
TurkStat Quality Assurance Framework

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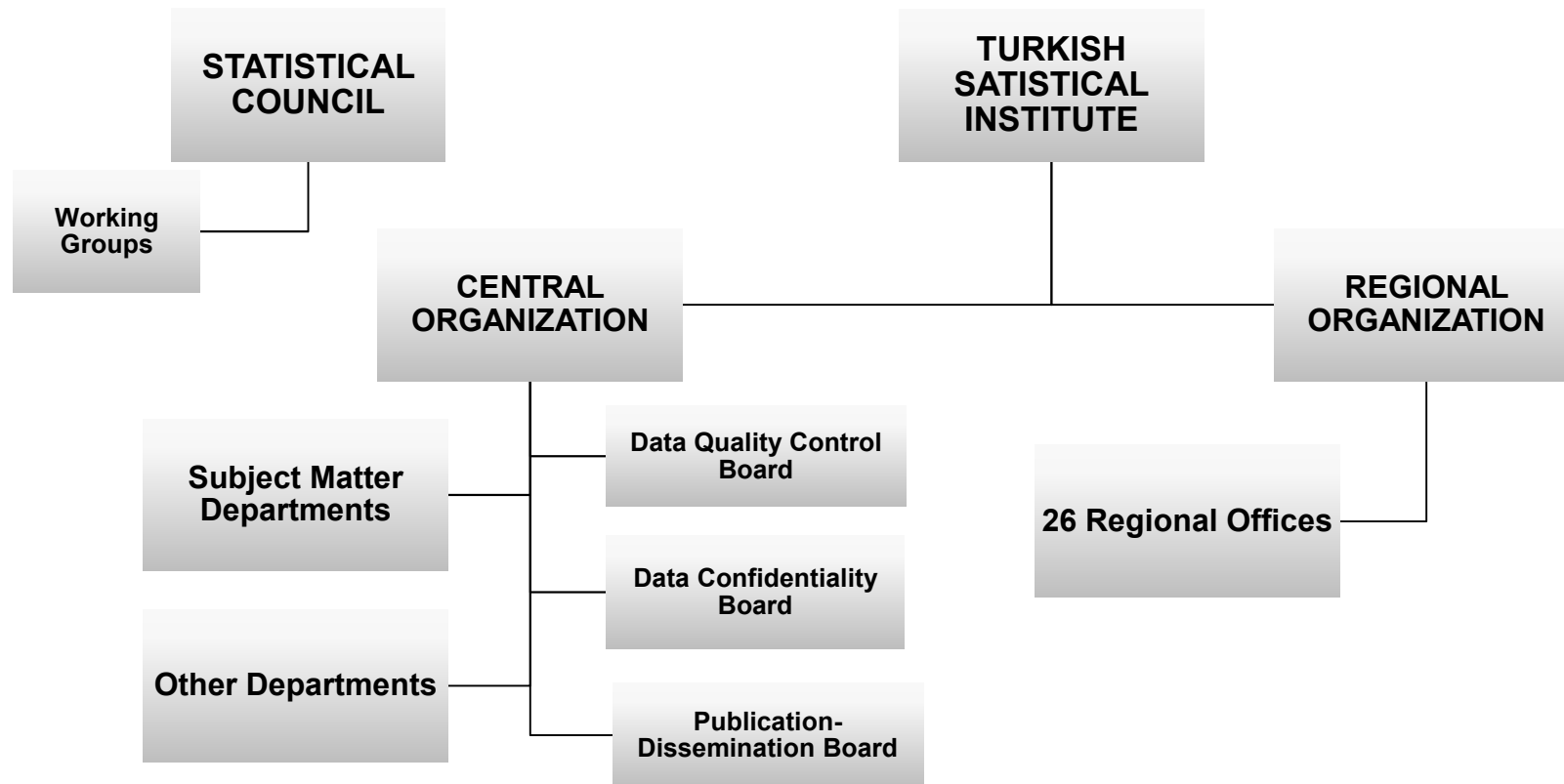
Our vision

“to establish a user-centered, sustainable statistical system based on the international standards”.

The vision is not only focused on statistical system of TurkStat itself but it is also focused on the **Turkish Statistical System** as a whole.



