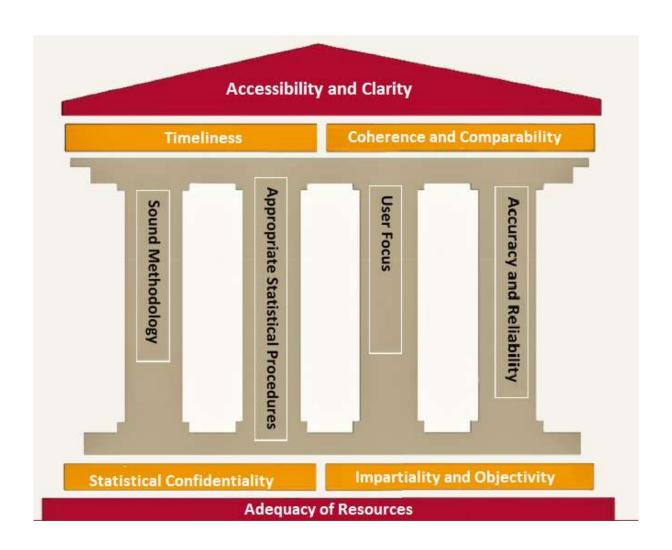
# NATIONAL QUALITY PRINCIPLES AND STANDARDS IN OFFICIAL STATISTICS



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# NATIONAL QUALITY PRINCIPLES AND STANDARDS IN OFFICIAL STATISTICS

In the Turkish Statistical System, the vision is to establish a user-oriented, sustainable statistical system that adheres to international standards. This underscores the importance of defining a quality assurance framework for the official statistics produced. The quality assurance framework aims to continuously improve the statistical production and dissemination processes by considering international standards and user needs. As a result, it ensures economic, social, and environmental sustainability.

In a multi-actor system like the Turkish Statistical System, the concept of sustainability plays a crucial role in achieving successful large-scale cooperation and interoperability. The development of a value-driven approach, rather than a benefit-driven one, is emphasized in creating a sustainable statistical system. This involves maintaining constant collaboration with users and stakeholders, as well as increasing confidence in official statistics. These issues take center stage in this context. The quality assurance framework in official statistics serves as a vital infrastructure task that not only ensures the reliability of official statistics but also of the institutions producing them.

National quality principles mandate the production, analysis, and dissemination of statistics according to professional standards. It is crucial that statistics are clearly explained and tailored to meet user needs. Ensuring that the official statistics produced by institutions and organizations comply with these national quality principles and standards guarantees quality assurance in the products provided to users within the framework of the Turkish Statistical System.

Furthermore, considering these principles, conducting periodic reviews of official statistics and implementing necessary improvements greatly contributes to systematic quality management.

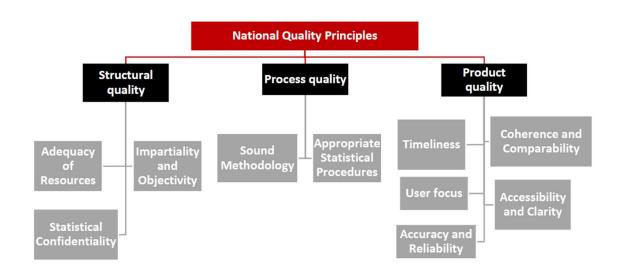
Within the framework of continuous improvement and sustainability of the Turkish Statistical System, various studies are carried out in collaboration with institutions and organizations. These studies focus on standardization and quality in official statistics and are conducted through cooperation in Statistical Council meetings and Official Statistics Program Working Group meetings held throughout the year, attended by representatives from the relevant institutions.

Whether the data source utilized is research/survey/census data or administrative records, the quality of the final output, namely official statistics, holds great significance from a user perspective. The quality of the inputs, production methods employed, and the manner in which they are presented to users are pivotal factors that determine the overall quality at the output stage. Therefore, considering

contemporary quality management approaches, it is essential to take into account all these factors when assessing the quality of official statistics.

The principle of continuous improvement is embraced in all official statistics produced within the Turkish Statistical System, and quality is approached through this perspective. The establishment of a quality assurance framework becomes imperative when implementing the principle of continuous improvement in official statistics. The quality principles formulated to ensure quality assurance in official statistics are structured across the dimensions of the producer, data provider, and user, which form the foundations of the production process. Therefore, in the production processes of official statistics, principles are in place that consider data collection, processing, analysis, and dissemination.

The quality assessment of official statistics produced by ONAsis based on 10 principles, 16 standards, and 41 indicators.



# **National Quality Principles**

### **Structural Quality**

#### 1. Adequacy of Resources

#### **Standards**

- 1.1. The human, financial, and data processing resources utilized in the production of official statistics should be adequate to meet the needs of the Turkish Statistical System in terms of both quantity and quality and should be effectively utilized.
- 1.2. The potential for generating statistics from administrative records should be developed to ensure cost-effectiveness.

