

БЮРО НАЦИОНАЛЬНОЙ СТАТИСТИКИ
АГЕНТСТВА ПО СТРАТЕГИЧЕСКОМУ
ПЛАНИРОВАНИЮ И РЕФОРМАМ РЕСПУБЛИКИ
КАЗАХСТАН

Data quality management

Creation of the Institute of data controllers

UNECE/EFTA
Workshop on Modernizing Statistical Legislation
29-30 May 2024, Tirana, Albania

ROADMAP FOR THE DEVELOPMENT OF STATE STATISTICS AND THE NATIONAL DATA ECOSYSTEM FOR 2023-2025

To implement the integrated development of state statistics and the national data ecosystem, a Roadmap for the development of state statistics and the national data ecosystem for 2023-2025 has been approved.

The roadmap includes three main directions (26 events):

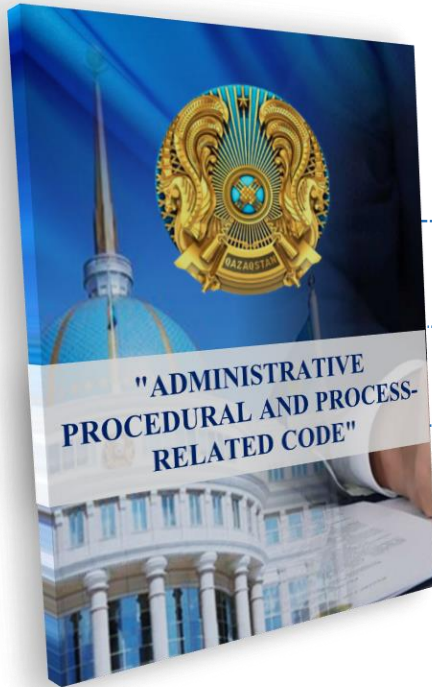
- Institutional and organizational changes
- Active use of administrative and alternative sources
- Strengthening the analytical capacity of all parties and increasing access to data



To achieve these objectives, institutional transformations in the current legislation are necessary to create legal conditions for reforming the system of state statistics and national data management.



THE MAIN ACT IN THE FIELD OF DATA MANAGEMENT:



1

Determines the authorized data management body represented by the Ministry of Digital Development and Aerospace Industry (MDDAI):

- **Manages and ensures the implementation of the state data management policy**
- **Develops and approves data management requirements**

2

Defines the concept of data management

- **Data management is a process related to the definition, creation, collection, accumulation, storage, distribution, destruction, support of data, as well as ensuring their analytics, quality, availability, protection.**

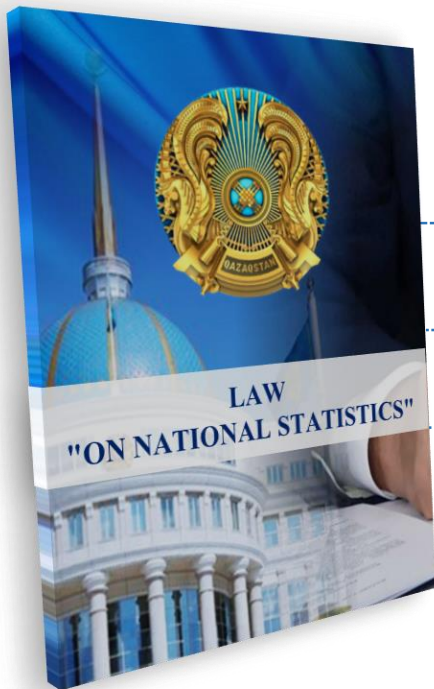
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It is aimed at regulation

- **legal relations in the field of simplification of public authorities' access to data from state information resources**



THE MAIN ACT IN THE FIELD OF STATE STATISTICS:



1

Determines the authorized body for data quality assessment represented by the **Bureau of National Statistics (BNS)**:

- Develops criteria for measuring data quality
- Determines the quality of data through data controllers

2

Access to primary, administrative and alternative data

3

Defines a new procedure for state quality control of administrative data

Primary
statistical data



Administrative
data

Alternative
data

Administrative data – individual quantitative (measured by numbers) and (or) qualitative (based on a certain principle and (or) attribute) data on natural person or legal entity and data of economic accounting compiled by administrative sources, except for primary statistical data

Digital registers based on administrative data

will reduce the financial, labor, and time burden on the circle of persons submitting data, eliminate duplicate collection of information, and improve the quality of generated data



The Health Register



Register of Foreign and Mutual Trade



Business Register



Population Register



Industry Register



Construction Register



Register of Education and Science



Register ICT and communications



Register of Ecology and the Environment



Register of Culture and Tourism



Register of vehicles



Real Estate Register



Register of Finance



Energy Register



Register of Agriculture



Organization

they manage the data themselves

Chief Data Officer (CDO)

responsible for data management in the supervised industry, for strategic directions and definition of data management policy

