



EUROPEAN CONFERENCE ON QUALITY IN OFFICIAL STATISTICS 2024 ESTORIL - PORTUGAL

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Introduction

- 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 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.



Introduction

- The **PDCA (Plan-Do-Check-Act) cycle** is known as the Shewhart and Deming cycle. In light of the philosophy the cycle aims at, it is also called the continuous improvement cycle.
- Although the **PDCA cycle** seems to be an easy cycle consisting of 4 stages, internalizing this cycle and making it a lifestyle requires serious dedication.





TurkStat Quality Policy

- Turkish Statistical Institute (TurkStat) has declared to apply the **European Statistics Code of Practice (ES-CoP)**, the **European Statistical System Quality Assurance Framework (ESS-QAF)**, and the **ISO 9001:2015 Quality Management System** in the implementation of quality frameworks.
- TurkStat is aware of the necessity of continuous improvement within the national statistical system to elevate the quality of statistics. The **PDCA cycle** is taken as the basic philosophy for ensuring continuous improvement. In line with those aspects, it is aimed at producing high-quality statistics and ensuring user needs.



Introduction

Quality in TurkStat are handled with two main elements.

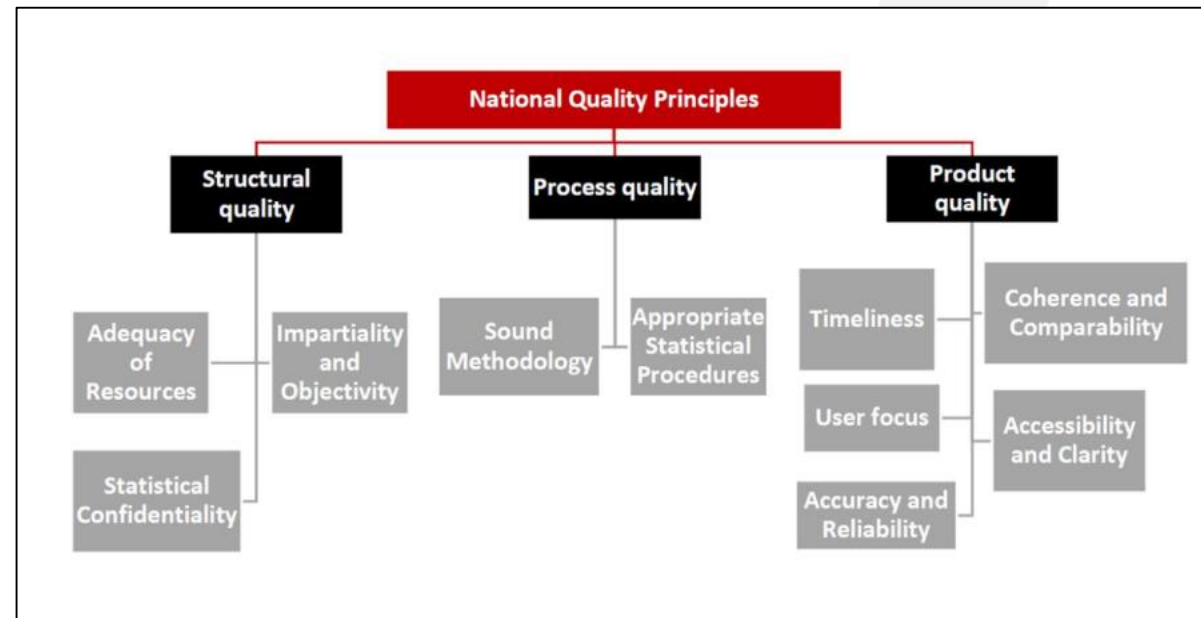
- 1. The quality of official statistics** is assessed by taking international quality principles and standards into consideration. Action plans are created and monitored to ensure the sustainability of strengths and the improvement of weaknesses.
- 2. ISO 9001:2015 Quality Management System.** Quality management is a holistic system that handles all corporate work with the participation of senior management and employees.