#### **Indicators**

- 1. The presence of units responsible for the production and coordination processes of official statistics.
- 2. The quantitative adequacy of human resources in the production and coordination processes of official statistics.
- 3. The adequacy of financial resources allocated for the production processes of official statistics.
- 4. The adequacy of financial resources used in the production processes of official statistics.
- 5. Legislative measures to improve the potential for generating statistics from administrative records.

#### 2. Statistical Confidentiality

#### **Standards**

- 2.1. Adequate measures are implemented to ensure the confidentiality of statistical information during the production and publication of official statistics.
- 2.2. Robust data security measures are in place throughout the official statistics production processes, including data collection, processing, analysis, and dissemination.

- 1. The state of being subject to data privacy and its application in official statistics.
- 2. Ensuring data security in the production processes of official statistics.

#### 3. Impartiality and Objectivity

#### **Standard**

3.1. Institutions and organizations responsible for producing official statistics should disseminate their data in an impartial, professional, and transparent manner, ensuring equal accessibility to all users.

#### **Indicators**

- 1. The practice of notifying users about errors and corrections in published statistics.
- 2. Availability and sharing of revision policies with users.
- 3. Accessibility of official statistics metadata for users.
- 4. The publication status of official statistics on the institution's website.
- 5. Ensuring equal access for all users to official statistics.

# **Process Quality**

#### 4. Sound Methodology

#### **Standards**

- 4.1. The methods employed in the production of official statistics are ensured to comply with national and international standards.
- 4.2. The concepts, definitions, scopes, and classifications utilized in the production and dissemination of official statistics are ensured to align with national and international standards.

- 1. Ensuring that the methods employed in the production of official statistics comply with national and international standards.
- 2. Assessing the suitability of concepts, definitions, classifications, and coding for key variables.
- 3. Evaluating the qualitative adequacy of human resources involved in official statistics production and coordination processes.
- 4. Assessing the extent of collaboration with national and international scientific communities to enhance methodology development.
- 5. Verifying the adequacy of personnel training to ensure compliance with national and international standards for official statistics.

#### **5. Appropriate Statistical Procedures**

#### **Standard**

5.1. Appropriate operations, such as micro control, macro control, imputation, correction in the data source, data analysis, revision, seasonal adjustment, etc., are carried out in the production of official statistics.

#### **Indicators**

- 1. The adequacy of collaborative activities in addressing deficiencies in data sources.
- 2. The adequacy of documentation in official statistics production processes.
- 3. The level of utilization of information and communication technologies in data collection, processing, analysis, and dissemination processes.
- 4. The suitability of micro and macro controls.
- 5. The status of imputation.
- 6. The appropriateness of revisions.

# **Product Quality**

#### 6. User Focus

#### **Standards**

- 6.1. User needs are considered during the production of official statistics. Institutions and organizations participating in the Turkish Statistical System take measures to enhance cooperation and foster the development of official statistics.
- 6.2. The utilization of administrative records in the production of official statistics is expanded, and data sharing among institutions and organizations involved in official statistics production is increased.

- 1. The extent to which official statistics meet user needs.
- 2. Regular monitoring and evaluation of user needs.
- 3. Incorporation of user needs into the strategic plan, work program, or action plan.
- 4. The level of cooperation with institutions/organizations to address user needs.

#### 7. Accuracy and Reliability

#### **Standard**

7.1. The accuracy and reliability of official statistics are rigorously ensured.

#### **Indicators**

- 1. The suitability of the data source for statistical purposes.
- 2. The status of data source correction after verification.

#### 8. Timeliness

#### **Standards**

- 8.1. Ensuring compliance of the time lag between the publication period of official statistics and the reference period of the data with national and international standards.
- 8.2. The publication time of official statistics is predetermined and adheres to the National Data Release Calendar (UVYT). Any changes to the publication date of official statistics, along with their justifications, are announced to the public in advance.

#### **Indicators**

- 1. Assessing the appropriateness of the time elapsed between the publication period of official statistics and the reference period of the data.
- 2. Evaluating whether the release time of official statistics aligns with user needs.
- 3. Monitoring the compliance of official statistics publication with the National Data Release Calendar.
- 4. Publicly announcing any changes in the publication date of official statistics.

# 9. Coherence and Comparability

#### **Standard**

9.1. Official statistics exhibit internal and time-series consistency, enabling comparability across regions and countries, as well as facilitating the integration and sharing of data from different sources.

- 1. Ensuring consistency of statistical data.
- 2. Availability and consistency of comparable time series.
- 3. Maintaining consistency of definitions, concepts, classifications, and codings across different data sources.

# 10. Accessibility and Clarity

#### **Standard**

10.1. Ensuring that official statistics, along with their metadata, are published and made accessible in a clear, understandable, and useful manner.

- 1. The presentation of official statistics to users using information technologies.
- 2. Ensuring easy access for users to official statistics.
- 3. Availability and up-to-date documentation of metadata.
- 4. Enabling users to access metadata.
- 5. Ensuring compliance of metadata with standards.