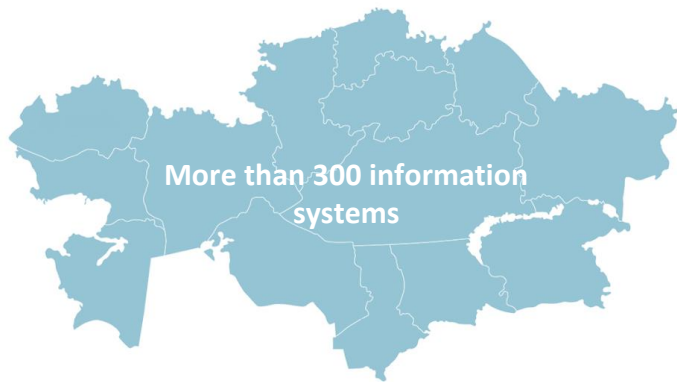


Data steward

the person responsible for data management within the Organization is assigned to the subordination to the CDO



The activities of data stewards are not centralized and are aimed at providing users with information, rather than quality control of this information. In this regard, an external (independent) internal audit is required to ensure the quality (reliability) of data in administrative sources.



A **data controller** is a specialist of a state monopoly entity in the field of state statistics with education and work experience in the relevant field and/or industry, access to relevant databases provided by administrative sources for the purposes of state statistics, and **evaluates the quality of administrative data.**

Responsibilities:

- participation in the conduct of State control over administrative sources;
- assessment of the quality of data contained in government information systems;
- generating a report on data quality;
- carrying out an analysis of the feasibility of using data for the purposes of forming official statistical information;
- re-analysis of the identified inconsistencies based on the results of the data quality assessment.



Data controllers will identify low-quality data, report incidents and maintain constant monitoring of the national digital registers and information systems assigned to them through monitoring, analysis, reconciliation and comparison of databases of administrative sources with data from other official sources containing the same set of data.

State control in the field of state statistics in relation to administrative sources is carried out by the BNS in order to identify:

- inaccuracy of administrative data;
- failure to provide administrative data;
- inconsistent forms designed to collect administrative data;
- inconsistent methodology for calculating indicators;
- data quality inconsistencies with Data management Requirements.

1

Remote control
involves a data controller

Identification of inconsistencies without visiting the subject of control, by monitoring, analyzing, determining the quality and comparing administrative data.

I. A conclusion is drawn up on the elimination of violations in cases of identification of unreliability or failure to provide administrative data.

Administrative proceedings are initiated for failure to comply with the conclusion within the prescribed period.

II. The administrative source is included in the semi-annual plan for periodic inspections in cases of uncoordinated forms intended for collecting administrative data, inconsistent methods for calculating indicators, data quality inconsistency with Data management Requirements.

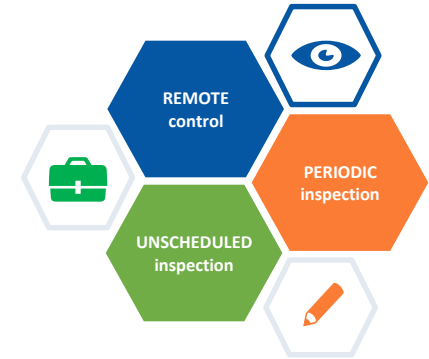
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Periodic inspection
involves a data controller

A visit to an administrative source based on semi-annual periodic inspection plans.

A conclusion on the results of the audit is drawn up.

Administrative proceedings are initiated for failure to comply with the conclusion within the prescribed period.



3

Unscheduled inspection
involves a data controller

Visiting an administrative source based on materials:

- received from law enforcement agencies;
- messages and statements from individuals and legal entities;
- media reports.

Data quality assessment indicators

01

Accuracy

determines the required level of detail of the data

02

Completeness

which determines the sufficiency of filling in data sets and their attributes

03

Consistency

determines how consistent the data is in different related datasets

04

Integrity

which determines the presence of correct links between entities and their compliance with established rules and restrictions between entities (one-to-one, one-to-many relationships)

05

Relevance

which determines the degree of compliance of the data of the simulated area at a certain point in time

