

# Global Assessment of the National Statistical System of Kazakhstan

**Final Report**  
**15 November 2023**

This report was prepared in partnership between the United Nations Economic Commission for Europe (UNECE), Eurostat (the Statistical Office of the European Union), the Statistical Office of the European Free Trade Association (EFTA), and the Organisation for Economic Co-operation and Development (OECD), in cooperation with Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan



**Contents**

List of abbreviations..... 5

Preface..... 7

Executive Summary ..... 8

Chapter 1: Legal framework and professional independence ..... 10

    Recommendations ..... 13

Chapter 2: Coordination and cooperation ..... 14

    Overview ..... 14

        Coordination of the National Statistical System..... 14

        Coordination of International Cooperation and Donors ..... 15

    Recommendations ..... 16

Chapter 3: Mandate for data collection ..... 17

    Overview ..... 17

        Primary and Administrative Data ..... 17

        Private Data..... 18

    Recommendations ..... 19

Chapter 4: Adequacy of resources ..... 20

    Overview ..... 20

        Human resources..... 20

        Budget21

    Recommendations ..... 22

Chapter 5: Commitment to quality..... 23

    Overview ..... 23

    Recommendations ..... 24

Chapter 6: Statistical confidentiality and data protection ..... 25

    Overview ..... 25

    Recommendations ..... 26

Chapter 7: Sound methodology..... 28

    Overview ..... 28

        Legal Background..... 28

Methodological infrastructure.....	28
Compliance with international statistical standards and classifications .....	29
Implementation of GSBPM .....	30
Revision Policy .....	30
Vocational Training of staff.....	30
Recommendations .....	31
Chapter 8: Appropriate statistical procedures and cost-effectiveness.....	32
Overview .....	32
Recommendations .....	32
Chapter 9: Non-excessive burden on respondents .....	33
Overview .....	33
Recommendations .....	33
Chapter 10: Relevance, accessibility, impartiality, and clarity .....	34
Overview .....	34
Legal basis and general dissemination principles.....	34
User satisfaction and needs assessment .....	34
Data dissemination.....	34
Access to micro-data for research purposes.....	35
Statistics and Data literacy initiatives .....	35
Recommendations .....	36
Chapter 11: National Accounts .....	37
Overview .....	37
Recommendations .....	38
Chapter 12: Balance of payment statistics .....	39
Overview .....	39
Recommendations .....	39
Chapter 13: Price statistics .....	40
Overview .....	40
Future plans.....	40
Recommendations .....	40
Chapter 14: Business statistics .....	42
Overview .....	42
Structural statistics .....	42

Statistical business register .....	42
Recommendations .....	43
Chapter 15: Population census .....	45
Overview .....	45
Census 2021 .....	45
Population registers and next census round .....	45
Recommendations .....	46
Chapter 16: Labour market statistics.....	47
Overview .....	47
Recommendations .....	47
Chapter 17: Other household statistics.....	49
Overview .....	49
Living Conditions Survey and Household Budget Surveys .....	49
Recommendations .....	50
Chapter 18: Statistics for the Sustainable Development Goals.....	51
Overview .....	51
Recommendations .....	51

## List of abbreviations

<b>Abbreviations</b>	<b>Full name</b>
ADB	Asian Development Bank
AIS	Automated information systems
ASPIR RK	Agency for Strategic Planning and Reforms of the Republic of Kazakhstan
BEC	Classification by Broad Economic Categories
BOP	Balance of Payments
BPM	Balance of Payments and International Investment Position Manual
CAPI	Computer assisted personal inquiry
CIS	Commonwealth of Independent States
CISSTAT	Interstate Statistical Committee of the Commonwealth of Independent States
COFOG	Classification of the Functions of Government
COICOP	Classification of Individual Consumption by Purpose
CN of FEA	Commodity Nomenclature of Foreign Economic Activity
CPI	Consumer Price Index
EAEU	Eurasian Economic Union
EECCA	Eastern European, Caucasus and Central Asia
EFTA	European Free Trade Association
e-GDDS	Enhanced General Data Dissemination System
ES CoP	European Statistics Code of Practice
FAO	Food and Agricultural Organisation
FDI	Foreign direct investment
FISIM	Financial intermediation services indirectly measured
GA	Global Assessment
GDP	Gross Domestic Product
GFS	Government Finance Statistics
GFSM	Government Finance Statistics Manual
GIZ	German Institute for International Cooperation
GLOS	Generic Law on Official Statistics
GPS	Global Positioning System
GSBPM	Generic Statistical Business Process Model
HBS	Household Budget Survey
HLFS	Household Budget and Labour Force Survey
HS	Harmonised Commodity Description and Coding Systems
ICT	Information and Communication Technology
ILO	International Labour Organization
IOT	Input output tables
IRENA	International Renewable Energy Agency
ISIC	International Standard Industrial Classification of all Economic Activities
IT	Information Technology
IMF	International Monetary Fund

<b>Abbreviations</b>	<b>Full name</b>
ISCED	International Standard Classification of Education
ITRS	International Transactions Reporting System
KR	Kyrgyz Republic
LFS	Labour Force Survey
MCC	Main Computing Centre
MICS	Multi-Indicator Cluster Survey
MoU	Memorandum of Understanding
NACE	The European Union's Classification of Economic Activities (Nomenclature Générale des Activités Économiques dans les Communautés Européennes)
NBKR	National Bank of the Kyrgyz Republic
NSC	National Statistical Committee of the Kyrgyz Republic
NSS	National Statistical System
OECD	Organisation for Economic Cooperation and Development
PIM	Perpetual inventory method
PPI	Producer Price Index
SAQ	Self-assessment questionnaire
SBR	Statistical Business Register
SC ADT	State Classification of Administrative and Territorial Division
SCEA	State Classification of Types of Economic Activity
SDMX	Statistical Data and Metadata eXchange
SDDS	Special Data Dissemination Standard
SDGs	Sustainable Development Goals
SECCA	EU Support to Sustainable Energy Connectivity in Central Asia
SEEA	System of Environmental and Economic Accounting
SEIS	Shared Environmental and Information Systems
SITC	Standard International Trade Classification
SME	Small and medium size enterprise
SNA	System of National Accounts
SSCP	State Statistical Classification of Products
SPSS	Statistical Package for the Social Science
SSB	Statistics Norway
SUT	Supply and use tables
UN	United Nations
UNECE	United Nations Economic Commission for Europe
UNFPA	United Nations Population Fund
UNFPOS	United Nations Fundamental Principles of Official Statistics
UNICEF	United Nations International Children's Emergency Fund
UNSD	United Nations Statistics Division
USRSE	Unified State Register of Statistical Units

## Preface

The Global Assessment of the National Statistical System of Kazakhstan was undertaken in partnership between the United Nations Economic Commission for Europe (UNECE), the European Free Trade Association (EFTA), the Statistical Office of the European Union (Eurostat) and the Organisation for Economic Co-operation and Development (OECD), at the request of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan (BNS).

The Global Assessment was conducted by Mr Steven Vale (Lead expert – UNECE), Ms Malwina Sedzikowska (Eurostat), Ms Randi Johannessen (Statistics Norway, representing EFTA), Mr Dario Florey (Swiss Federal Statistical Office, representing EFTA), Mr Julien Dupont (OECD), Mr Adrian Zerbe (OECD) and Mr Taeke Gjaltema (UNECE), in cooperation with the managers and staff of the BNS.

This Global Assessment was the first of a new round of assessments planned for the countries of Eastern Europe, the Caucasus, and Central Asia, using an adapted methodology based on feedback from these countries and users of previous assessment reports. It is, however, still broadly comparable with [previous Global Assessments that were carried out in Kazakhstan in 2008 and 2017](https://unece.org/statistics/statistical-capacity-development) (<https://unece.org/statistics/statistical-capacity-development>).

The Global Assessment Team carried out a mission to Astana in March 2023. This report and its recommendations are based on discussions during that mission, as well as documentation provided by the BNS, including a self-assessment questionnaire completed by BNS staff before the mission to Astana.

The collaboration between the international experts and the staff of the BNS was positive and constructive throughout all phases of the work. The international experts would like to thank the BNS management and staff for this.

## Executive Summary

Many positive impressions:

- Significant progress since the previous Global Assessment (GA)
- Concept of the Development of State Statistics and the National Data Ecosystem – good direction
- Activities to promote data literacy and analysis
- Links with academia – collaboration on projects, internships for students, etc.
- User satisfaction
- Good coordination of work between producers of official statistics
- Participation in major international statistical bodies and cooperation activities
- Ambitious junior statisticians
- Staff professionalism and openness – the energy!

Areas for recommendations:

- Theme 1 – Updating and strengthening legislation
  - Strengthen professional independence of the BNS
  - Appointment and mandate of top managers
    - Focus on professional competencies
    - Advice on appointments from Statistical Council
    - Fixed term, renewable once for chief statistician
  - Explicit role to coordinate National Statistical System
    - Legally create the NSS and assign responsibility for its composition and coordination to BNS
    - Build on strong role regarding statistical work programme
    - More coordination tools and mechanisms, e.g. expand methodological council
  - Clarify exclusive authority of BNS regarding sources, methods, and timing content of statistical activities and releases
    - Include the frequency of the censuses in the law
  - Strengthen data access rights and confidentiality provisions to cover private data sources
  - Strengthen BNS role regarding data stewardship and setting standards for administrative registers
- Theme 2 – Methods and quality
  - Develop data quality management tools and implement across the NSS
    - Include data quality management in legislation
    - Widen (formalize) user involvement in developing the statistical work programme
    - Develop quality criteria and a national quality assurance framework
  - Develop standard formats for quality reporting and process documentation
    - Reduce the burden of international reporting
    - Knowledge management and retention – continue GSBPM-based documentation



- Informing data users to support correct interpretation of statistical information
- Support respondents to provide high quality information
  - Maximise use of built-in validation for electronic reporting
  - Videos and other materials to help respondents, particularly when changing collection modes
  - Ensure equal methodological guidance across subject-matter domains
- Theme 3 – Structure and organisation
  - Strategy for reallocating posts to support modernisation
    - Regional offices – reduce staff or reallocate work
    - Map structure to GAMS0?
  - The future of ICC
    - Reflect on role and tasks
    - Closer integration – physical co-location?
    - Role regarding new data sources?
- Theme 4 – Supporting the new concept
  - Principles / strategies for how different functions will support implementation
    - Human resources – several elements already present, e.g. skills gaps
    - IT – standards for systems, platforms, languages
    - Communications – mostly done
    - International relations – set priority areas – avoid distractions
  - Data stewardship
    - Improving administrative data to facilitate development of key statistical registers and the move to a register-based census
  - Mobilising international support
    - Maximising benefits from knowledge and experiences of others, e.g. for measuring migration in the context of a register-based census
    - Identifying who can help

#### Looking to the future

- BNS is in a strong position
  - Capacity is rapidly increasing
  - Provider of technical assistance
  - More active member of international statistical community, especially in the region – plans and experiences will be an inspiration to others

## Chapter 1: Legal framework and professional independence

This chapter assesses the legal framework for the collection and production of official statistical information, and the professional independence of the producers of statistics in Kazakhstan against the Fundamental Principles for Official Statistics of the United Nations, European Statistics Code of Practice, and OECD Recommendation on Good Statistical Practice.

