice<sup>2</sup>. Our compliance with the Code of Practice is periodically assessed by means of review mechanisms and strict follow-up of the improvement actions<sup>3</sup> identified.

We see quality as the basis of our competitive advantage in a world experiencing a growing trend of instant information which often lacks the necessary proof of quality. Our work is governed by professional independence, impartial treatment of all our users, objectivity, reliability, statistical confidentiality and cost-effectiveness. The development, production and dissemination of our statistics are based on sound methodologies, the best international standards and appropriate procedures that are well documented in a transparent manner. Our principles of quality are: relevance, accuracy, timeliness and punctuality, accessibility and clarity, as well as comparability and coherence.

We consistently strive to minimise the burden on our respondents, cultivate good cooperation with data providers and cooperate closely with stakeholder groups including the scientific communities.

We are committed to statistical excellence by systematically identifying our strengths and weaknesses, as well as related risks which we duly take into account by the continuous development of our common quality framework. By continuously modernising, innovating and compiling new indicators, we not only improve the quality of our products and services, but also attempt to anticipate emerging phenomena and needs with our users.

Heads of the National Statistical Institutes and Director-General of Eurostat

<sup>&</sup>lt;sup>1</sup> Treaty on the Functioning of the European Union: <a href="http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2016:202:FULL&from=EN">http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2016:202:FULL&from=EN</a> and Regulation (EC) No 223/2009 on European statistics as amended by Regulation (EU) 2015/759: <a href="http://eur-lex.europa.eu/legal-content/en/TXT/PDF/?uri=CELEX:02009R0223-20150608&from=EN">http://eur-lex.europa.eu/legal-content/en/TXT/PDF/?uri=CELEX:02009R0223-20150608&from=EN</a>

<sup>20150608&</sup>amp;from=EN

2 European Statistics Code of Practice: <a href="http://ec.europa.eu/eurostat/documents/3859598/5921861/KS-32-11-955-EN.PDF/5fa1ebc6-90bb-43fa-888f-dde032471e15">http://ec.europa.eu/eurostat/documents/3859598/5921861/KS-32-11-955-EN.PDF/5fa1ebc6-90bb-43fa-888f-dde032471e15</a> and Quality Assurance Framework of the ESS: <a href="http://ec.europa.eu/eurostat/documents/64157/4392716/ESS-QAF-V1-2final.pdf/bbf5970c-1adf-46c8-afc3-58ce177a0646">http://ec.europa.eu/eurostat/documents/64157/4392716/ESS-QAF-V1-2final.pdf/bbf5970c-1adf-46c8-afc3-58ce177a0646</a>

3 First and second round of ESS peer reviews: <a href="http://ec.europa.eu/eurostat/web/quality/first-round-of-peer-reviews">http://ec.europa.eu/eurostat/web/quality/peer-reviews</a> <a href="http://ec.europa.eu/eurostat/web/quality/first-round-of-peer-reviews">http://ec.europa.eu/eurostat/web/quality/peer-reviews</a> <a href="http://ec.europa.eu/eurostat/web/quality/first-round-of-peer-reviews">http://ec.europa.eu/eurostat/web/quality/peer-reviews</a>

## Institutional environment

Institutional and organisational factors have a significant influence on the effectiveness and credibility of a statistical authority developing, producing and disseminating European Statistics. The relevant Principles are professional independence, coordination and cooperation, mandate for data collection, adequacy of resources, quality commitment, statistical confidentiality, impartiality and objectivity.

**Principle 1: Professional Independence**. Professional independence of statistical authorities from other policy, regulatory or administrative departments and bodies, as well as from private sector operators, ensures the credibility of European Statistics.

**Indicator 1.1:** The independence of the National Statistical Institutes and Eurostat from political and other external interference in developing, producing and disseminating statistics is specified in law and assured for other statistical authorities.

**Indicator 1.2:** The heads of the National Statistical Institutes and of Eurostat and, where appropriate, the heads of other statistical authorities have sufficiently high hierarchical standing to ensure senior level access to policy authorities and administrative public bodies. They are of the highest professional calibre.

**Indicator 1.3:** The heads of the National Statistical Institutes and of Eurostat and, where appropriate, the heads of other statistical authorities have responsibility for ensuring that statistics are developed, produced and disseminated in an independent manner.

**Indicator 1.4:** The heads of the National Statistical Institutes and of Eurostat and, where appropriate, the heads of other statistical authorities have the sole responsibility for deciding on statistical methods, standards and procedures, and on the content and timing of statistical releases.

