

Use of international standards for the development of the National Quality Management Framework

Aigul Zharkynbaeva¹, Zhazgul Beisheeva²

¹Head and ²Leading Specialist of the Department for the Development of Regional Statistics and Quality of the National Statistical Committee of the Kyrgyz Republic

Abstract

In Kyrgyz Republic there is a general commitment to ensure the quality of official statistics in the National Statistics Act, which also includes a dedicated chapter for quality. Measures to implement the requirements of the act are contained in the Strategy for 2022-2026. Additionally, the World Bank started a project for “Modernization of tax administration and statistical system”, in which the National Statistical Committee (NSC) of the Kyrgyz Republic has started to develop the National Quality Management Framework based on international standards.

From the organizational side, Department of Regional Statistics Development and Quality has started to work on quality related topics. Since 2022 there is also an internal Quality Working Group, that consists of the representatives of the top management and heads of units. In 2023, the Quality Working Group agreed on several important documents for the National Statistical System, such as quality declaration and quality policy. Both documents are in accordance with the National Statistics Act and United Nations Fundamental Principles in the Field of Official Statistics.

On a more detailed level, the United Nations National Quality Assurance Frameworks Manual for Official Statistics have been adopted. These guidelines contain recommendations for the development and implementation of a national framework for quality assurance of official statistics and fostering trust in it. To achieve this, the national basic principles for ensuring the quality of official statistics are established for the entire National Statistical System, thereby structurally covering interconnected main areas such as the coordination and management of the National Statistical System, the institutional environment, processes, and products.

Generic Statistical Business Processes Model (GSBPM) as well as Single Integrated Metadata Structure (SIMS) are under systematic implementation. Guidelines for GSBPM-based production are introduced and seminars have been carried out for heads of departments in the National Statistical Committee, but also for the heads of statistical bodies in regions across the country. SIMS-based metadata and quality reports are compiled and will be published on the new website of the NSC.

For this year and the following year, a quality road map has been drawn up under the leadership of the Quality Working Group, which includes a plan for the development and implementation of all elements still missing for the full implementation of the National Quality Management Framework. This presentation and the descriptive document provide a more detailed overview of the activities that have been implemented so far and future plans.

Keywords: Quality Management, Quality Management Framework, Standards, International Cooperation, National Statistical System

1. Introduction

The National Statistical Committee of the Kyrgyz Republic (NSC) is the central statistical office and coordinator of the national statistical system of the country. The Committee is administratively autonomous and reports to the President of the Kyrgyz Republic. In the new National Statistics Act there is a general commitment to ensure the quality of official statistics (Article 28), that is supported by improvement actions in the NSC Strategy for 2022-2026.

The following subsections describe the content of both documents in a little more detail.

4.1 National Statistics Act

The Act entered formally into force on 8 July 2020. It is based on the United Nations (UN) Generic Law on Official Statistics (GLOS) and thus on the UN Fundamental Principles of Official Statistics (UNFPOS). The new Law strengthened the role of the NSC as the main national producer of official statistics and entrusts it with the mandate to lead the development of official statistics and coordinate the national statistical system (NSS).

The Act devotes an entire Article 28 “Obligation to ensure the quality of official statistics” to quality related topics. This article sets out the criteria that official statistics must meet and be regularly assessed such as relevance, accuracy, reliability, timeliness, punctuality, transparency, clarity, coherence, and comparability. It is also stated that all methodology in the NSC is developed in accordance with internationally agreed statistical standards and recommendations and all producers of official statistics are obliged to document in a standard way the sources and methods used in the production process, to inform users about all sources and methods of statistical production, through the use of metadata.

Implementation of the Act is supported by the Strategy of the NSC.

4.2 Strategy for 2022-2026

The Medium-term Program for Development of Official Statistics of the Kyrgyz Republic for 2022-2026 is designed to improve the statistical system to provide reliable and high-quality data for effective and high-quality monitoring in the country. The Program defines the next stages of reform and the most important directions of development of the national statistical system of the Kyrgyz Republic. The Program is based on the recommendations of the UN Statistical Commission on the development of statistical activities, application of statistical standards, development of concepts, methods and their application at the national level, as well as the recommendations of the Global Assessment of the national statistical system of the country conducted in 2020-2021 by international experts of the UN Economic Commission for Europe, the European Free Trade Association and the European Union Statistics Service.

Currently, the implementation of the strategy and the modernization of the national statistical system is also supported by the World Bank project.

2. Theoretical framework

According to the National Statistics Act of Kyrgyz Republic, all methodology for the production of official statistics by the National Statistics Committee must be developed in accordance with internationally agreed statistical standards and recommendations. This assumption is undoubtedly very relevant, but at the time of drafting the National Statistics Act it was still partly theoretical, because the necessary standards had not been fully identified and implemented by the organization.