Quality of Official Statistics in TurkStat

Main elements of quality assessments in TurkStat:

- Data Quality Control Board (DQCB)
- Quality Monitoring and Assessment Tool (QMAT)
- Quality Logo





Quality of Official Statistics in TurkStat

Data Quality Control Board (DQCB)

- DQCB is responsible for determining the data quality control principles for the official statistics produced within the scope of the Official Statistical Program (OSP).
- DQCB consists of heads of departments under the chairmanship of the Vice President determined by the President. The Board meets at least once a month.
- DQCB, which can serve as an example of good practice in leadership in quality studies, plays a very important role in the assessment and improvement of official statistics.



Quality of Official Statistics in TurkStat

Quality Monitoring and Assessment Tool (QMAT)

- QMAT is designed to assess the quality of official statistics produced by TurkStat and to improve them with improvement actions.
- Official statistics are assessed using advanced methods according to many international quality methodologies.





Quality of Official Statistics in TurkStat

Quality Monitoring and Assessment Tool (QMAT)

Methodology;

- UNECE Generic Statistical Business Process Model (**GSBPM**)
quality indicators
- European Statistics Code of Practice (**ES-CoP**)
- European Statistical System Quality Assurance Framework (**ESS-QAF**)
- European Self-Assessment Checklist for Survey Managers (**DESAP**)
- Methodologies for an Integrated Use of Administrative Data (**MIAD**)

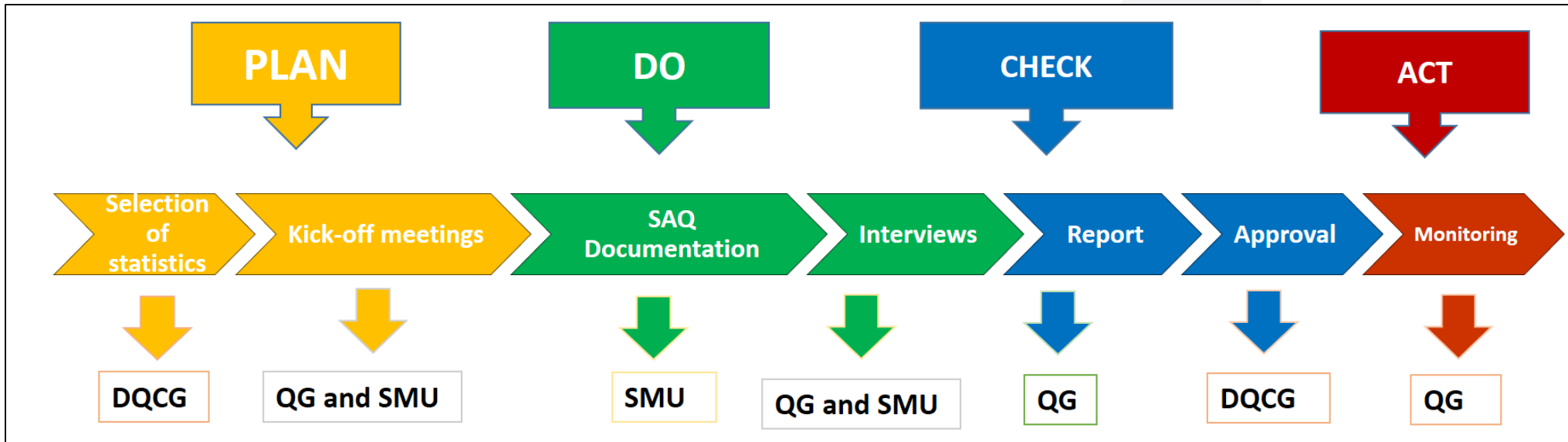




Quality of Official Statistics in TurkStat

Quality Monitoring and Assessment Tool (QMAT)

- QMAT is carried out based on the PDCA cycle.