**Indicator 1.5:** The statistical work programmes are published and periodic reports describe progress made.

**Indicator 1.6:** Statistical releases are clearly distinguished and issued separately from political/policy statements.

**Indicator 1.7:** The National Statistical Institute and Eurostat and, where appropriate, other statistical authorities, comment publicly on statistical issues, including criticisms and misuses of statistics as far as considered suitable.

**Indicator 1.8:** The procedures for the recruitment and appointment of the heads of the National Statistical Institutes and Eurostat and, where appropriate, the statistical heads of other statistical authorities, are transparent and based on professional criteria only. The reasons on the basis of which the incumbency can be terminated are specified in the legal framework. These cannot include reasons compromising professional or scientific independence.

**Principle 1bis: Coordination and cooperation.** National Statistical Institutes and Eurostat ensure the coordination of all activities for the development, production and dissemination of European statistics at the level of the national statistical system and the European Statistical System, respectively. Statistical authorities actively cooperate within the partnership of the European Statistical System, so as to ensure the development, production and dissemination of European statistics.

**Indicator 1bis.1:** The National Statistical Institutes coordinate the statistical activities of all other national authorities that develop, produce and disseminate European statistics. They act in this regard as the sole contact point for Eurostat on statistical matters. Legislation and well defined and established procedures are in place for implementing the coordination role at both national and European levels.

**Indicator 1bis.2**: National guidelines to ensure quality in the development, production and dissemination of European statistics within the national statistical system are produced by the Heads of the National Statistical Institutes, where necessary; their implementation is monitored and reviewed.

**Indicator 1bis.3**: Statistical authorities continuously maintain and develop cooperation at various levels with each other and with the advisory bodies of the European Statistical System, as well as with the members of the European System of Central Banks, academic institutions and other international bodies, as appropriate.

**Principle 2: Mandate for Data Collection and Access to Data.** Statistical authorities have a clear legal mandate to collect and access information from multiple data sources for European statistical purposes. Administrations, enterprises and households, and the public at large may be compelled by law to allow access to or deliver data for European statistical purposes at the request of statistical authorities.

**Indicator 2.1:** The mandate of the statistical authorities to collect and access information from multiple data sources for the development, production and dissemination of European Statistics is specified in law.

**Indicator 2.2:** The statistical authorities are allowed by law to access administrative data, promptly and free of charge, and use them for statistical purposes. They are involved from the beginning in the design, development and discontinuation of administrative records, in order to make them more suitable for statistical purposes.

**Indicator 2.3:** On the basis of a legal act, the statistical authorities may compel response to statistical surveys.

**Indicator 2.4:** Access for statistical purposes to other data, such as privately held data, is facilitated, while ensuring statistical confidentiality and data protection.

**Principle 3: Adequacy of Resources.** The resources available to statistical authorities are sufficient to meet European Statistics requirements.

**Indicator 3.1:** Human, financial and technical resources, adequate both in magnitude and in quality, are available to meet statistical needs.

Indicator 3.2: The scope, detail and cost of statistics are commensurate with needs.

Indicator 3.3: Procedures exist to assess and justify demands for new statistics against their cost.

**Indicator 3.4:** Procedures exist to assess the continuing need for all statistics, to see if any can be discontinued or curtailed to free up resources.

**Principle 4: Commitment to Quality.** Statistical authorities are committed to quality. They systematically and regularly identify strengths and weaknesses to continuously improve process and output quality.

**Indicator 4.1:** Quality policy is defined and made available to the public. An organisational structure and tools are in place to deal with quality management.

**Indicator 4.2**: Procedures are in place to plan, monitor and improve the quality of the statistical processes, including the integration of data from multiple data sources.

**Indicator 4.3:** Output quality is regularly monitored, assessed with regard to possible trade-offs, and reported according to the quality criteria for European Statistics.

**Indicator 4.4:** There is a regular and thorough review of the key statistical outputs using also external experts where appropriate.

**Principle 5: Statistical Confidentiality and Data Protection.** The privacy of data providers, the confidentiality of the information they provide, its use only for statistical purposes and the security of the data are absolutely guaranteed.

**Indicator 5.1:** Statistical confidentiality is guaranteed in law.

**Indicator 5.2:** Staff sign legal confidentiality commitments on appointment.

Indicator 5.3: Penalties are prescribed for any wilful breaches of statistical confidentiality.