Additionally, based on the results of the Global Assessment conducted in 2020-2021, it was determined that the NSC needs to build on the work already done in relation to quality, by development of a National Quality Assurance Framework (NQAF) in accordance with international recommendations. More precisely, it was recommended that the NSC should build on the work already done regarding quality of outputs by:

- Introducing a more systematic measurement including quality of inputs and processes, in a coherent “Total Quality Management” approach;
- Developing a national quality framework in line with international guidelines;
- Adopting regulatory legal acts in accordance with the national quality framework, to be applied throughout the NSC and the national statistical system.

Based on the aforementioned conditions, it was a logical continuation that we urgently started to find solutions on how to bring our methodology into conformity with international standards and recommendations and start with related improvement activities.

3. Methods

After some searches and consultations, we decided that it is most appropriate and reasonable for the NSC to follow the recommendations of the UN NQAF and use the UN Handbook on Management and Organization of National Statistical Systems (HMONSS) for support. With such a methodical approach, we are in full compliance with the requirements of our National Statistics Act and can also increase coherence with both national and international partners.

NQAF is a coherent and holistic system for statistical quality management which assures trust and quality of official statistics across the entire national statistical system.

HMONSS provides guidance on how to develop and maintain national statistical capacity that is fit for purpose and appraises critical issues and topics, including the integration of innovative data sources and technologies in the production of statistics and indicators.

4. Results

As a result of the active implementation of the previously mentioned methodological materials and with the support of several international cooperation projects, we have achieved considerable success to date. In the following, we highlight various examples of how we have improved the conscious management of quality in our national statistical system.

4.1 Department and position for Quality

Department of Regional Statistics Development and Quality was established in 2019 with responsibilities to monitor the quality of the processes of official statistics production, based on international standards and agreed methodologies for the scope, terms, concepts, units and classifications of official statistics.

The establishment of a dedicated Quality Specialist position in 2023 is essential for NSC's sustained growth, reputation, and competitiveness. This role's sole focus on quality management will ensure the effective implementation of standardized processes, fostering a culture of excellence and continuous improvement. This specialist will solely focus on implementing and managing quality assurance standards and processes based on the Generic Statistical Business Process Model (GSBPM) and the Generic Activity Model for Statistical Organizations (GAMSO). The designated individual will oversee and execute various tasks essential to ensuring the highest quality of our processes and outputs.

4.2 Quality Working Group

Quality Working Group (QWG) was established in 2022. Primary purpose of the QWG is to oversee and improve the quality of statistical outputs and the processes involved in their production. The group establishes and maintains quality-related standard methodologies, guidelines, and best practices for data production. This ensures consistency and comparability of data over time and across different statistical domains and departments.

QWG also focuses on quality assurance mechanisms, including regular quality assessments, checks, and audits throughout the entire statistical process. This helps in identifying and addressing any issues or discrepancies promptly. The QWG may oversee training programs for staff and enhance their skills and understanding of quality requirements and methodologies. It facilitates communication with stakeholders to understand their needs and concerns

regarding statistical data. This ensures that statistical products meet user requirements and are relevant to the changing needs of society.

QWG also encourages the adoption of new technologies, tools, and methodologies by identifying areas for improvement and innovation in statistical processes and implementing changes to enhance quality and efficiency. Overall, the QWG plays a pivotal role in upholding the integrity and trustworthiness of statistical data produced by the NSC, thereby ensuring its usefulness for decision-making and policy formulation at various levels in Kyrgyz Republic.

4.3 Quality Declaration

In order to ensure unwavering trust and reliability of the official statistics, the NSC issued a comprehensive quality declaration in 2023. It contains obligations to fulfil international agreements, legal obligations arising from the National Statistics Act and defines the guiding quality principles used in the production of official statistics. The declaration certifies that the NSC complies with the above agreements.

The quality declaration is signed by the Chairman and it represents the highest level of approval and accountability, underscoring NSC's commitment to the quality of official statistics. The signature of the Chairman is a confirmation of personal responsibility, which ensures the operation of the NSC in accordance with the declared principles and methodologies.

4.4 Quality Policy

Quality Policy was made and accepted in 2023. Main differences between the quality declaration and quality policy documents are related to its audience and details. Main aim of quality declaration is to transparently communicate the quality aspects of statistical production and outputs by broad statements without getting into granular details of specific processes or methodologies. They focus on high-level objectives and principles. Quality declaration of the NSC mentions the quality criteria in the Statistics Act and general principles of quality management.

Quality policy has a bit more in-depth approach than the Quality Declaration, as it is in good alignment with recognized quality standards and regulatory requirements, such as UN Fundamental Principles in the Field of Official Statistics, but also UN Guidelines on National Basic Principles for Quality Assurance of Official Statistics. Quality policy provides a framework for ensuring compliance and sets the direction and objectives regarding quality management within an organization.