Quality of Official Statistics in TurkStat

Quality Monitoring and Assessment Tool (QMAT)

- The improvement actions are regularly monitored in the Microsoft Power BI application.
- **94 improvement actions** were defined for **8 statistics** as a result of the QMAT process. The most number of improvement actions have been defined for quality principle "**Accuracy and Reliability**"
- QMAT stands out as a good practice for the **indicators 4.2 and 4.3 in ES-CoP.**



Quality of Official Statistics in TurkStat

Quality Logo

- The Quality Logo is applied to increase and improve the quality of official statistics produced by ONAs that produce statistics within the scope of the OSP.
- Quality Logo is on a voluntary basis. ONAs carry out an official application to TurkStat to get a Quality Logo for their official statistics.





Quality of Official Statistics in TurkStat

Quality Logo

Objectives;

- compliance of the official statistics produced by ONAs with quality principles
- raising awareness of quality in official statistics
- increasing cooperation with ONAs
- sharing experiences
- increasing user trust and satisfaction





Quality of Official Statistics in TurkStat



Quality Logo

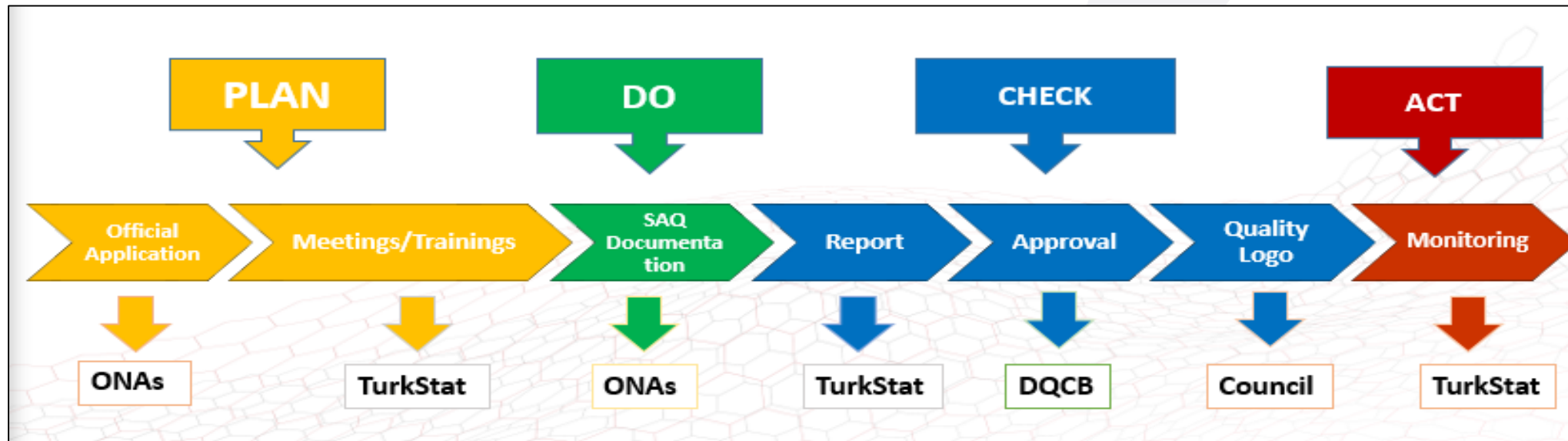
- The Quality Logo is given for 5 years. Official statistics, which receive a Quality Logo, can reapply at the end of the 5 year term.
- ONAs that are entitled to receive the Quality Logo are rewarded with the Quality Logo at the Statistics Council held every year.



Quality of Official Statistics in TurkStat

Quality Logo

- Quality Logo is implemented based on the PDCA cycle





Quality of Official Statistics in TurkStat

Quality Logo

- Improvement actions are regularly monitored in **Microsoft Power BI**.
- **284** improvement actions were defined for **53** statistics that received the logo.
- The most number of improvement actions have been defined for quality principle "**User Focus**".
- Quality Logo stands out as a good practice for the indicators **1bis.1**, **1bis.2**, **4.2** and **4.3** included in the ES-CoP.