**Indicator 5.4:** Guidelines and instructions are provided to staff on the protection of statistical confidentiality throughout the statistical processes. The confidentiality policy is made known to the public.

**Indicator 5.5:** The necessary regulatory, administrative, technical and organisational measures are in place to protect the security and integrity of statistical data and their transmission, in accordance with best practices, international standards, as well as European and national legislation.

**Indicator 5.6:** Strict protocols apply to external users accessing statistical microdata for research purposes.

**Principle 6: Impartiality and Objectivity.** Statistical authorities develop, produce and disseminate European Statistics respecting scientific independence and in an objective, professional and transparent manner in which all users are treated equitably.

Indicator 6.1: Statistics are compiled on an objective basis determined by statistical considerations.

**Indicator 6.2:** Choices of data sources and statistical methods as well as decisions about the dissemination of statistics are based on statistical considerations.

**Indicator 6.3:** Errors discovered in published statistics are corrected at the earliest possible date and publicised.

Indicator 6.4: Information on data sources, methods and procedures used is publicly available.

Indicator 6.5: Statistical release dates and times are pre-announced.

Indicator 6.6: Advance notice is given on major revisions or changes in methodologies.

**Indicator 6.7:** Statistical authorities independently decide on the time and content of statistical releases, while taking into account the goal of providing complete and timely statistical information. All users have equal access to statistical releases at the same time. Any privileged pre-release access to any outside user is limited, well-justified, controlled and publicised. In case of breach, pre-release arrangements are reviewed so as to ensure impartiality.

**Indicator 6.8:** Statistical releases and statements made in press conferences are objective and non-partisan.

## **Statistical Processes**

European and other international standards, guidelines and good practices are fully observed in the statistical processes used by the statistical authorities to develop, produce and disseminate European Statistics, while constantly striving for innovation. The credibility of the statistics is enhanced by a reputation for good management and efficiency. The relevant Principles are sound methodology, appropriate statistical procedures, non-excessive burden on respondents and cost effectiveness.

**Principle 7: Sound Methodology.** Sound methodology underpins quality statistics. This requires adequate tools, procedures and expertise.

**Indicator 7.1:** The overall methodological framework used for European Statistics follows European and other international standards, guidelines, and good practices, while constantly striving for innovation.

**Indicator 7.2:** Procedures are in place to ensure that standard concepts, definitions, classifications and other types of standards are consistently applied throughout the statistical authority.

**Indicator 7.3:** The registers and frames used for European Statistics are regularly evaluated and adjusted if necessary in order to ensure high quality.

**Indicator 7.4:** Detailed concordance exists between national classifications systems and the corresponding European systems.

**Indicator 7.5:** Graduates in the relevant academic disciplines are recruited.

Indicator 7.6: Statistical authorities implement a policy of continuous vocational training for their staff.

**Indicator 7.7:** Statistical authorities maintain and develop cooperation with the scientific community to improve methodology, the effectiveness of the methods implemented and to promote better tools when feasible.

**Principle 8: Appropriate Statistical Procedures.** Appropriate statistical procedures, implemented throughout the statistical processes, underpin quality statistics.

**Indicator 8.1:** When European Statistics are based on administrative and other data, the definitions and concepts used for non-statistical purposes are a good approximation to those required for statistical purposes.

**Indicator 8.2:** In the case of statistical surveys, questionnaires are systematically tested prior to the data collection.

Indicator 8.3: Statistical processes are routinely monitored and revised as required.

**Indicator 8.4:** Metadata related to statistical processes are managed throughout the statistical processes and disseminated, as appropriate.

Indicator 8.5: Revisions follow standard, well-established and transparent procedures.

**Indicator 8.6:** Agreements are made with holders of administrative and other data which set out their shared commitment to the use of these data for statistical purposes.

**Indicator 8.7:** Statistical authorities co-operate with holders of administrative and other data in assuring data quality.

**Principle 9: Non-excessive Burden on Respondents.** The response burden is proportionate to the needs of the users and is not excessive for respondents. The statistical authorities monitor the response burden and set targets for its reduction over time.

**Indicator 9.1:** The range and detail of European Statistics demands is limited to what is absolutely necessary.

**Indicator 9.2:** The response burden is spread as widely as possible over survey populations and monitored by the statistical authority.

**Indicator 9.3:** The data sought from businesses is, as far as possible, readily available from their accounts and electronic means are used where possible to facilitate its return.