The Law of the Republic of Kazakhstan on State Statistics, No. 257-IV, of March 19, 2010, is the main legal act regulating the production of official statistics in Kazakhstan. This law has been amended on 19 April 2023 to align with the Law No. 223-VII "On amendments and additions to certain legislative acts of the Republic of Kazakhstan on administrative reform in the Republic of Kazakhstan". The most significant modifications include the deletion of article 9 (international cooperation), article 14 (authorized body), article 15 (professional independence of the authorized body), article 22 (statistical methodology), and a revision of article 11 (competence of the authorized body is streamlined/limited). The amended law focusses on the principles guiding the production and dissemination of official statistics and leaves to some other legal acts the regulation of its implementation.

The other main legal instruments related to official statistics include the Constitution of the Republic of Kazakhstan, the Code on Administrative Offences, the Budget Code, and the Law on Public Service. Additional subordinate regulatory legal acts regulating the production of official statistical information facilitate the implementation of the Law on State Statistics, such as the order creating the Council of State Statistics Bodies (Statistics Producers) in 2021, or the order establishing the Methodological Council on Statistics in 2022.

The Law on State Statistics empowers the BNS to plan state statistical activities as part of the NSS through the development of an annual programme of work, to establish methodologies, allocate tasks, supervise data dissemination, and co-operate with national and international organisations.

The Law on State Statistics forms the legal basis for official statistics in Kazakhstan and is linked to many areas of the global assessment:

- **Coordination and cooperation.** According to Article 12 of the Law on State Statistics the authorized body has the competence to coordinate the activities of central and local executive bodies and the National Bank in the field of state statistics. The authorized body is not specifically designated in the Law on State Statistics even though in practice the BNS acts as this institution. The scope of central and local executive bodies in the field of statistics that need to be coordinated is not defined and there is no body in charge of the composition and coordination of the national statistical system.
- **Mandate for data collection.** Article 24 of the Law provides a legal basis for data collection by defining the sources for the formation of statistical information. Article 23-1 establishes the state monopoly for the collection and processing and primary data. As regards the collection of administrative data, Article 16 defines the rights and obligations of administrative sources building a strong basis to access administrative data for the BNS. A mandate to collect data from privately held data providers is not part of the statistical legislation.
- **Adequacy of resources.** The budget of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, including the BNS and its territorial divisions is regulated by other national legislation regulating the employment of state officials.
- **Commitment to quality.** Article 5 the statistical legislation establishes a commitment to quality of state statistics by defining the principles of using all types of information sources, considering the quality, timeliness, costs, and burden on respondents. The Law on State

Statistics does not provide any additional provisions on how to assess and improve the quality of statistical processes and outputs.

- **Statistical confidentiality and data protection.** Guarantees of confidentiality and protection of submitted data are covered in Article 8 of the Law on State Statistics, according to which statistical information and databases allowing a direct or indirect identification of the respondent, or determining the primary statistical data about the respondent, are confidential and cannot be shared without the consent of the respondent. Paragraph 4 of Article 8 of the Law on State Statistics also provides some exceptions to this rule, including the names and surnames of an individual entrepreneur or a legal entity.<sup>1</sup>

- **Sound methodology.** The formation of statistical methodology represents the first task in the field of statistics as defined by Article 7. Among others, Article 12 clarifies that the authorised body, i.e., the BNS, forms a statistical methodology in accordance with international statistical standards and approves the statistical methodology, including methods, for nationwide statistical observations. Administrative sources are obliged to approve, in agreement with the authorized body, the forms intended for collecting administrative data, as well as methods for calculating indicators (Article 16, paragraph 3(2)). The Law on State Statistics establishes a strong legal basis as regards the authority to develop and enforce statistical methodology by BNS.

- **Professional Independence**

The 2017 Global Assessment (GA2017) recommended a revision of the legislation to further align the legal and institutional framework in Kazakhstan with international standards, in particular with regard to strengthening the professional independence of the producers of official statistics, and a change in the status of the national statistics office.

The Presidential decree adopted in October 2020 creating the BNS under the supervision of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, which reports to the President of the Republic of Kazakhstan, represented a positive improvement in this area since GA2017. The BNS replaced the Committee on Statistics operating under the Ministry of Economy. This new position in the Kazakh administration improved the autonomy of the BNS, reinforced its authority vis-à-vis the Ministries and owners of administrative records, and upgraded its staff therefore enabling the recruitment of young and motivated personnel.

The importance of the fundamental principle of professional independence is clearly recognized by the statistical authorities. However, this principle is explicitly established only in the Article 5 of the Law on State Statistics since the amendment of the law in 2023. Article 5 defines a list of principles related to official statistics, including: “Professional independence and autonomy when performing statistical activities”.

Prior to the amendment, professional independence was included in several articles of the Law on State Statistics, including Articles 14 and 15, whereby professional independence was vested in the authorized body responsible for developing and approving the statistical methodology. Although an explicit provision on the principle of professional independence is important, it is also important to ensure that regulation and procedures are legally established. For example, legal provisions that are considered to strengthen the professional independence of the national statistical institute would include explicit procedures ensuring the transparent appointment and dismissal of the Head of the BNS, remain excluded from the statistical legislation. To further protect the independence of BNS, the statistical legislation should make clear that the heads of

---

<sup>1</sup> According to the Entrepreneurial Code this information is not considered as confidential in Kazakhstan.

the BNS have the exclusive authority to decide on sources, methods, timing, and content of statistics releases.

Moreover, several articles in the legislation do not fully comply with the principle of professional independence and complicate its full implementation in practical terms across the national statistical system. Article 10 (competence of the President of the Republic of Kazakhstan), Article 11 (competence of the Government of the Republic of Kazakhstan in the field of state statistics), and paragraph 26 of Article 12 (competence of the authorised body) empower the President and the government to intervene in the production of official statistics and create doubts about the real professional independence of the BNS. Article 11 of the Law on State Statistics gives the President of the Republic exclusive authority to appoint or dismiss the Head and the top managers of the BNS, in accordance with the subparagraph 5 of the Constitution, which empowers the President to abolish and reorganise subordinated state bodies and to appoint and remove their heads.

Although the legislation on civil servants establishes general norms for the appointment of political civil servants, the legislation does not establish a clear length of mandate for the Head of the BNS, nor transparent procedures or conditions for recruitment, and does not provide any reason based on professional competences for the appointment or dismissal of the Heads of the BNS. Strengthening transparency in these procedures would reinforce trust in the professional independence and further align the national statistical system with international standards and with best practice in place in other countries.

According to Article 11 and Article 21, the government decides on the date of the population and housing census. However, the law on State Statistics should include a reference to the frequency of the census, thus ensuring that censuses are carried out every ten years, in compliance with the international recommendations in this area. Census results need to be updated on a regular basis to guarantee the quality of the statistical infrastructure through up-to-date sampling frames, etc. Given its responsibility to ensure the high-quality of statistics produced within the national statistical system, the BNS should take part in the decision to define the appropriate period for undertaking a census as well as in the development of the census form. In addition to the frequency of the census, the law should clearly define the role of the BNS in this major data collection process.

Article 85 of the Budget Code of the Republic of Kazakhstan (item 9-3) provides the BNS with autonomy in the budget allocation, and thus represents an improvement since the GA 2017. However, further autonomy in managing contracts for the provision of services to the BNS, including for hiring interviewers, would further increase the autonomy of the national statistics office.

There are no existing mechanisms and procedures to give pre-release access to official statistics in Kazakhstan and this complies with best practice in the international statistical community and contributes to strengthen the perceived professional independence of the BNS.

Overall, although the statistical legislation and regulations improved since the GA 2017, the project of modernisation of the national statistical system needs to be legally supported by a modernisation of the legal and institutional framework. To this end, the law should create the national statistical system and assign the responsibility of its coordination and composition to the BNS. The legislation on official statistics should also be revised to strengthen the provisions on the professional independence.

## Recommendations

1. Modernise the legislation on statistics to further align with international standards, to support the project of modernising the national statistical system, and to strengthen the professional independence of the producers of official statistics. To this end, the law on statistics should establish more transparent procedures for the appointment of the Head of the BNS and should include provisions on the length of his mandate. Explicitly assign by law the BNS with the exclusive authority on the choice of sources, methods, and content and timing of statistical releases, include the frequency of the censuses (population and housing census, agricultural census, etc.) in the legislation on statistics, and provide the BNS with a full autonomy in financial and human resources allocation, including for contract for services.
2. Legally create the national statistical system and assign the responsibility for its composition and coordination to the BNS (chapter 2). This includes defining the role of BNS as a coordinator of all activities relating to the production and dissemination of official statistics within the Republic of Kazakhstan.
3. Clarify the definition of official statistics in the legislation and clearly identify the BNS as responsible for the definition of official statistics in a way to clarify the boundary with other statistics produced nationally.
4. Ensure that the Authorised Body defined in the law relates to the Bureau of National Statistics.
5. Clearly assign the responsibility for the development of the statistical work program and for monitoring its implementation over the whole national statistical system.

## Chapter 2: Coordination and cooperation

### Overview

#### Coordination of the National Statistical System

Management and inter-sectoral coordination in the field of state statistics is exercised by the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan (BNS), referred to in the Law of the Republic of Kazakhstan “On State Statistics” as the “authorized body”.

According to Article 12 of the law, the authorized body in the field of state statistics “coordinates the activities of central and local executive bodies and the National Bank of the Republic of Kazakhstan in the formation of state policy in the field of state statistics.” This includes preparing an annual plan of statistical activities and schedules of data collection and dissemination. The law does not provide a definition of the central and local executive bodies or a mechanism to define the bodies. Hence there is no legal basis to clearly define the entities of the national statistical system that are coordinated by the BNS.

The law stipulates that the authorized body and “a specially created commission” may jointly coordinate the conduct of national censuses (Article 21, paragraph 3), which means that the BNS does not have exclusive competence in the organization of censuses. The law is also clear regarding the distribution of statistical information from administrative data, which is done independently by relevant state bodies (Article 26, paragraph 5).

As an authorized body in charge of the management and coordination in the field of state statistics, the BNS aims to further optimize its role in official data management at national level. A clearly defined role of the data management coordinator is key to an efficient functioning of a statistical system in order to guarantee the quality of government data. Achieving this goal would require enhanced optimization of business processes of statistical production in Kazakhstan.

The revision of the Law on State Statistics (recommendation 2, Chapter 1) should give the BNS an explicit role as a coordinator of all activities relating to the production and dissemination of official statistics within the Republic of Kazakhstan.

The BNS’s enhanced role in national data stewardship, with data navigators in every ministry, is a key concept embedded in the first general priority (Institutional and organizational transformations) of the roadmap for the years 2023-25, which aims to reform the functioning of the BNS and the broader statistical system.

The roadmap is a central document regulating the activities of the BNS along with several others:

- The work plan of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan for 2023, approved by order of the Chairman of the Agency for Strategic Planning and Reforms dated December 7, 2022.
- The main directions for the development of the Bureau for 2023-2025 and the Roadmap for the development of state statistics and the national data ecosystem for 2023-2025, approved by order of the ASPR.
- Master plan for the development of the national statistical system of the Republic of Kazakhstan (2017-2025), approved by the Chairman of the Statistics Committee of the MNE of the Republic of Kazakhstan on January 31, 2017.