Organizational Structure of TurkStat



Organizational structure on quality management

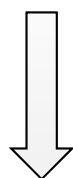
- Total quality management, standards, classifications - *Metadata and Standards Department*
 - Data quality - *Subject matter departments*
 - Data analysis methods and sampling techniques - *Sampling and Analysis Techniques Department*
 - Monitoring of the field works - *Coordination of Data Collection Department*
 - Preparation and compliance of the Data Release Calendar - *Dissemination and Communication Department*
 - Defining quality principles and compliance with the standards - *Data Quality Control Board*
 - Specification of confidentiality criteria and tools - *Data Confidentiality Board*
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Coordination role - *Official Statistics Programme*

Coordinated by TurkStat

Prepared for a 5-year period

Determines the responsibilities (production and dissemination)



Statistical Council



Working Groups

TurkStat Quality Assurance Framework & European Statistics Code of Practice

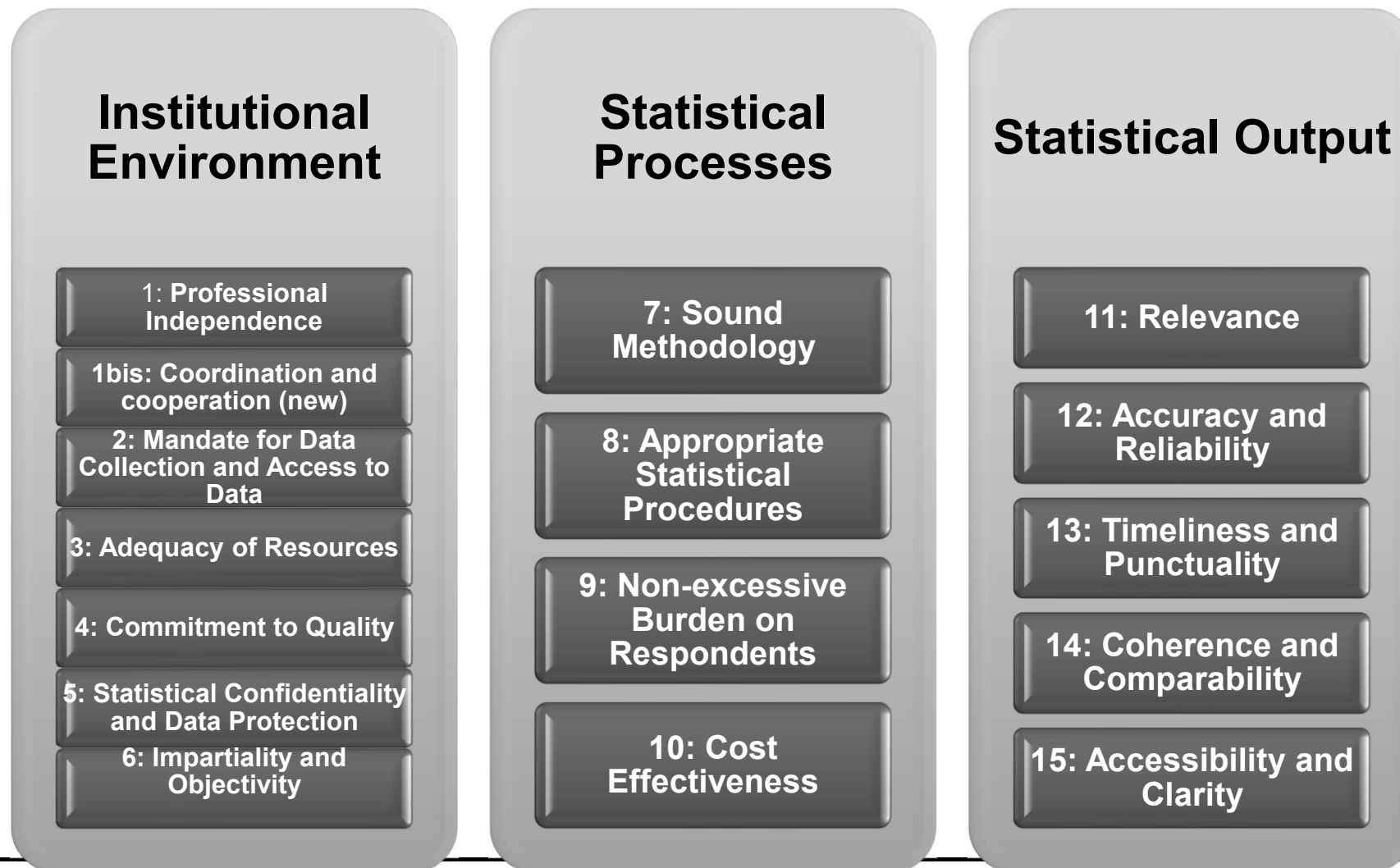
ES COP and ESS Quality Assurance Framework