**Indicator 9.4:** Administrative and other data sources are used whenever possible to avoid duplicating requests for data.

Indicator 9.5: Data sharing and data integration, while adhering to confidentiality and data protection

requirements, are promoted to minimise response burden.

**Indicator 9.6:** Statistical authorities promote measures that enable the linking of data sources in order to minimise response burden.

## Principle 10: Cost Effectiveness. Resources are used effectively.

**Indicator 10.1:** Internal and independent external measures monitor the statistical authority's use of resources.

**Indicator 10.2:** The productivity potential of information and communication technology is being optimised for the statistical processes.

**Indicator 10.3:** Proactive efforts are made to improve the statistical potential of administrative and other data sources and to limit recourse to direct surveys.

**Indicator 10.4:** Statistical authorities promote, share and implement standardised solutions that increase effectiveness and efficiency.

# **Statistical Output**

Available statistics meet users' needs. Statistics comply with the European quality standards and serve the needs of European institutions, governments, research institutions, business concerns and the public generally. Output quality is measured by the extent to which the statistics are relevant, accurate and reliable, timely, coherent, comparable across regions and countries, and readily accessible by users, i.e. the Principles of Statistical Output.

#### Principle 11: Relevance. European Statistics meet the needs of users.

**Indicator 11.1:** Procedures are in place to consult users, to monitor the relevance and value of existing statistics in meeting their needs, and to consider and anticipate their emerging needs and priorities. Innovation is pursued to continuously improve statistical output.

Indicator 11.2: Priority needs are being met and reflected in the work programme.

Indicator 11.3: User satisfaction is monitored on a regular basis and is systematically followed up.

#### Principle 12: Accuracy and Reliability. European Statistics accurately and reliably portray reality.

**Indicator 12.1:** Source data, integrated data, intermediate results and statistical outputs are regularly assessed and validated.

**Indicator 12.2:** Sampling errors and non-sampling errors are measured and systematically documented according to the European standards.

**Indicator 12.3:** Revisions are regularly analysed in order to improve source data, statistical processes and outputs.

# **Principle 13: Timeliness and Punctuality.** European Statistics are released in a timely and punctual manner

Indicator 13.1: Timeliness meets European and other international release standards.

**Indicator 13.2:** A standard daily time for the release of statistics is made public.

**Indicator 13.3:** The periodicity of statistics takes into account user requirements as much as possible.

**Indicator 13.4:** Divergence from the dissemination time schedule is publicised in advance, explained and a new release date set.

**Indicator 13.5:** Preliminary results of acceptable aggregate accuracy and reliability can be released when considered useful.

# **Principle 14: Coherence and Comparability.** European Statistics are consistent internally, over time and comparable between regions and countries; it is possible to combine and make joint use of related data from different data sources.

**Indicator 14.1:** Statistics are internally coherent and consistent (i.e. arithmetic and accounting identities observed).

**Indicator 14.2:** Statistics are comparable over a reasonable period of time.

**Indicator 14.3:** Statistics are compiled on the basis of common standards with respect to scope, definitions, units and classifications in the different surveys and data sources.

**Indicator 14.4:** Statistics from the different data sources and of different periodicity are compared and reconciled.

**Indicator 14.5:** Cross-national comparability of the data is ensured within the European Statistical System through periodical exchanges between the European Statistical System and other statistical systems. Methodological studies are carried out in close co-operation between the Member States and Eurostat.

**Principle 15: Accessibility and Clarity.** European Statistics are presented in a clear and understandable form, released in a suitable and convenient manner, available and accessible on an impartial basis with supporting metadata and guidance.

Indicator 15.1: Statistics and the corresponding metadata are presented, and archived, in a form that

facilitates proper interpretation and meaningful comparisons.

**Indicator 15.2:** Dissemination services use modern information and communication technology, methods, platforms and open data standards.

**Indicator 15.3:** Custom-designed analyses are provided when feasible and the public is informed.

**Indicator 15.4:** Access to microdata is allowed for research purposes and is subject to specific rules or protocols.

**Indicator 15.5:** Metadata related to outputs are managed and disseminated by the statistical authority according to the European standards.

**Indicator 15.6:** Users are kept informed about the methodology of statistical processes including the use and integration of administrative and other data.

**Indicator 15.7:** Users are kept informed about the quality of statistical outputs with respect to the quality criteria for European Statistics.