- Statistical work plan for 2023, approved by order of the BNS ASPR RK dated October 11, 2022.

Joint working group meetings for all bodies responsible for producing official statistics are organised regularly as well as on an ad hoc basis. The statistical work plan is developed and is approved by the BNS in coordination with all interested state bodies.

Currently, there are advanced works in place on the development of a Smart Data Ukimet system (ukimet meaning “government” in Kazakh) – to allow for exchange of data among civil servants at the state level. The work is coordinated by the Ministry of Digital Development, Innovations and Aerospace Industry of the Republic of Kazakhstan.

### **Coordination of International Cooperation and Donors**

The Department for International Cooperation and Sustainable Development operates directly under the head of the BNS and is divided into two divisions: international statistical cooperation and Sustainable Development Goals statistics.

The department coordinates and is responsible for:

- Cooperation with international organizations, other statistical offices and state bodies;
- Organization of events, meetings and seminars;
- Implementation of agreements and memorandums of understanding;
- Correspondence and data compilation for international questionnaires/data requests (in collaboration with subject-matter departments of the BNS);
- Secondment of staff to online and onsite statistical projects and activities.

Statistical cooperation is realized at four levels: global (international and intergovernmental organizations), regional (regional organizations and regional branches of international and intergovernmental organizations, development institutions), international (other statistical offices) and national (government, local offices of international organizations, NGOs, academia).

The BNS participates in major international statistical bodies, such as the UN Statistical Commission and the Conference of European Statisticians, as well as attending regional and sub-regional working group meetings and seminars, such as the High-Level Seminar for European Neighbourhood Policy East and Central Asia Countries, co-organised by Eurostat, EFTA and UNECE.

Staff of the BNS and staff of ministries learn about international cooperation news, meetings, working group or training opportunities through dissemination and communication tools, such as the BNS website, telegram channel, and internal chat. After return from international meetings and activities, employees are asked to write a report and debrief colleagues at internal meetings.

The BNS is involved in several internationally co-financed initiatives aimed at enhancing the capacity of the BNS and government agencies. Various projects and programs support improvement of the quality of statistical information across several subject-matter areas and touch upon institution-building issues, e.g. Joint Economic Research Program and Effective Governance for Economic Development Conference (World Bank), Knowledge and Experience Exchange Program and E-commerce (ADB), Data Literacy initiative (ADB and UNDP), agricultural statistics (USAID), energy statistics (–IRENA, EU SECCA), urbanisation (UN-HABITAT).

BNS not only receives support from donors but also provides advisory or technical assistance to other countries in the region: Tajikistan, Kyrgyzstan, Uzbekistan, and Azerbaijan. The virtual Regional Training Centre for enhancing of statistical skills and sharing good practices can serve as a relatively low-cost tool to support work in this area.

When it comes to international rankings, Kazakhstan ranks 48th (out of 192 countries) in the Open Data Inventory (ODIN) 2022 with an overall score of 64. The Open Data Inventory measures how complete a country's statistical offerings are and whether their data meet international standards of openness. At the end of 2019, Kazakhstan entered the TOP-50 of the world ranking as part of the assessment of the statistical effectiveness of the World Bank Statistical Performance Assessment (78.6 points out of 100).

The international agencies based in Kazakhstan met by the Global Assessment team strongly value cooperation with the BNS, which is perceived as a reliable and responsive partner.

## **Recommendations**

- Chapter 1: 2. Legally create the national statistical system and assign the responsibility for its composition and coordination to the BNS. This includes defining the role of BNS as a coordinator of all activities relating to the production and dissemination of official statistics within the Republic of Kazakhstan.
6. The revised Law on State Statistics should strengthen the Bureau's role regarding data stewardship across state agencies producing statistics and set standards for administrative registers. In this regard, the Bureau should also be actively involved in coordination and preparation of the Smart Data Ukimet system for civil servants.
  7. The BNS should continue regular coordination meetings for all bodies responsible for producing official statistics.
  8. The BNS should think of strategic priority areas and a clear vision for international cooperation for the coming years. In order to keep focus and avoid distractions it is recommended that the Bureau defines and selects the most relevant international cooperation projects to be engaged in, which also fit in its overall strategy.
  9. The BNS is encouraged to further enhance its involvement in the international statistical community – current plans and experiences can serve as an inspiration for others. With recent achievements and ambitious goals, BNS should continue supporting partners in the region in building their statistical capacity.
  10. The BNS is encouraged to continue its work on the development of the regional virtual hub of statistical knowledge and good practices - the Regional Training Centre.



## **Chapter 3: Mandate for data collection**

### **Overview**

In 2023, statistical surveys, collected online or through paper collection, provide information for most of the statistical outputs of the BNS. The Bureau developed ambitious plans to reduce their reliance on direct surveys and increase the use of administrative and alternative data sources to account for more than half of the BNS sources by the end of 2025.

Changes in the statistical legislation since the 2017 Global Assessment have strengthened the legal basis for the access to and use of administrative data owned by other state bodies. Administrative sources are obliged to agree with BNS on forms for administrative data collection, as well as the methods for calculating indicators. This puts the BNS in a strong position to control and promote unified national classifiers of technical and economic information and methodologies used by administrative sources to make them more suitable for statistical purposes.

Despite the legal guarantees, the implementation of a unified system for creating, structuring, and managing administrative data remains a major challenge, in particular in regard to the creation of digital statistical registers. In some cases, the quality of data received from administrative sources is limited and requires additional efforts by BNS for data validation and data cleaning.

As a measure to increase response rates to statistical surveys the BNS plans legal amendments to introduce an administrative fine instead of a warning for the provision of unreliable primary statistical data. These fines are an effective way to increase response rate but should be considered as a last resort to avoid negative consequences for the image and trust in official statistics.

The forward-looking efforts to access and explore new data sources is a strength of the BNS. These sources provide opportunities to improve the timeliness and granularity of official statistics by complementing or replacing administrative and survey data. At the same time, private sources could be difficult to access and often require new investments in technical capacities and methods to also ensure data interoperability. It is not clear if the BNS is systematically assessing the work, in particular on quality, required to adapt its statistical infrastructure to use private data for statistical purpose.

To-date, the access to privately held data by the BNS is limited by unexplicit legal provision which makes it difficult to sign cooperation agreements with holders of private data. This situation creates uncertainty for the exploration of alternative data sources and could hinder the BNS plans to systematically use these sources as inputs for official statistics.

### **Primary and Administrative Data**

Different legal provisions in the Law on State Statistics establish a strong basis for the collection of survey and administrative data for statistical purpose:

- Article 24 of the Law on State Statistics defines the four main sources to produce statistical information, including 1) primary statistical data; 2) administrative data; 3) statistical information of state bodies; 4) statistical information of statistical bodies of other states and international organizations.
- Article 23-1 establishes a state monopoly for the collection, processing of primary statistical data submitted by territorial statistical bodies and respondents, obtained during national statistical surveys and national censuses.

- Article 12 outlines the competences of the BNS. In 2022, amendments of Article 12 introduced several new paragraphs (15-2, 15-3, 19-2), that reinforce the free of charge access to primary statistical data from different sources, apart from the National Bank of the Republic of Kazakhstan, and other relevant state bodies, when carrying out statistical activities.
- Article 17 establishes the obligation of respondents to reply to surveys and to provide reliable primary statistical data when conducting statistical observations.
- Explicit legal provisions for the collection of administrative sources include an Order of the Acting Chairman of the Agency on Statistics, No. 183 from 2010, which establishes rules for gratuitous provision of administrative data by administrative sources. Additionally, Article 16 of the Law on State Statistics defines the right and obligations of administrative sources giving the BNS a strong mandate to use administrative records and control all forms used for administrative data collection. According to paragraph 3. of Article 16 administrative sources are obliged to:
  - 1) apply national classifiers of technical and economic information developed by the authorized body in the manner established by the legislation of the Republic of Kazakhstan in the field of standardization;
  - 2) approve, in agreement with the authorized body, the forms intended for the collection of administrative data, as well as the methods for calculating indicators;
  - 3) submit administrative data to the authorized body free of charge in the manner and within the time limits established by the authorized body.

In addition to the statistical legislation, the BNS has signed cooperation agreements with several owners of administrative data that formalise the exchange of information.

The BNS is currently in the process of creating a system based on digital statistical registers, which will be updated based on verified administrative data collected from other state bodies. These statistical registers have been identified to significantly reduce the use of forms in the statistical reporting by state bodies, and to increase the efficiency of the data and metadata transmission, thus becoming the cornerstone of statistical production. Three of these digital registers created major challenges include the implementation of a unified methodological approach with standard classifications for state indicators, and the creation of a unified system for the dissemination of state statistics, enabling to link relevant fields in an efficient and consistent way. To this end, the eighteen experts of the BNS Department of Statistical Registers and Classifications created numerous methodological standards, e.g., on maintaining and updating the Agricultural Statistical Register or the Statistical Business Register, both released in 2021.

Article 27 of the Law on State Statistics establishes that any violation, including the non-provision of data or provision of unreliable data to the BNS, shall entail liability established by laws of the Republic of Kazakhstan. In accordance with Article 497 of the Code “On Administrative Offences”, the BNS sends warnings when unreliable primary statistical data is provided. However, the “Code on Administrative Offences” is currently being revised to strengthen the authority of the BNS to compel response to statistical surveys, in particular through the introduction of administrative fines.

## **Private Data**

The roadmap for the development of state statistics for 2023-2025 demonstrates the strong commitment of the BNS to explore privately owned data as an alternative source to produce official statistics. In addition to an increased use of administrative data, the BNS aims to give alternative sources a key role in the production of statistical information by 2025. At the current

stage, the BNS signed data sharing agreements with selected owners of private data, for instance with mobile phone operators or providers of scanner data, to produce a set of experimental statistics.

The Law on State Statistics does not mandate the BNS for the collection of data from privately held sources. Article 24 of the Law does not include private sources as possible sources of information for official statistics. Access to privately held data relies on voluntary data sharing agreements with companies or institutions, which sometimes only grant access on a commercial basis. The BNS is currently working on amendments of Law on State Statistics to expand the use and access to privately held sources and meet the objectives defined in the roadmap.

## **Recommendations**

11. Increase the cooperation with owners of administrative data to improve data quality. The BNS should ensure that owners of administrative data are aware of the quality requirements to produce official statistics, and regularly inform them about incorrect data or quality problems. If required, the BNS can offer quality training or tools to support the quality assurance of administrative data. The cooperation could be institutionalised by creating an administrative data management committee as a joint platform for administrative data holders and producers of statistics.
12. The BNS should strengthen data access rights and confidentiality provisions to cover private data sources.
13. The BNS should implement systematic cost-benefits analysis prior to the use of new data sources to evaluate the implication for statistical infrastructure, statistical methods, and possible quality issues arising from the work with new data sources.
14. The BNS should institutionalise the cooperation with owners of private data through data sharing agreements. These agreements can specify the period, frequency, and format of delivery for data and metadata to guarantee sustainability and continuity of the production of official statistics based on private sources. To this end, private data providers should inform the BNS about any change in the data content and structure.
15. The BNS should strengthen non-sanctioning measures to encourage response to statistical surveys. This could include a system of automatic reminders, improvement of questionnaires and questionnaire guidance, strengthening the cooperation with data providers, communication on the usefulness and benefits of a survey, or feedback on the resulting outputs.