06

Uniqueness

determines the absence of duplication of data

07

Reliability

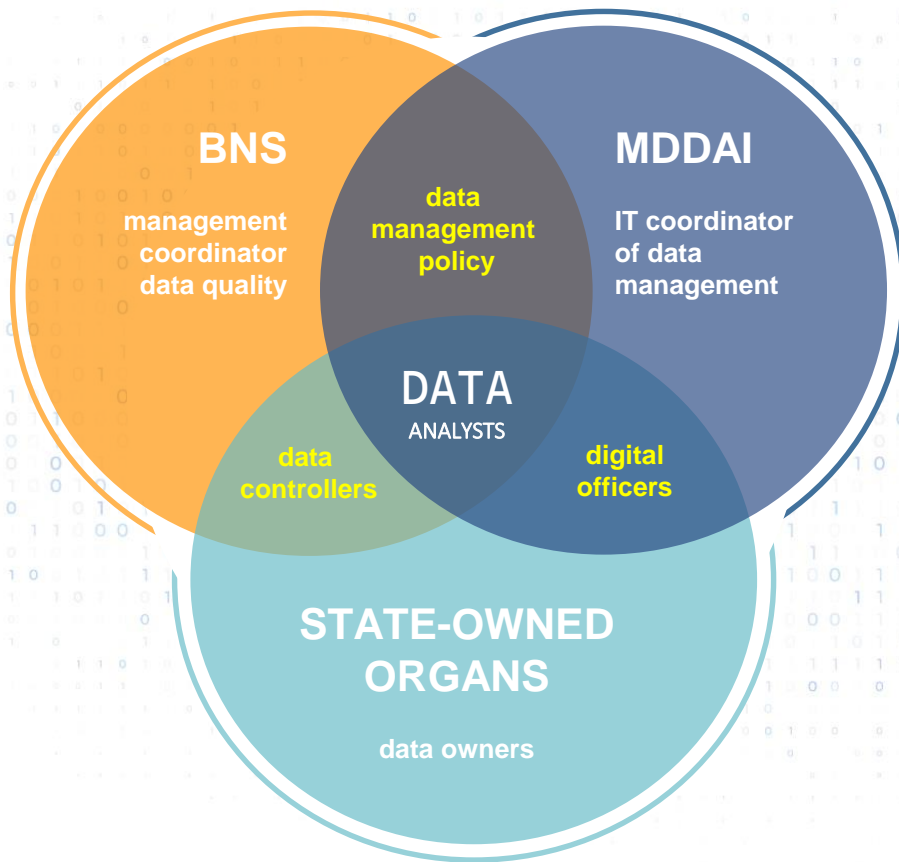
determines how well the data describes the simulated area

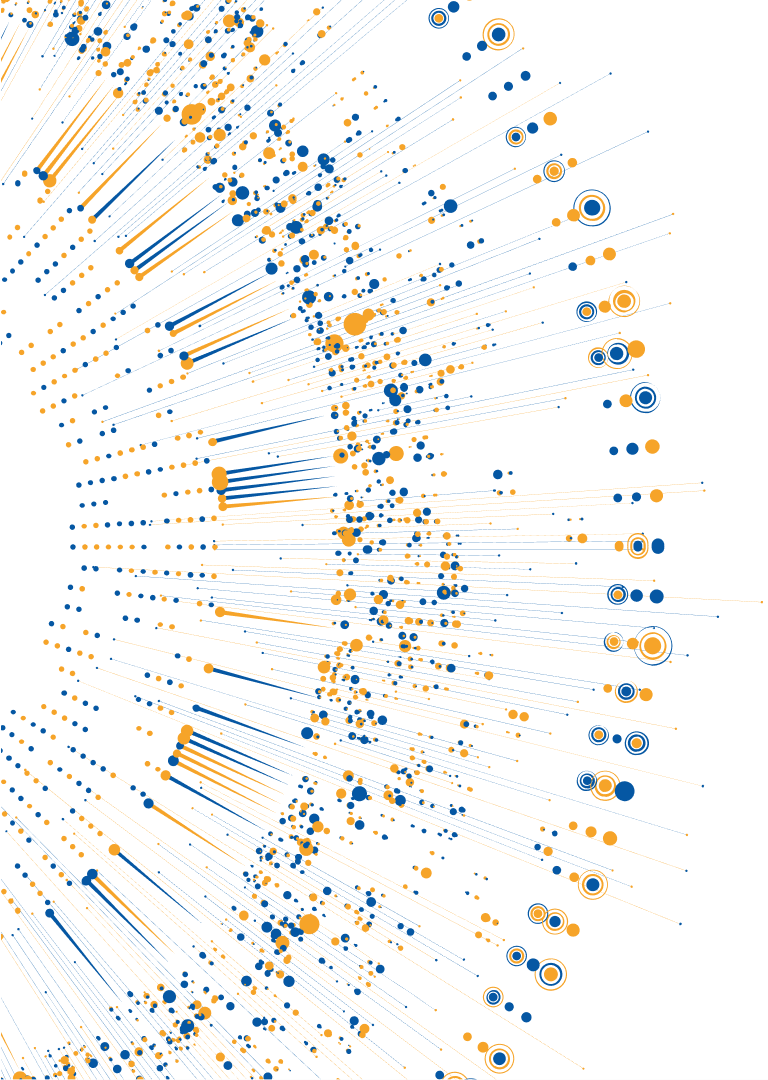
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Timeliness

(punctuality)

that determines the availability of data to the user at the right time





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Thank you for attention!

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