- The European Statistics Code of Practice sets the standard for developing, producing and disseminating European statistics

<https://ec.europa.eu/eurostat/web/quality/european-statistics-code-of-practice>

- The Quality Assurance Framework is a supporting document aimed at assisting the implementation of the European Statistics Code of Practice (CoP). It identifies possible activities, methods and tools that can provide guidance and evidence for the implementation of the indicators of the CoP.

ES Code of Practice Principles (Nov. 2017)



TurkStat Quality Assurance Framework

- Statistics Law of Turkey: Includes the European Statistics Code of Practice's principles and covers the statistical system as a whole
- Turkish Statistical Institute's Quality Assurance Framework is based on the ES CoP's principles.
- Our strategic plan is configured based on these quality principles.
- The entire statistical business process is planned on the quality axis.

<http://www.turkstat.gov.tr/jsp/duyuru/upload/TurkStatQualityAssuranceFramework.pdf>

TurkStat Quality Assurance Framework (cont'd)

Principle 2) Mandate for data collection

- TurkStat has a clear legal mandate to collect the data needed for the implementation of the Official Statistical Programme.
- TurkStat is entitled to collect data directly from statistical units and can access administrative records for statistical purposes.
- The obligation to reply to all surveys or censuses is stipulated by the Statistics Law, Article 7.

TurkStat Quality Assurance Framework (cont'd)

Principle 8) Appropriate Statistical Procedures

- TurkStat undertakes surveys in accordance with the international literature. Methodological documents and directions developed Eurostat and the UN are followed.
- Questionnaires are examined and tested thoroughly before the field work starts. Checklists are used to control the field work for surveys, standard data validation and cleaning rules are embedded into the electronic data collection forms.

TurkStat Quality Assurance Framework (cont'd)

Principle 8) Appropriate Statistical Procedures

- The methods used in corrections or imputations are published as part of the institutional quality reports.
- The revision policy as well as the historical information about the revisions done for produced statistics is presented to the public on the web site.

TurkStat Quality Assurance Framework (cont'd)

Principle 8) Appropriate Statistical Procedures

- Article 10 states that “Institutions and organizations are under the obligation to establish and update their national register systems in their areas of work in line with the standards as defined by the Presidency, and open these registers to the Presidency for the statistical use of them”.
- TurkStat makes assessments of official statistics in line with the national quality principles, standards and indicators (detailed explanation in the next section).

TurkStat Quality Assurance Framework (cont'd)

Principle 9) Non-excessive burden on respondents

- As part of the Strategic Plan, TurkStat continuously measures and monitors the burden imposed on respondents and takes necessary measures to reduce the response burden.
- TurkStat started to measure the burden on respondents in 2013, and continued in 2015. Response burden will be measured every 5 years from now on.
- TurkStat focuses on collecting data from administrative sources as much as possible. Some of the major business surveys are now using data from administrative sources.

TurkStat Quality Assurance Framework (cont'd)

Principle 13) Timeliness and punctuality

- TurkStat follows a dissemination strategy in compliance with the international standards based on disseminating data as soon as the final data is ready.
- Advance release calendar for all official statistics of Turkey is released on the statistical portal at the end of each year.
- Any change of a pre-announced publication date in the release calendar is published in advance for reasons of transparency.
- TurkStat's press releases are disseminated at 10.00 am.