## **Chapter 4: Adequacy of resources**

### **Overview**

In October 2020, the Committee of statistics of the Ministry of Finance was transformed into the Bureau of National Statistics of the Agency for Strategic Planning and Reforms (ASPR), directly subordinated and accountable to the President of the Republic of Kazakhstan. This transformation strengthened the BNS's legal mandate and its professional independence. This also resulted in BNS's staff grading aligned with the grading of line ministries.

Human resources, international cooperation and SDGs, information security and territorial divisions fall directly under the responsibility of the Head of the BNS. Other departments and their divisions are supervised by three deputy heads of the BNS, who report to the head.

### **Human resources**

As per 2022, the number of BNS staff in the central office is 271, and in territorial subdivisions: 2114. The headcount has decreased by 462 positions or 16.2% over the past 6 years (from 2017 to 2022). It is worth noting that a significant part of the workforce in the regional offices are employed on a temporary basis in order to carry out statistical surveys.

The government sets the upper limit for budget and headcount of the Bureau, however BNS has a certain degree of flexibility to reshuffle and restructure resources the within those limits. In view of further restructuring plans and digitalisation of processes, the shifting of posts between territorial and central offices has not yet been decided.

According to the SAQ, the staffing of the BNS is sufficient. To fill vacant and temporarily vacant public positions, competitions are held on an ongoing basis, in accordance with legal requirements for employment of state officials. BNS employees are predominantly statisticians with an economic education and limited competencies in business analytics. There are practically no specialists with competencies in programming and data management. It is also important to note that the staff of the Information and Computing Centre (ICC) are not civil servants.

The Information and Computing Centre, which is a state enterprise, is a subsidiary body of BNS. The ICC is the provider and BNS the client of statistical services. The two entities have separate management, budgets, HR and accounting system. Nevertheless, the BNS appoints the director and deputies of the ICC. The plan of transformation of the BNS into a national data management coordinator, envisages changes in the institutional structure of the central office and regional branches, including the Information and Computing Centre. Work is underway to restructure the BNS's central office and territorial subdivisions, as well as to optimize the structure of the ICC.

The internal gap analysis in skills performed in August 2022 revealed that more than 63% of the surveyed employees (total number: 2221) wanted to expand their skills in a particular area of knowledge, such as Business Intelligence tools or programming. As a follow up, the BNS launched the Data Literacy project in a form of a massive open course, which aims to increase the statistical literacy of own staff as well as government officials, who work with data. There are future plans to make the completion of the course mandatory for all civil servants.

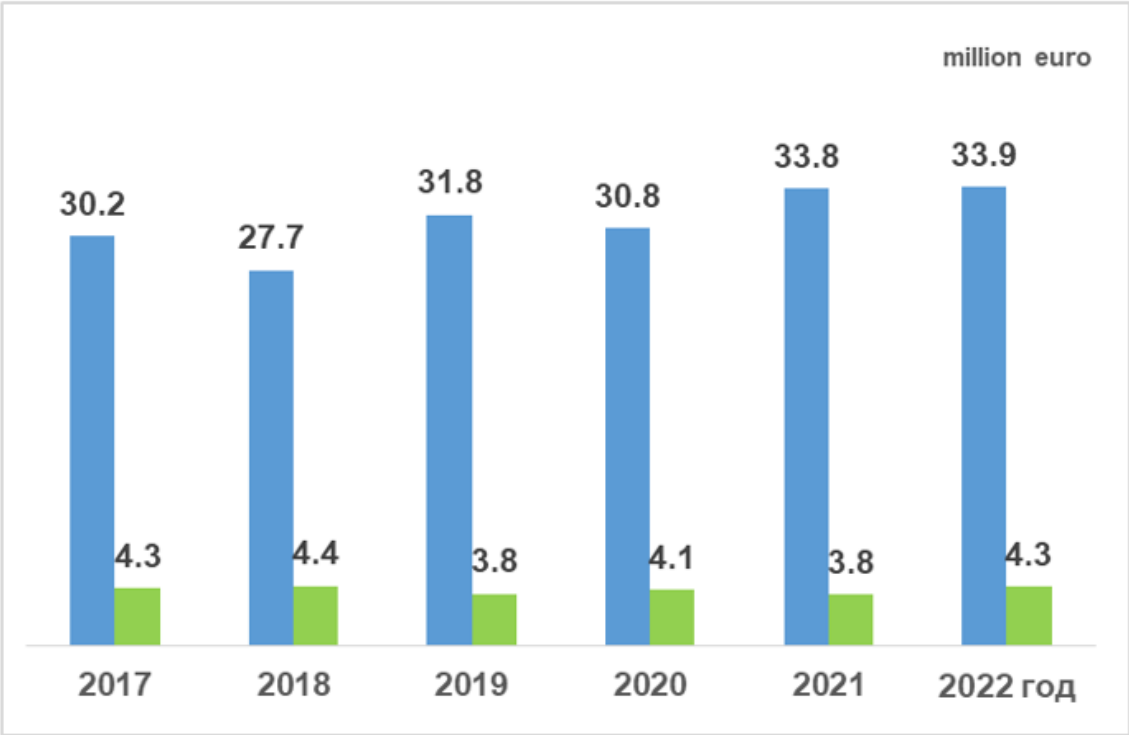
When it comes to English language skills, 134 of staff (49%) in the central office declare a certain level of knowledge of English. The KAZSTAT programme, which ended in 2017, provided English language classes, however once the KAZSTAT stopped, the regular training ceased.

Currently, BNS staff benefit from various projects funded by international donors, e.g. Asian Development Bank’s Knowledge and Experience Exchange Program, which helps to enhance professional potential of employees. Additionally, analytical competencies are increased through BNS staff interactions with academia, e.g. thanks to staff involvement in teaching activities at universities and their contribution to the development of statistics-related study curricula.

The Academy of Public Administration under the President of the Republic of Kazakhstan oversees the training of civil servants at entry level as well as staff appointed for the first time to a managerial position. The academy also provides professional development training courses to BNS staff. The Information Computing Centre (ICC) conducts the training of its employees independently.

**Budget**

Overview of the budget of the BNS (blue) and the Information and Computing Centre (green) over the years 2017-2022.



- Bureau of National Statistics
- Information and Computing

In 2022, the biggest part (almost 65%) of the BNS budget, which was 33.9 million euro, was used to cover administrative expenses such as wages, taxes and deductions, travel expenses, followed by expenses for the collection, processing and dissemination of statistical data

(17.3%). The redistribution of funds between budget lines is not allowed. It is permitted to redistribute funds between budget subprograms within the same budget program within the limits of the annual amounts for such budget program.

## **Recommendations**

16. The ambitious plan of a large-scale modernisation and digitalisation of the statistical system requires a well-thought-out strategy especially for regional offices – staff would need to be reduced or work relocated. In any case, employees in territorial subdivisions can take advantage of the online content as part of the Digital Literacy project, to enhance competencies or to prepare for a potential relocation.
17. BNS should reflect on the role and tasks of the future ICC in view of the reform plans of the BNS and its subordinates. Close physical location would enhance integration and facilitate communication as well as implementation of joint training activities. The BNS should also define its position and the ICC's role regarding alternative data sources.
18. The Data Literacy initiative should be further developed to familiarise staff of state agencies producing official statistics (especially juniors) with basic statistical principles, skills for data analysis and reading metadata.
19. The BNS should make use of the technical support offered by international donors in a form of small-scale activities, which do not require heavy involvement of human resources and do not entail financial costs for the BNS, e.g. Eurostat statistical training courses for Eastern Neighbourhood and Central Asia, where all participation costs are covered by Eurostat.
20. Junior staff should be encouraged to improve their English language skills, which would enable them to use the full potential of participation in international meetings, seminars or working groups. An incentive for a language upgrade could be a possibility to participate in international activities and events, irrespective of the seniority level (a quota for junior staff to be introduced). For certain meetings and activities, where more than one representative of a NSO is invited, a junior staff member could accompany a more senior colleague.

## Chapter 5: Commitment to quality

### Overview

The quality of statistics has been a guiding principle behind the concept of the reform of the national statistical system featured in the roadmap for the years 2023-25. The improvement of the quality concerns data that is stored not only in the BNS, but also in the information systems of other government agencies and private providers. Work is underway to achieve this ambitious goal and some of milestones have already been reached.

According to the standard methodology for describing the process of statistical information production by state bodies, approved by Order No. 53 of the Chairman of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan dated March 30, 2015, approved by the Order of the Head of the BNS on November 16, 2020, the data production process is in general accordance with the Generic Statistical Business Process Model (GSBPM). BNS has now described the method for quality assurance for each sub-phase of GSBPM. This is a significant improvement compared to the last global assessment in 2017, when GSBPM was only starting to be used as a basis for describing statistical processes.

Following the global assessment in 2017, a new division overseeing the statistical quality was created within the Department of methodological development and data management policy. The Council of State Statistics Bodies (Council of Producers) of the Republic of Kazakhstan was established to ensure high quality of statistical information. This is part of the methodological infrastructure that defines statistical methods, monitors their implementation, and validates results (please refer to chapter 7 for further details).

Currently, there is no unified comprehensive policy for managing the quality of statistical information. A policy of ensuring the quality of statistical accounting exists but there is no mechanism for assessing the quality of information systems of administrative data generated by state bodies.

In 2022, the BNS initiated a reform of the national statistical system and approved a corresponding action plan. The key goal of the reform is to improve the quality of data that is stored at the BNS as well as in the information systems of other government agencies and private providers. The reform plans to implement multiple measure to establish an effective data quality management system including the implementation of the quality policy; restart of the date stewards institute; improvement of the quality policy; development of indicators for assessing quality, as well as systems for measuring them and monitoring data quality; data audits of information systems of state bodies.

The ‘Concept of the Development of State Statistics and the National Data Ecosystem’ proposes that the BNS takes on the role of the data management coordinator in the state data ecosystem. The main task of the coordinator is to build interagency coordination that ensures the use of a unified methodology and standards to produce high quality state data. To this end, data stewards should play a central role as coordinator between the BNS and state bodies by supervising and managing national registries, as well as ensuring its quality. Data stewards should identify data quality problems, report incidents, and maintain ongoing monitoring of their national registries. To date, the BNS has begun to develop criteria for assessing data quality and proposes to form a team of data stewards based on the Republican State Enterprise ‘Information and Computing Center’ of the Bureau with the allocation of annual funding from the republican budget for conducting date audits.

The Methodological Council of the BNS has been created as a result of recommendations after the global assessment in 2017. The council consists of deputy directors of departments working

on methodologies and external experts (e.g. researchers and representatives of academia) and prepares new methodological documents and the adjustment of existing ones. The Council is supposed to play the role of a body ensuring that decisions regarding statistical methodology are coherent across the statistical system, including consideration of the official statistical methodology developed and approved by state bodies authorized to maintain state statistics.