Quality of Official Statistics in TurkStat

Quality Logo

Main progress by ONAs;

- ✓ standard metadata
- ✓ a detailed definition of the statistical production process,
- ✓ revision and error policies
- ✓ user satisfaction surveys
- ✓ user focused website designs
- ✓ user focused dissemination systems





ISO 9001:2015 Quality Management

Objectives;

- including prioritizing user needs and expectations
- providing better product and service delivery
- increasing effectiveness by identifying risks
- increasing employee performance and motivation,
- providing a systematic approach to possible problems and strengthening the corporate image at national and international levels.



ISO 9001:2015 Quality Management

Activities;

- ✓ Trainings
- ✓ Workshop
- ✓ ISO Quality Handbook
- ✓ All documents for internal and external audit was compiled.
- ✓ Processes and risks were updated
- ✓ Quality policy
- ✓ Internal audits
- ✓ The review of top management
- ✓ External audit
- ✓ Received ISO 9001:2015 Quality Management certification



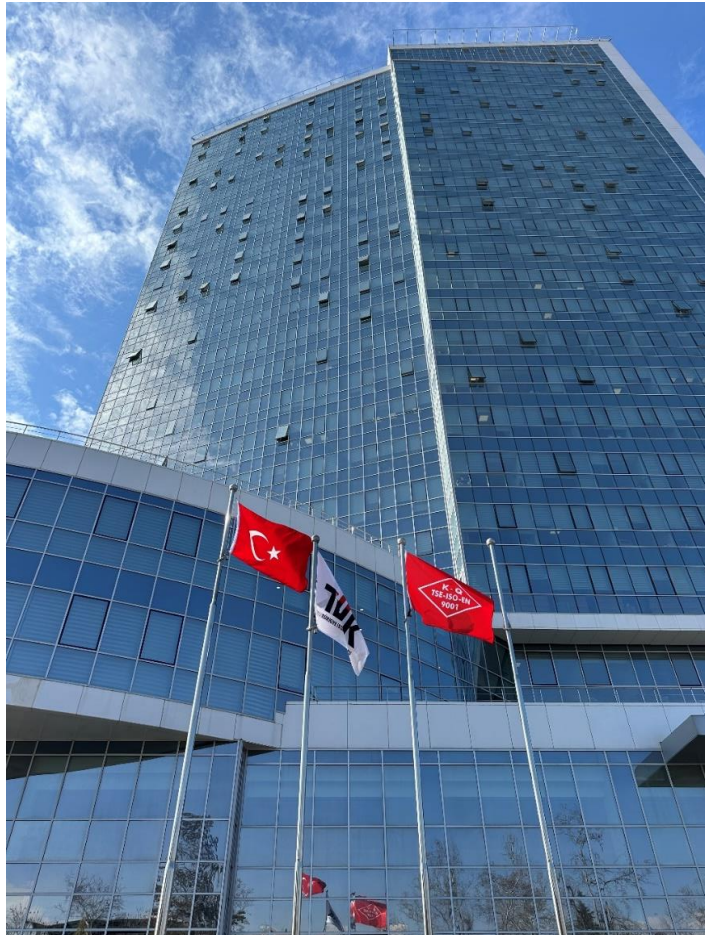
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ISO 9001:2015 Quality Management





Result and Discussion

1- Leadership

Leadership can be achieved by the institution's top management having a quality perspective and vision. It is much more effective to implement quality in business environments where leaders believe in it, internalize it and encourage it to be implemented. Because the leadership perspective spreads to all employees in succession.

2- Participatory process

The participatory attitude of institutional employees in quality systems plays a major role in the establishment and dissemination of these systems. The fact that the employees of the institution believe in the quality philosophy and contribute to it makes the process holistic. It allows many studies to be done more efficiently and with higher quality.



Result and Discussion

3- User Focus

Users are at the core of quality. Whatever the product you produce and offer, users are the actors who determine the quality of that product and, accordingly, the institutional quality. Users' needs, satisfaction and trust are what make quality essential



Result and Discussion

Producing the statistics with strong leadership and a participatory process and presenting them to the users will enable their needs to be met to a greater extent. It will add value to the quality of statistics along with international quality standards and a continuous improvement philosophy. In this way, user satisfaction and trust will increase, and both product quality and institutional quality perception will improve.