TurkStat Quality Assurance Framework (cont'd)

National Data Release Calendar

<http://www.turkstat.gov.tr/ingtakvim/tkvim.zul#tb1>

National Data Release Calendar			
		Maximum monthly real profit rate was realized in US Dollar	
		07 Sep 2018 15:34	
Current Release/Data	Find Release/Data		
07 September 2018's Bulletin/Data(s)			
RELEASE NAME	PERIOD	DATE	RESPONSIBLE INSTITUTION
The Rates of Real Profits Created by Means of Financial Investment	August 2018	07-09-2018 10:00	Türkiye İstatistik Kurumu (TÜİK)
Central Bank Analytical Balance Sheet	06-09-2018	07-09-2018 14:30	Central Bank of the Republic of Turkey (CBRT)
Indicative Exchange Rates	07-09-2018	07-09-2018 15:30	Central Bank of the Republic of Turkey (CBRT)
National Education Statistics - Formal Education	2017-2018	07-09-2018 16:00	Ministry of National Education (MoNE)
Weighted Average Interest Rates for Deposits (Flow Data %) (Weekly)	35. Week 2018	07-09-2018 17:00	Central Bank of the Republic of Turkey (CBRT)
Airport Statistics	August 2018	07-09-2018 17:00	Ministry of Transportation, Maritime Affairs and Communications (MoTMAC)
Treasury Cash Realizations	August 2018	07-09-2018 17:30	Undersecretariat of Treasury (UT)
Statistics of Interbank Money Market within Central Bank	07-09-2018	07-09-2018 18:00	Central Bank of the Republic of Turkey (CBRT)
Daily Statistics about the Mutual Funds, Pension Funds, Investment Trusts	06-09-2018	07-09-2018 19:00	Capital Markets Board of Turkey (CMBT)

Quality Assessment of Official Statistics Produced by ONAs

Quality Assessment



Legal Basis

➤ Statistics Law of Turkey No.5429

Article 18 (h)

TurkStat's duties and authorities;

“to follow the performance of tasks assigned by the Programme to the institutions and organisations in relation to official statistics, to examine statistics produced by these institutions and organisations in terms of their conformity to international standards, to perform quality control and to provide technical support and ensure coordination in these issues”

Quality Assessment (cont'd)



Legal Basis

- Regulation on Foundation of Data Quality Control Board and its Working Procedure and Principles

Article 6

- Directive on Principles and Procedures for Quality Assessment in Official Statistics

Quality Assessment (cont'd)



General Information

- Quality Principles and Standards
- The questionnaire and checklist
- Evaluation process
- Trainings

10 principles 16 standards 41 indicators

- Focus on both process and product quality
- Initiated with the formal request
- Aim to increase awareness on quality principles, collaboration, exchange of knowhow, enhancement and sustainability
- Assessments will be done before accepting to the OSP
- Signing the Quality Assurance Statement





Quality Assessment (cont'd)

Official Statistics Assessment Form

- Includes 8 parts:

General Information, Data Sources and Cooperation, User Needs, Data Collection, Classifications, Data Processing and Analysis, Official Statistics Dissemination, Opinions and Suggestions