As the Bureau is moving away from using paper survey, the e-statistics software is used to facilitate the process of transition to electronic surveys. This allows more data validation at source.

A user survey to assess the need for quality statistics is carried out as part of the Open Doors day. A report is drafted based on the results of the survey, which contributes to further improvement of statistical activities.

## **Recommendations**

21. The BNS should use the opportunity of digitalisation of processes to further improve the efficiency of reporting and minimize duplication in data collection.
22. Data quality management tools should be developed and implemented across the NSS. To this end, the data quality management should be included in legislation. Quality management tools could include a national code of practice that defines guiding principles for the NSS, quality guidelines on how to implement criteria and procedures for quality management, or regular quality reviews to evaluate output quality. The BNS should ensure that quality management tools are applicable to all statistical activities, including those using administrative and private data sources.
23. Development of standard formats for quality reporting and process documentation should further reduce the burden on respondents (Chapter 9) and the burden of international reporting. Standard formats would facilitate the interpretation of statistical information and would help to retain knowledge in-house (crucial in case of staff turnover).
24. In view of BNS plans to become the national coordinator of statistics in the country, it is important that the work on quality assurance regarding the administrative statistics produced by other state agencies starts as soon as possible.
25. The BNS should widen and formalize the user involvement in particular in developing the statistical work programme. To this end, improve the participation of various users' groups, including representatives of business, government agencies or research institutions.
26. The BNS should support respondents to provide high quality information, e.g. by maximising use of built-in validation for electronic reporting or by providing online tutorials, access to harmonised methodological guidance to subject matter domains and regional offices or material to help respondents. This is specifically relevant when changing data collection modes. Parallel data runs could be undertaken to measure mode effects.



## Chapter 6: Statistical confidentiality and data protection

### Overview

Article 18 of the Constitution guarantees the right to privacy and the provisions in the Law of the Republic of Kazakhstan of 21 May 2013 No. 94 on Personal Data and its Protection and the Amendment Law introduced in July 2020 provide general regulations on the collection and processing of data.

The Law on State Statistics mandates the BNS to ensure the protection of primary data collected for statistical purpose. Primary data enables the direct or indirect identification of individual units (people, businesses, etc.), during their collection, processing, and storage:

- Article 1 defines primary statistical data as data received or recorded in statistical forms.
- Article 5 and Article 8 define confidential statistical information, protect privacy of data providers, and ensure the confidentiality of primary statistical data, i.e., information provided by individuals, households, and enterprises exclusively for statistical purposes.
- Paragraph 1 in Article 8 of the Law on State Statistics guarantees the confidentiality and protection of personal information provided by individuals, households, and enterprises for statistical purposes. However, paragraph 4 in Article 8 provides exceptions for information related to “last name, first name, patronymic (if any) of an individual entrepreneur or the name of a legal entity; type of economic activity according to the general classifier of types of economic activity; code according to the classifier of sectors of the economy; code according to the classifier of forms and types of ownership; business identification number; code according to the classifier of administrative-territorial objects; code according to the classifier of dimensions of legal entities, branches and representative offices, as well as subjects of individual entrepreneurship by the number of employees; information about respondents, which, in accordance with the Entrepreneurial Code of the Republic of Kazakhstan, is publicly available”. Thus, according to paragraph 13 of Article 28 of the Entrepreneurial Code of the Republic of Kazakhstan, publicly available information of a business entity is provided, which include:
  - 1) surname, first name, patronymic (if it is indicated in an identity document) or the name of an individual entrepreneur;
  - 2) name and date of registration of the legal entity;
  - 3) identification number;
  - 4) legal address (location);
  - 5) type of activity;
  - 6) surname, first name, patronymic (if it is indicated in the identity document) of the head.
  - 7) information on ongoing public procurement and procurement of quasi-public sector entities, with the exception of organizations that are part of the structure of the National Bank of the Republic of Kazakhstan, and legal entities, fifty percent or more of the voting shares (participation shares in the authorized capital) of which belong to the National Bank of the Republic of Kazakhstan or are in its trust management, including information on plans, announcements, participants, results, concluded contracts, performance of contractual obligations and payment, as well as information on local content, with the exception of information constituting state secrets in accordance with

the legislation of the Republic of Kazakhstan on state secrets and (or) containing official information of limited distribution determined by the Government of the Republic of Kazakhstan. Though introducing some flexibility with regard to information that is often publicly available, these exceptions, taken as a whole, could be seen as enabling the identification of individuals, as subjects of individual entrepreneurship, or enterprises.

- Paragraph 5 of Article 8 was amended in 2020 to ensure that confidential primary statistical information cannot be shared without the consent of the respondent.
- According to the paragraph 2 in Article 8, the BNS is not allowed to share confidential primary statistical information with state bodies and the national bank. "The use of primary statistical data by state bodies and the National Bank of the Republic of Kazakhstan in relation to the respondent, including in the exercise of their control and supervisory functions, is not allowed." At the same time, according to Article 29 of the Entrepreneurial Code of the Republic of Kazakhstan, the use of primary statistical data by state bodies and the National Bank of the Republic of Kazakhstan in relation to a business entity, including in the exercise of their control and supervisory functions, is also not allowed.

BNS staff and contractors' obligation to protect the confidentiality of personal information is brought to the attention of new staff. A confidentiality clause is included in the agreements with other bodies, in particular the owners of administrative records, and these agreements explain which officials of those bodies will have access to relevant information shared by the BNS.

The BNS improved its procedures on access to microdata for research purposes as detailed in Chapter 10 but the rules on microdata access for research purposes should be included in the law on statistics. The SAQ states that the BNS is currently working with universities to ensure that anonymised microdata can be shared. This work should be part of a large policy, covering human resources, IT, and legal issues, on the development and maintenance of appropriate mechanisms on the use of microdata.

However, the law, and the mechanisms and procedures in place, should evolve to ensure their relevance and effectiveness as regards to the future data stewardship role of the BNS. Human resources policies should include, among others, a signed commitment by staff, appropriate training activities, and administrative penalties in case of breach, etc. IT measures should be further developed to ensure a secured storage, and to integrate efficient mechanisms, including encryption and anonymisation, to safeguard confidentiality of personal information. In this area, the BNS is encouraged to continue its efforts to reinforce the protection of statistical secrecy through upgrades to its data collection and storage infrastructure. Overall, a policy as regards confidentiality should identify principles and mechanisms to ensure that producers and users of official statistics are aware of its contents, and the legislative framework should ensure that existing protections are maintained and updated where necessary to reflect IT developments and the increasing automation and digitalisation of information.

## **Recommendations**

27. Develop a comprehensive confidentiality policy setting out principles, responsibilities, and mechanisms for the protection of personal information. The confidentiality policy should include a policy and appropriate mechanisms on the use of microdata. In this area, the BNS is encouraged to pursue the work with academics.

28. Ensure that rules about confidentiality are fully transparent for the public, in particular for respondents. Ensure that respondents are well informed about the confidentiality policy, including the exception in Article 8 of the legislation.
29. Reinforce the human resources measures related to confidentiality, including a signed commitment by staff and penalties in case of breach, but also well-developed guidance and training sessions on data security to ensure that all staff is aware of the various confidentiality issues.
30. Develop IT measures to ensure data security and protection of personal information (data collection, data storage, servers, data dissemination, encryption, anonymisation, regular security audits, etc.).

## Chapter 7: Sound methodology

### Overview

#### Legal Background

The Law on State Statistics provides the BNS with an appropriate legal basis to ensure the development and implementation of a sound statistical methodology to produce official statistics. Article 7 defines the formation of statistical methodology as its first task in the field of state statistics. Moreover, the BNS has the competence to form a statistical methodology in accordance with international statistical standards and to approve the statistical methodology, including methods, for nationwide statistical observations (Article 12). Article 22 on ‘Statistical methodology’ as well as Article 23 on ‘Statistical classifiers and registers’ reinforce the authority of the BNS to develop, approve, and implement statistical methodology and classifications.

The BNS is also in a strong position to control the methods used by administrative sources. According to Article 16 paragraph 3 of the Law on State Statistics, the holders of administrative sources are obliged to apply national classifications of technical and economic information developed by the BNS and approve the forms as well as the methods for collecting administrative data. However, the SAQ states that the “development and approval of national classifiers of technical and economic information is regulated by the Rules... approved by the Ministry for Investment and Development”.

The BNS maintains the unified register of reports generated in state bodies, which at the time of writing this report contains 2243 forms of departmental reporting, in order to control, eliminate duplication in data collection, and systematize the reporting of administrative sources.

#### Methodological infrastructure

Statistical methods, their implementation and validation results are governed by the following infrastructure:

- **Council of State Statistics Bodies (Council of Producers) of the Republic of Kazakhstan**, established to ensure high quality of statistical information, offers a platform of exchange between the BNS and other producers of statistical information. Established in 2021, the Council aims to ensure the high quality of statistical data, as well as to promote the harmonization of methodological principles for the compilation of official statistics, thus ensuring comparability. According to its regulations, the members of the Council include the head of the BNS, deputy heads of state statistical agencies, and heads of structural subdivisions of state statistical agencies – producers of official statistical information.
- **Department of Methodological Development and Data Management Policy** is responsible for the development of statistical methodology in subject areas over the national statistical system, in particular administrative sources. Recently created, with seventeen experts currently, it represents the most important unit to coordinate the methodological work, create a unified methodology, and overcome methodological inconsistencies throughout the national statistical system. It includes the Division of Methodological Coordination and Analysis.
- **Strategic Council**, which considers strategic documents for the future methodological developments of the BNS.

- **Expert Methodological Council**, created in 2022 with the aim to perform the functions of an expert council for the preparation of new methodological documents and the adjustment of existing ones. At the current stage, the Methodological Council is composed of senior BNS staff but in the future, it is planned to include representatives from the main user groups and scientific experts. The objectives of the Methodological Council include:
  - ensure the conformity of the statistical methodology with international standards
  - review and validate proposals for the introduction of new methods for statistical indicators
  - review draft methodological workplan of the BNS for the coming year
  - review statistical methodology developed and approved by other producers of official statistics
  - Request/coordinate the production of guidance/guidelines for the implementation of new technologies
- **Department of Statistical Registers and Classifications**, carrying out the development and maintenance of statistical registers, classifications, and national reference information.
- **Department for the Development of Statistical Processes**, which carries out user consultations, activities related to the dissemination of official statistical information, and the management of the BNS official website.

Since the 2017 GA, the BNS significantly strengthened its infrastructure to define, implement and coordinate methodological work in the national statistical system. Following the recommendation to establish a central unit for methodological training, coordination, and harmonisation, the BNS created a new Department of Methodological Development and Data Management Policy to enable a high-quality methodological support for statistical activities. Additionally, the Council of State Statistics Bodies, established in 2021, as well as the Methodological Council, established in 2022, serve as new platforms to discuss methodological issues.

The Methodological Council has the mandate to act as a subject matter advisory committee advising the producers of official statistics on methodological matters. The BNS is encouraged to extend the number of experts in the Council and to expand its power to effectively coordinate methodology for all producers of official statistics.