4.5 User Satisfaction Surveys

To improve the quality of official statistical information, based on feedback from users, a satisfaction survey of statistical information was developed and implemented.

The questionnaire on users satisfaction was first launched in 2018 and it has taken place regularly and systematically since that time. It allows to take a survey only once from one device and consists of 12 questions assessing the quality of NSC's products and services.

4.6 Quality Trainings and Seminars

Trainings and seminars about international standards and quality in official statistics have been carried out in 2023-2024 to several hundreds of NSC employees in the central office, but also for the regional offices. Standards such as NQAF, GAMSO, GSBPM and SIMS have been in the focus of such trainings so far. All the held seminars have received very high ratings from the participants and positive feedback regarding the implementation in the NSC system.

The continuation of this activity is also supported by a comprehensive training plan that has been made for 2024-2025. This plan aims to equip the NSC with the necessary skills, knowledge, and tools to effectively navigate and optimize the revamped workflow, ensuring efficient process management and robust statistical production based on international standards and related good practices.

4.7 Quality of Official Statistics webpage

The Quality of Official Statistics website was made in 2023 and it is dedicated to promoting the importance of quality of official statistics, emphasizing the importance of quality, including its key components. NSC shares information about the multifaceted nature of statistical quality and its main guiding documents including international standards, to contribute to the credibility and usability of statistical data.

The Quality of Official Statistics website also serves as an educational hub, catering to a diverse audience, including policymakers, researchers, students, industry experts and the general public. Through the content, NSC bridges knowledge gaps by presenting complex theory of statistical quality in an accessible and comprehensible manner.

The Quality of Official Statistics website will be constantly updated over time. For example, if new quality-related documents are created (for example, quality reports based on SIMS, the Single Integrated Metadata Standard) or the content of existing documents is updated, these additions or changes should also reach this public website.

4.8 Quality Roadmap

In order to implement the activities related to standards and quality and to plan the necessary resources, the NSC Quality Working Group approved a Quality roadmap at the beginning of 2024, agreeing not only on the activities but also on the achievable results, deadlines, and responsible persons. This roadmap is an important step towards improving the quality and reliability of our statistical data, which will contribute to making informed decisions and improving the life of our society. There are three main tasks in the roadmap:

1. Quality Guidelines will be developed on the basis of UN NQAF. This will become the basis for the improvement of our quality management system. In addition, we will develop a metadata framework for all types of statistical work and publish reports on the quality of our statistical products.
2. Standardization of processes – we place great emphasis on training our employees on quality, standards, and processes. Trainings on the quality of official statistics will help us to create a culture of quality within our organization.
3. Organizational issues – to effectively implement the quality management system, we have regular meetings of the QWG. Quality audits and standardization of methodology in all areas of statistics will help us to improve the quality of our data. Also the development of an automated information system for quality management is needed to increase the efficiency of processes and quality of official statistics.

4.9 Under implementation

All subsequent standards are planned to be implemented within 2024 according to the roadmap agreed by the QWG. Work has been going on with all topics for some time and we are confident that we will be able to meet the set goals on time. Hereby we also give a brief overview of the current situation.

- National Quality Assurance Framework (2024) – full self-assessment has been carried out for all required elements and there is a good overview of the current state of the NSC in terms of meeting NQAF expectations. Work continues on that basis.
- Generic Statistical Business Processes Model (2024) – the implementation continues simultaneously with the updating of IT systems, which is also taken into account when describing the processes and related methods at the level of detail.
- Generic Activity Model for Statistical Organisations (2024) – all the most important parts of the standard have already been in use in the organization or were introduced in the past, as a follow-up activity it is planned to tie everything together as a whole.

- Single Integrated Metadata Structure (2024) – considerable work has been done on describing the concepts since 2023, including gathering information from various sources, further description, and standardization and harmonization of content.
- Quality Auditing (2024) – as a logical continuation of the above, the systematic implementation of quality audits will also begin, based on GSBPM phase 8.

5. Conclusions

Implementation of international standards has helped the systematisation, harmonisation, transparency, and efficiency of the official statistics production, but also the development and implementation of a National Quality Management Framework. NSC has improved thanks to standards, but also to similar international experiences.

As a result of previous success, we have understood the benefits and see that it is worth continuing on the same path. To this end, we are already aware of some follow-up activities related to the implementation of standards, such as Quality Coordination of the National Statistical System, automatic calculation of Quality Indicators, Implementation of Generic Statistical Information Model, Implementation of Classification of Statistical Activities, External assessments and feedback and Improvement actions based on NQAF.

In order to support standardization, it is very helpful to exchange experiences with colleagues, which is supported, among other things, by participation in conferences such as Q2024 in Lisbon. We fully support joint efforts to develop standards and partnerships between countries, which are getting stronger over time and are very helpful in meeting common statistical quality goals.