- 54 questions

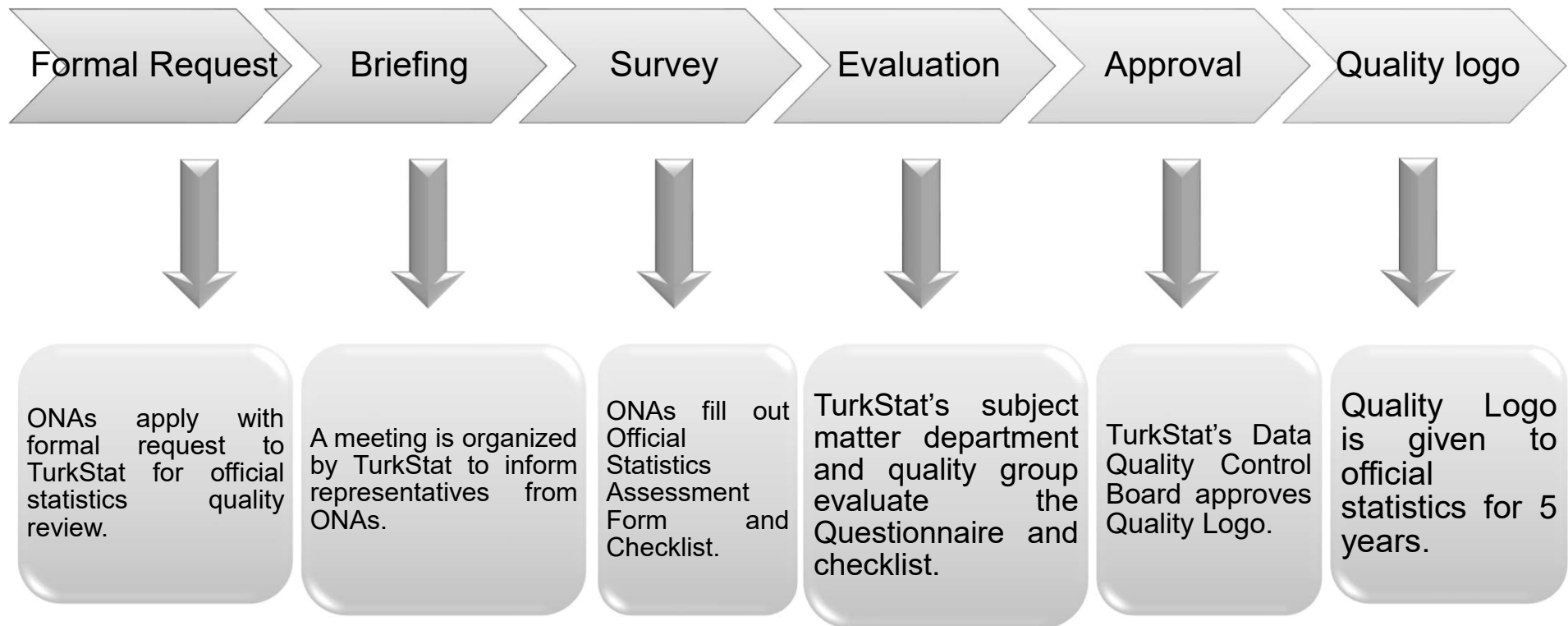
- Peer review

- Evidence-based system, through control checklist, supplementary documents,

Quality Assessment (cont'd)



Quality Logo Process



Quality Assessment (cont'd)