### **Compliance with international statistical standards and classifications**

The BNS engages with various international experts, including from UNECE, IMF, OECD, World Bank, and Eurostat, to support methodological reforms and confirm the compliance with international standards. Thus, statistical classifications are mostly developed in accordance with generally accepted international classifications (NACE Rev. 2, CPA 2008, PRODCOM 2008, CC-98, BEC Rev. 4, COICOP, ISCO-08, ISO 3166-1, ISCED 2011, ISO 4217-2015, SNA-2008).

Classifications used in official statistics are formally approved, even if the process could be clarified.

The Committee of Technical Regulation and Metrology of the Ministry of Trade and Integration of the Republic of Kazakhstan is mandated to approve national classifications of technical and economic information, except military national standards. The procedures for their

development and approval are regulated by the rules for the development, approval, examination, approval, registration, accounting, amendment, revision, cancellation, and entry into force of national standards, national classifications for technical and economic information and recommendations on standardization (No.918) of 2018.

The BNS is mandated to approve the statistical classifications. The development and approval of sectoral (departmental) classifications by state bodies that generate statistical information and administrative data is regulated by the standard methodology for conducting departmental classifications approved by Order No. 50 of the Committee on Statistics of the MNE RK, dated March 18, 2015.

The use of harmonised, up-to-date, and internationally consistent classifications for official statistics being crucial for international comparisons, the BNS should have the final responsibility in deciding about the development and maintenance of the classifications used in the production of official statistics. This role includes the obligation to comply with international standards, promote their use within the national statistical system, provide appropriate guidance to this end in particular when important changes occur. The management of the classifications could be efficiently supported by the development of a classification management system.

### **Implementation of GSBPM**

The BNS continues to gradually implement the Generic Statistical Business Process Model, version 5.1 (GSBPM) in accordance with an order of the Chairman of the Committee on Statistics (replaced by the BNS) issued in 2015. The modernisation of the BNS statistical production processes also includes the move from paper-based data collection to electronical reporting and the integration of administrative data in official statistics. These changes have strong implications for the applied statistical methodology and the transition to new methods requires additional support for respondents to ensure high quality of information. However, the standardisation of the statistical processes with the implementation of GSBPM should be considered as a priority in order to make the modernisation more efficient.

### **Revision Policy**

In 2018, the BNS established “Rules for revision of published official statistical information for statistical purposes in case of changes in statistical methodology and on the basis on updated and documented information” (Order No.20 from 28 December of 2018). This revision policy establishes guiding principles for the regular, major, and special revisions of published statistical results. They provide clear guidance on when and why revisions should be done, as well as guidelines on the dissemination of revised results. However, even if information statements are posted on the BNS website when revisions occur, a public calendar of regular revisions is not made available to users.

### **Vocational Training of staff**

To foster methodological training of their staff, the Bureau promotes a broad Data Literacy initiative that also contains modules for BNS employees to increase methodological competencies such as the application of new visualization tools. In addition, the BNS together with the Asian Development Bank (ADB) began a training of employees in advanced business intelligence tools and in data analysis skills as part of the joint Kazakhstan and ADB Knowledge and Experience Exchange Program. In the future, the BNS plans to build an internal competence centre to continue further training of employees of state bodies on its own.

The BNS assists data providers when new methodologies are introduced. To this end, regional specialists conduct focus group events with the participation of potential respondents, interested government bodies, and the National Chamber of Entrepreneurs "Atameken". In some cases, explanatory videos are shared centrally by the BNS to support data providers. The methodological guidance is unfortunately not necessarily harmonised across subject matter domains or between different regions.

## **Recommendations**

31. Expand the Methodological Council by including other producers of official statistics or external experts. This could turn the council into a more effective institution to coordinate methodology across the national statistical system.
32. Establish quality checks for changes in collection methods. Parallel runs could be undertaken when systems or questionnaires are significantly redesigned, at least for one collection period, and new collections could be systematically pre-tested.
33. Increase transparency of the revisions of official statistics. This could be achieved by providing a calendar for revisions to inform about regular revision cycles, communicating major revisions or changes in methodology in advance, distinguishing between final and provisional in the release calendar, or explaining and publishing the revision rules on the BNS website.
34. Continue the work to unify statistical classifications across administrative registers, in particular to facilitate data sharing.
35. Clarify the role of the BNS as regards the approval of national classifications of technical and economic information: classifiers and reference books of state bodies. As coordinator of the national statistical system, the BNS should be legally mandated to approve all the classifications used in the production of official statistics. To this end, the BNS is encouraged to ``a classification management database, allowing an efficient classification management system.

## **Chapter 8: Appropriate statistical procedures and cost-effectiveness**

### **Overview**

The BNS has already harmonised statistical procedures across different domains to some extent. This is mainly due to the use of standard IT tools and approved methodologies. This is a positive legacy of the Kazstat project several years ago. Custom solutions are only used for a few one-off or infrequent processes, such as MICS (Multi-Indicator Cluster Surveys) and a recent survey on violence against women.

Further centralisation and standardisation of processes is being considered, particularly in the context of the re-deployment of resources from traditional data collection activities in regional offices to more analytical roles.

The BNS is implementing a system of core statistical registers, which will be fully integrated and updated from administrative sources. This system will be based on international standards and good practices. It is being developed by the BNS Department of Statistical Registers and Classifications.

The BNS uses a national version of the Generic Statistical Business Process Model (GSBPM) as a basis for standardised documentation of statistical production processes. The national version is sufficiently close to the global GSBPM to allow benchmarking and to facilitate communication with other national statistical offices. This is a good basis for moving towards a more process-oriented structure.

As the volume of documentation increases, the BNS will need to consider tagging and versioning to help staff find relevant documents as quickly as possible. This could be linked to a government requirement to develop a register of processes.

### **Recommendations**

36. The BNS should continue with plans to move towards a more process-oriented structure, in line with the GSBPM, and to increase the standardisation of processes across statistical domains
37. The BNS should continue activities to document all statistical processes according to the GSBPM and use this to improve interaction and the spread of good practices between statistical domains.
38. The BNS should develop a system of tagging and versioning for process documentation, to make it easier for staff to find relevant information quickly.



## **Chapter 9: Non-excessive burden on respondents**

### **Overview**

Available sources of statistical information in the BNS include primary statistical data, administrative data, and information of statistical bodies of other states and international organizations. Primary statistical data is mostly covered by forms, either electronic or paper, from different respondents. Due to the introduction of modern information technologies, and as part of the integrated information system, the "e-Statistics" project, the submission of statistical forms by respondents in electronic form has increased. According to the roadmap for reforming the BNS, the aim is to phase out paper forms by the end of 2025. In line with the transition from traditional statistical reports to new data sources, e.g., administrative sources, the number of forms has been reduced by 23 per cent since 2020.

The government collects a huge set of data based on various administrative sources in over 400 state information systems. In the past, these systems were created at different times and with respect of the considerations of each separate state body, thus duplicate data is manually entered in dozens of databases. BNS is working towards a unified system for creating, structuring, and managing data for all state bodies, so called National Reference Information (NRI) by suggesting a single source of NRI. This will result in comparable data across the state bodies. Within this mapping the data management solutions in other countries have been examined, e.g. should BNS become a coordinator of data management or be transformed into a data agency.

Within the framework of digital statistical registers the BNS has examined the structures of 150 databases of state bodies and more than 900 departmental reports. The aim is to start using 3 statistical registers by the end of 2023: agriculture, healthcare, and education. Further work in this field will make it possible to switch to register-based statistics, thus reducing the burden on respondents and improving the quality of data.

### **Recommendations**

39. BNS should continue developing national registers and digital statistical registers.
40. BNS should continue the work to avoid multiple (double) reporting to different registers, to improve the quality of data from administrative sources.
41. BNS should continue to encourage respondents to transit from paper to electronic forms.
42. BNS should continue to identify alternative data sources as well as data collection system like CAPI, web surveys, GPS tracking, web scraping, etc.

## **Chapter 10: Relevance, accessibility, impartiality, and clarity**

### **Overview**

#### **Legal basis and general dissemination principles**

According to the Law on State Statistics, Article 26 paragraph 2, state statistical bodies provide users with equal rights to simultaneous access to high-quality official statistical information, including in the format of machine-readable data and statistical methodology by posting them on the Bureau's Internet resource. The Order on 'Methodology for the formation and dissemination of official statistical information in electronic form' (No.292 of 2016) establishes the principles and procedures for the dissemination of official statistical. The scope of statistical information published by BNS is determined by the Statistical Work Plan and the Schedule for Dissemination of Official Statistical Information. In general, information is available free of charge to all users. Additional user requests for statistics are possible but costs of their development must be reimbursed.

The press service of the BNS is entitled to comment any major erroneous interpretation and misuse of statistics published by the Bureau. Media monitoring is conducted daily to identify erroneous interpretation and misuse of statistics, in particular when official statistical information is printed or announced. Depending on the severity of the errors the press office contacts the responsible author in line with the BNS communication strategy.

#### **User satisfaction and needs assessment**

The annual user satisfaction survey has a high response rate and provides useful insights on user satisfaction and its trends over the years. It confirms the high satisfaction of users that has been prevalent in the meeting of the Global Assessment team with users as well.

The meeting with users of statistics also confirmed the well-established contact of the BNS with government agencies and the academic community. However, the participation of businesses should be reinforced as they represented 34 % of the total users in 2022.

Although the BNS uses different practices to assess user needs including online user satisfaction surveys, direct user consultation through focus groups, or indirect analysis of user request, users should be more formally involved in statistical bodies or in the formation of the statistical work programme. The Council of State Statistical Bodies is composed of producers of official statistics only and its activities would benefit from the integration of users. To this end, it is important for the BNS to identify various user groups and to establish interactions with all of them to ensure that what relevance means for users is clear for all the entities within the national statistical system.

#### **Data dissemination**

The BNS uses different channels to disseminate statistical information:

- [BNS website](#), redesigned in 2023 (at the time of writing, the migration to the new website is not finalised and the old and new platforms are both operating in parallel),
- [information and analytical system Taldau](#),
- social media (Facebook, YouTube, Telegram, Instagram),
- electronic publications,
- news and press releases of the Bureau on the latest data on key socio-economic indicators are available on the main BNS website.

The design of the new website includes dynamic interfaces enabling fast navigation across main statistical indicators, interactive dashboards, and provides a link to other related dissemination platforms such as Taldau. For the first half of 2023, it is planned to extend the English version of the website to guarantee a closer alignment with the information available in Kazakh and Russian.

Taldau is the information and analytical system for official statistics and the main database of the BNS. Following the recommendation of the 2017 Global Assessment the Taldau system has been extended by an English interface to increase accessibility for foreign users.

Since the last Global Assessment, the BNS social media presence (Facebook, YouTube, Instagram) has been systematically expanded. With approximately 10.000 regular users on social media platforms, BNS significantly increased its visibility over the last years, particularly among young users.

User-friendly access to data and statistical information through various dissemination tools reaches a broad user community. The new website presents statistics in a clear and understandable form and is aligned with best practices worldwide. The introduction of new dashboards increases the interactivity and understanding of statistics for frequently requested topics and represents a significant improvement.

The BNS dissemination platforms are sufficiently flexible to integrate new data formats such as GIS data and are therefore well prepared for possible new demands for data dissemination

An annual statistical release calendar is made publicly available on the BNS website and social networks every year in December in accordance with the Statistical Work Plan and the Schedule for the Dissemination of Official Statistical Information. The calendar includes all release dates of statistics produced by the BNS for a given year, but no standard daily time for the release of statistical information. The BNS is encouraged to align with best practices and to implement a standard release time. Changes to publication dates are announced on the news section of the BNS website including reasons for such changes.

There is no pre-release access to statistical outputs by media representatives or government agencies. This practice strengthens the perceived impartiality of official statistics and underlines the BNS's commitment to its main principles as established in Article 5 of the Law on State Statistics.

### **Access to micro-data for research purposes**

The BNS improved the procedures in place for the provision of micro-data for research purposes following the recommendation of the 2017 Global Assessment. Standard application procedures are in place and the work on Researcher's laboratory to give secure access and virtual access possibilities is underway. Researchers apply via an online form that must be reviewed and approved by the BNS. Micro-data are anonymised and controlled by the Information Computing Centre (ICC) before being shared and researchers sign confidentiality agreements. At the current stage, data are shared via disk, but a Researcher's laboratory is planned on-site to facilitate the work with micro-data in Astana and Almaty. Synthetic sample data will be made available to researchers to prepare their analysis in the data rooms. There is a plan to establish a virtual data laboratory to provide access to anonymised microdata by 2025.

### **Statistics and Data literacy initiatives**

The BNS shows a strong commitment to develop various activities to promote statistics and data literacy for different user groups, including public, government officials, and BNS staff. In 2022, the BNS conducted a gap-analysis to evaluate its maturity against the vision of the

roadmap. Based on the results, the BNS developed specific activities for its staff but also implemented a demand-driven approach to data literacy that considers different target audiences in the perspective of its project to become data steward.

The Data Literacy initiative is based on an active collaboration with educational institutions and public agencies to develop and promote innovative products and activities. The core of the initiative is a module of open online courses that focuses on different data competence levels, ranging from basic introduction to official statistics to more sophisticated courses on data visualization and dashboards.

Parts of the training will become mandatory for civil servants. The BNS consulted with other NSO's enabling the exchange and sharing of national good practices for the planning of its Data Literacy initiative. Further examples of the BNS engagement in the area of statistical and data literacy for different user groups include:

- Brief methodological explanations or links for media representatives published by the press service to avoid misunderstanding and misinterpretation of statistical information.
- Informational videos in various statistical areas posted on the YouTube channel (statgov.kz) to ensure transparency of statistical activities.
- Special courses on official statistics for the media representatives as part of the BNS Media Plan 2023.
- National data competition “Qazdatathon” on working with data.
- Open days in the headquarters and regional offices informing various users about the statistical information systems and publications of the BNS.
- Interactive dashboards on frequently requested indicators (e.g. CPI) to increase the understanding of statistics and explain the statistical methodology.

## **Recommendations**

43. The BNS should establish and communicate a standard publication time for official statistics. Especially for market sensitive statistics a standard release time should avoid any unintended market impacts of statistical releases.
44. The BNS should move from an annual release calendar towards a rolling 12-months ahead release calendar. The practice of providing 12-month-ahead notice of the precise release, where the release dates become gradually available, helps users to plan their work independent from annual publication cycles.
45. The BNS should involve users in the development of the statistical work programme. To this end, appropriate mechanisms should be developed to consult users and to evaluate their current and emerging needs and priorities.
46. The BNS should evaluate user-satisfaction and impact of data literacy products and activities. Despite the increasing engagement in data literacy initiative in many NSOs the evidence on the effectiveness of products and activities is still weak. Evaluating the user-satisfaction and impact of efforts will increase the quality of training programs and enables to share evidence with other statistical organisations.
47. The BNS should promote the development of new methods to facilitate the integration of geospatial data in the production of official statistics.

## Chapter 11: National Accounts

### Overview

National accounts data play an important role in providing information for economic and monetary policy makers, their quality should be ensured beyond legal requirements. This means incorporating methodological improvements; improving data collection and production processes; and introducing new data sources.

Compiling national accounts is under the responsibility of the Bureau of National Statistics (BNS). The system of national accounts originally was based on the SNA 93 concepts. Since then, they have progressively introduced most of the concepts of the 2008 SNA, except for the treatment of research and development and military weapons expenditure. They plan to change the treatment of these two expenditures to gross fixed capital formation in 2025, thus finalizing the introduction of the 2008 SNA.

The national accounts department is composed of four divisions: economic balance, current accounts, accumulation accounts and auxiliary accounts and structural statistics. Eighteen persons, including the Director of department, are involved in producing and disseminating national accounts statistics.

The National Accounts Department compiles and publishes a very large number of indicators annually, including the full sequence of national accounts by sector as described in the SNA, the input/output and the supply-use tables, the regional accounts and the financial accounts (transactions) from 1990 to date. In addition, some indicators, such as the production accounts by type of activity or by region, are published on a quarterly basis at current and constant prices.

There are three main methods or formulas for determining GDP: the expenditure method, production method and income method. Kazakhstan's national accounts use all three ways to measure GDP. The use of three methods to estimate GDP ensures better quality.

The General Classification of Types of Economic Activity used in Kazakhstan for the national accounts are based on NACE Rev. 2, which corresponds to the European classification. This classification is used in monthly surveys to measure production and intermediate consumption and compensation of employees by industry. Administrative data are used for financial and insurance activities and for the general government sectors. For the former, the National Bank of the Republic of Kazakhstan is the main data provider, and for the latter, the state budget of the Ministry of Finance of the Republic of Kazakhstan. The source on import and export is the Balance of Payments of the National Bank of the Republic of Kazakhstan.

The household surveys and non-profit institutions serving households complete the data sources for producing the sequence of accounts by sector of economy.

In addition to the sequence of national accounts the Department of National Accounts forms auxiliary account like the tourism satellite account, the health satellite account, and the SEEA account.

The National Accounts Department of the BNS provide detailed and quite complete national accounts data. The methodology, the nomenclatures and the classifications have been largely aligned to be compliant with internationally agreed standards.

## Recommendations

48. The BNS is encouraged to finalize the implementation of the 2008 SNA as set out in their plans.
49. The BNS should compile on regular basis and publish the balance sheet of financial assets and liabilities.
50. National accounts are synthesis statistics relying on many different administrative sources (National Bank of Kazakhstan, Ministry of Finance and etc.). Therefore, the BNS has to have a very deep cooperation with central state bodies. For the Central Bank it is also encouraged to have very detailed information and if possible, to be able to share individual company data.
51. The economy is developing at a very fast pace and is becoming more and more internationally integrated. The 2008 SNA will very soon be obsolete and will be replaced in 2029 by the SNA 2025, which will be adopted by the United Nations Statistical Commission in 2025. The BNS is encouraged to set up a working group to identify changes in the new SNA and to prepare for the implementation, which will probably require some adaptations of the surveys.

## **Chapter 12: Balance of payment statistics**

### **Overview**

The Division of Balance of Payments and Division of International Investment in the Balance of Payments Department of the National Bank of the Republic of Kazakhstan (NB RK) are responsible for compiling balance of payments statistics. These divisions have 24 employees; in addition, some regional staff are involved in data collection. The BPM6, the most recent guideline, was introduced in 2013 to compile balance of payments, international investment position and external debt statistics.

The Balance of Payments statistics are compiled and disseminated on a quarterly basis and transmitted to international organizations. They comply with the IMF's Special Data Dissemination Standard (SDDS) regulation.

To compile the data of Balance of Payments, the NB RK relies on a very wide range of sources: primary statistical data, information from the BNS based on information agreements, administrative data (border control of the National Security Committee, the Ministry of Finance, the Ministry of National Economy and the Ministry of Labour and Social Protection of Population of the Republic of Kazakhstan) and information from the NB RK.

Balance of Payments and International Investment statistics are compliant with international regulations. The expert group acknowledge the good cooperation between the NB RK and the National Accounts Department of the BNS and encourages continued cooperation. However, since the national economy are always more opened to the world, it is essential to have granular data to reach a high level of quality for national accounts statistics and bop statistics.

The best practice should be to exchange the data at the level of the individual companies; therefore, we recommend to expand the collaboration between the two institutes.

### **Recommendations**

52. The National Bank of the Republic of Kazakhstan is encouraged to expand cooperation with the National Accounts Department of the BNS and to exchange individual company data, since both institutes are bound by confidentiality rules.
53. At the level of the international organizations, the new manual of the Balance of Payments (BPM7) is being prepared. The NBRK should follow the work to be able to implement it in 2029, like the most advance countries. The BPM7 is due to be adopted by the United Nations Statistical Commission in 2025.

## **Chapter 13: Price statistics**

### **Overview**

Price statistics are compiled within the Department of Price Statistics. The Department has four divisions, 24 staff and around 290 full-time employees in the regional offices, mostly covering the registration of consumer prices. The price statistics are compiled in line with international recommendations, covering the System of National Accounts 2008, consumer and producer price indices and real estate indices.

Prices are obtained through sample surveys covering the whole country. BNS uses a selective observation method with periodic updating and rotation of selected populations in the sampling procedures. All price statistics use standard international classifications like COICOP, NACE, CPA and PRODCOM. With some exceptions, the different monthly price indices are disseminated between day 2 and 10 after the measurement period, which is regarded as a very good timeliness. Quarterly price indices are in general disseminated between 17 and 22 days after the measurement period. Published price indices are considered final and are not revised. Time series are available from the period of introduction of the index calculation. For the consumer price index, a user-friendly interactive dashboard has been developed to provide more detailed analyses including the contribution to inflation of different goods and services.

Prices within the real sector are collected either through forms online within the “E-statistics” system or through paper forms, altogether 21 forms are used in obtaining prices in BNS. Within the consumer price sector prices are obtained by direct visit to the shops where the price collectors read information from the label (price tag), interview sellers and register the prices in a notebook.

Residential real estate indices are within the portfolio of price statistics in BNS. The consumer price index covers the rental market as well maintenance and repair of dwellings. However, it seems that the consumer price index does not cover owner-occupied housing (indicated in COICOP 0421 as “Imputed rentals of owner-occupiers”). BNS should identify through the weighting scheme a potential expenditure share for owner-occupied housing and, if a significant share, investigate possible approaches to measure owner occupied housing in line with international recommendations.

### **Future plans**

Priority areas for further development include improving the statistical data collection process and utilising new data sources in addition to traditional price collection methods. New tools for data collection include scanning barcodes using mobile phones, and web scraping. Examples of new data sources are use of fiscal receipts, administrative data, and electronic invoice prices. Some of the indices testing out new data sources will be on an experimental basis, e.g., export and import prices based on electronic invoice prices.

A validation of the methods for both the residential and the commercial real estate price indices as well as the construction price index are planned but requires technical assistance from IMF.

### **Recommendations**

54. BNS should encourage enterprises to report prices through online forms.
55. BNS should continue the work with new data sources and new data collections tools.