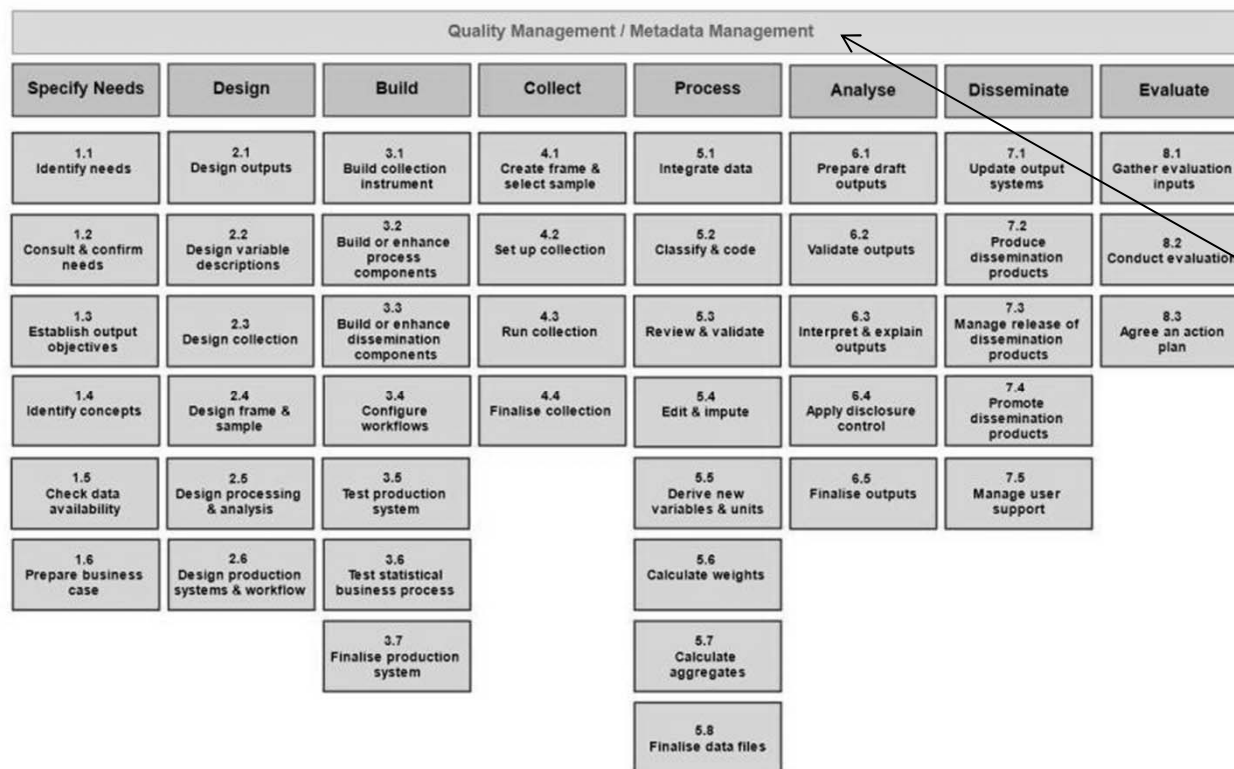
Outputs of Quality Logo Process

- Official Statistics Quality Assessment Report
- Official Statistical Metadata Document
- Quality Improvement Action Plan
- Official Statistical Quality Assurance Statement
- Official Statistical Quality Certificate



Quality Indicators for the GSBPM

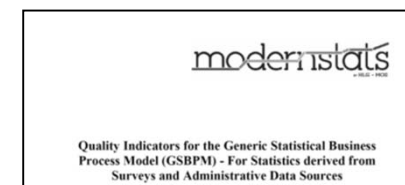
Quality Indicators for the GSBPM



Quality and Metadata management overarching processes

Quality indicators were developed for each phase (1 to 8) and sub-processes

Types and Levels of the Indicators



- Generic indicators were proposed in order to reflect the nature of the GSBMP itself.
- Consistency with existing frameworks was ensured (e.g. UN, ESS Q&P indicators, ESSnet AdminData)
- No formulas were indicated but explanations and reference to the related quality dimension were provided.
- Quantitative indicators were used whenever possible.
- Qualitative indicators were expressed in the form of yes/no or high/medium/low degree indicators.

<https://statswiki.unece.org/display/GSBPM/Quality+Indicators>

Uses of the Quality Indicators

- QIs for the GSBPM provide a standard framework and a common terminology and support a process-oriented approach to Quality Management
 - To rationalise quality work within an organisation
 - ✓ Avoid duplication of work in different sectors within the organisation
 - ✓ Map/fill in gaps with QIs in use in an NSO
 - To define a mid-term quality policy
 - ✓ Can be tailored by NSIs according to their needs
 - ✓ Set quality targets to be achieved in a 3-5 year period
 - ✓ Inspiration from indicators defined for the overarching processes
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TurkStat Quality Indicators

- A data quality working group has been created to determine quality indicators.
 - GSBPM Quality Indicators have been studied by the data quality working group with regular meetings.
-

Quality Monitoring and Assessment Tool (QMAT)

- to monitor and evaluate quality of statistics produced by TurkStat
 - based on ES CoP, Quality Indicators for the Generic Statistical Business Process Model (GSBPM) Version 2.0, quality reports and checklists used in TurkStat
 - The Tool will be used to regularly review the quality of statistical outputs
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Quality Monitoring and Assessment Tool (QMAT)

Purpose: monitor and evaluate quality of statistics produced by TurkStat

- QMAT is established on Quality Indicators mapped to both GSBPM sub-phases and quality dimensions
 - Quality Indicators developed under modernstats –hlg by participating different countries and Turkstat as well
 - Appropriate quality indicators selected for TurkStat
 - Questions and measures for quality indicators
 - 188 questions mapped to GSBPM processes and CoP dimensions
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Thank You