56. BNS should investigate machine to machine reporting of prices, e.g., scanner bar codes directly from retail chains.
57. BNS should investigate the possibilities of including owner-occupied housing in the consumer price index (following a consistent approach with other statistical areas such as national accounts).
58. The Department of Price Statistics should, in cooperation with National Accounts and the Department of Statistical Registers and Classifications, start the preparations for introducing COICOP 2018 in the consumer price index. This task requires a source of private consumption expenditures based on COICOP 2018.

## **Chapter 14: Business statistics**

### **Overview**

Business statistics covers a broad range of statistics in BNS. This Global Assessment focuses on structural business statistics and the statistical business register.

### **Structural statistics**

Structural statistics are compiled within the Department of National Accounts, Structural Statistics Division. The division has six employees.

Structural statistics (SS) describe the structure, conduct and performance of economic activities and covers the following sections: non-financial sector other than healthcare, education, and banking sector organizations. Annual and quarterly reports on the financial and economic activities of large, medium, and small enterprises, as well as annual status of fixed assets, form the basis of the structural business statistics. Statistical observations are carried out for large and medium-sized enterprises by a continuous method, for small enterprises -30% (of the total population of enterprises).

The methodological basis in structural statistics are IFRS and NFRS. Filling in financial statistical reports is carried out by the respondent on the basis of accounting statements compiled using a Standard Plan of Accounts and NSF and Methods developed by the Department of Structural Statistics:

- Methodology for calculating the indicators of small and medium-sized businesses (No. 130 of 20.09.2017);
- Methodology for drawing up the balance of fixed assets and calculating its indicators (No. 312 of 13.12.2016);
- Methodology for conducting market surveys of enterprises and organizations of the Republic of Kazakhstan (No. 33 dated 02/14/2017).

In recent years the statistical forms have been revised, controls improved and video instructions of how to report data has been prepared. A draft methodology for conducting conjunctural surveys of enterprises and organizations has also been prepared. A pilot on estimating economic activity with seasonal adjustment has been conducted.

The different statistics are disseminated on a monthly, quarterly, and annual schedule and the timeliness is regarded as fairly good.

Future plans:

- Start using customized data collection with the unified accounting software systems for automatic uploading of data to the forms of structural statistics.
- Integration of data on structural statistics, fixed assets, and statistics on small and medium-sized enterprises (SMEs) with administrative sources.

### **Statistical business register**

The statistical business register is managed by the Department of Statistical Registers and Classifications (DSRC). The Department covers economic and social registers in addition to classification management Division and has eighteen employees.

Data from four main state databases feed into the statistical business register: State database “Legal entities”, different data from the State Revenue Committee of the Ministry of Finance, information about licenses, and information on the amounts of social payments and the number of recipients of social payments. The owner of the legal entities database is the Ministry of Justice. BNS also cooperates with the maintenance of these sources, for example, changes of type of economic activity (NACE codes) are reported back to both Ministry of Justice and State Revenue Committee of the Ministry of Finance to ensure a uniform register. Available information is legal entities and individual entrepreneurs, branches, and branches of foreign legal entities, as well as statistical units (enterprise, local unit, unit of activity, local unit of activity) for statistical purpose. The number of employees is used as an indicator of the size of the enterprise.

One main task is to keep the register as up to date as possible reflecting the population of enterprises in the Republic of Kazakhstan. The statistical business register is updated daily and follows international guidelines. The legal basis for the collection of data of enterprises is laid down in the Law of the Republic of Kazakhstan "On State Statistics". The procedure for updating and maintaining the register is regulated by “Methodology for maintaining and updating the information system Statistical business register” (December 31, 2021 No. 50) and the “Methodology for conducting sample surveys of enterprises” (August 22, 2016 No. 169”). The statistical business register uses the NACE 2007 classification.

Part of the register is open access online and the BNS experience quite a lot of requests from users to provide more detailed information.

#### Challenges and future plans

One main challenge is to identify inactive (“sleeping”) enterprises. The enterprise does not necessarily close the registration if it is inactive. As an experiment, BNS has, in cooperation with the National Bank, used financial transactions data to identify inactive enterprises. In the future, financial receipts might work as an indicator to identify inactive enterprises. BNS is also investigating the possibilities of including sales revenue in the statistical business register.

The quality of the type of economic activity codes (NACE Rev. 2) could be a challenge as the enterprises themselves choose a specific NACE code. One question raised was how to register enterprises with their main office within Kazakhstan and branches in other countries. As a main rule the statistical business register should only include legal entities, its structural subdivisions, as well as subjects of individual entrepreneurship that have economic activity within the borders of Kazakhstan. But there are other approaches if the legal entities are parent companies and the branches abroad are subsidiary companies, e.g. the use of enterprise groups. This will also influence which type of economic activity (NACE) to be used. In some cases, units across borders may be classified by using a main global activity.

## Recommendations

59. BNS should continue the work of integrating the use of administrative data in structural business statistics.
60. BNS should continue the pilot of seasonal adjusted data where it is suitable, e.g., monthly data.
61. BNS should continue the investigation of how to identify inactive enterprises, e.g., coordinate with Ministry of Justice about who should have main responsibility for this.

62. BNS should continue the dialogue on including sales revenue in the statistical business register.
63. BNS should seek business register expertise to decide how to treat legal entities with branches abroad.
64. BNS should prepare for, and not underestimate the workload of, changing the classification from NACE Rev. 2 to a new version that is expected to be introduced in January 2025.

## **Chapter 15: Population census**

### **Overview**

#### **Census 2021**

The Census was originally planned for 2020 but postponed to 2021 due to the Covid19 pandemic. The Census was mandated by the order of the head of state at a meeting of the Supreme Council for Reforms and by decree of the Government of the Republic of Kazakhstan. It was conducted CAWI<sup>2</sup> first (website, also link through e-government portal, or mobile application), followed by a personal visit by enumerators of all addresses. Next, a CAPI round was conducted for those that could not show they had responded online. Results were sent immediately to a central database. Internet and tablet data were compared to prevent duplicates. Data was also compared to that from administrative sources.

The Census consisted of 91 questions in four modules (address/list of residents, living conditions, individual/vital statistics and permanent, temporary residents/visitors). These were based on the recommendations of the Interstate Statistical Committee of the CIS, as well as recommendations of the Conference of European Statisticians on the 2020 round. Pre-filling of data from the available databases of statistical registers was used. To avoid duplication of information and update information in the databases, an individual identification number was included in the census form.

The 2021 Census seems to have been done in accordance with international recommendations. The non-response was 1.3%, 42% responded online and 47% through an in-person interview. BNS signalled some issues with incomplete coverage of the population during the enumeration, as well as insufficient coverage of the Geographic Information/location for the use of cartographic materials during the census. Issues with coverage are unlikely to be worse than in most other countries.

#### **Population registers and next census round**

The BNS plans to have a register based or a hybrid Census in the next round. Registers were already used to prefill Census questionnaire and Census results were compared to registers. There are two statistical registers that will form the backbone for an administrative Census: the Statistical Housing Stock Register and the Statistical Population Register.

Several administrative registers provide information to Statistical Population Registers, such as: Vital registration (“Recording of civil status act” of Ministry of Justice) and information system "Registration point "Documentation and registration of the population" of the Ministry of Internal Affairs of the Republic of Kazakhstan" (RP DRP MIA RK). Information on migration is also collected by district and city departments of the Ministry of Internal Affairs. Other sources are the “Register of Attached Population” from the Ministry of Healthcare, and of the Ministry of Education (education) and of the Min. of Labour and Social Protection (on employment).

The BNS is setting up a unified ‘National Reference Information’ digital system (DS NRI), containing all classifications that were developed by state and local executive bodies. This would allow for creating, structuring, and managing national reference information for all State Bodies. Legislation is foreseen to oblige all government agencies to use this DS NRI.

Currently, the government decides when the census will be held. Even if in practice this might be largely based on the planning of the BNS, it is recommended that the national statistical

---

<sup>2</sup> Computer Assisted Web Interview

offices decide when the Census should be conducted (based on quality and methodological considerations, and in coordination with the Government, rather than the reverse).

When introducing a register-based population census, the accuracy of the statistical population register is vital. An important additional dimension in the population accounting is 'administrative and statistical corrections'. These are mainly emigration or internal moves not being recorded when the event took place as they might not be covered by the RP DRP MIA RK information system and often the government is not notified about departures. There might be unregulated/illegal immigration as well. Even if discovered, this is often afterwards without knowledge about when the event actually took place. Procedures are therefore needed to detect and correct such errors. Countries that have already implemented a register-based Census can be consulted on how they try to ensure good quality administrative and statistical registers.

The quality of Statistical registers and other Administrative sources can be tested by comparing it with survey results. Especially the LFS is suitable for this given its large sample size and it is covering information from various registers (housing stock, population, education and science, health care).

Having the Statistical Housing Stock register up to date is also crucial. In person surveys can be used to check and correct registers but in moving from survey to administrative sources, other means such as satellite imagery data can be used to improve coverage. The planned linking of various administrative registers and cross validating discrepancies can improve the quality of the various sources. The BNS has planned to use unique identifiers. This can largely prevent new duplicate entries being created. Having clear and thorough procedures for administrative records and training of employees at registers as well of the public is important. It is also important to specifically test the coverage of marginalized groups as they are most likely to be not well covered in administrative registers.

## **Recommendations**

66. The BNS, in coordination with the government, should decide on when the Census should be conducted.
67. The BNS should continue to prepare for moving to a register-based Census. Close collaboration with the owners of administrative sources is important.
68. The BNS should lead or be strongly involved in the further integration of the various administrative registers for example by continuing to implement unique identifiers and set up a unified 'National Reference Information' digital system with common/harmonized classifications and references that should be used by all relevant administrative sources.
69. The BNS, in collaboration with the agencies maintaining the respective administrative registers, should harmonize statistical concepts and administrative concepts and find ways to implement checks and balances to ensure identification and correction of errors in the registers.
70. The BNS should consult with countries that successfully implemented a register-based census and study how they assure the quality of the administrative and statistical records.

## **Chapter 16: Labour market statistics**

### **Overview**

The BNS compiles labour market statistics in line with the standards adopted by the 19<sup>th</sup> International Conference of Labour Statisticians (ICLS), as well as other International Labour Organisation standards and guidelines. Work is planned to implement standards adopted by the 20<sup>th</sup> ICIS, and particularly the latest version of the International Classification of Status in Employment (ICSE-18), after this has been translated into Russian. Methodological assistance is needed to move to the updated ICSE18 employment status classification.

The labour force survey (LFS) is conducted monthly using a sample of 228,567 households, drawn from the statistical housing register. This sample covers around 4.3% of Kazakh households, to allow the compilation of statistics down to the district level. There is a 30% overlap within the year (across the calendar year, 100% is replaced). An extensive questionnaire is administered every quarter. Sampling and other methodologies seem to be robust and field observations are used to improve the Statistical Housing Stock register.

In cooperation with the World Bank, the BNS is currently developing modelling methods for small territories. This can help to reduce the sample size and thus the response burden while at the same time, it will free up resources to work on the transition to register based statistics.

The main indicators are published quarterly. In addition to unemployment, indicators cover decent work / quality of employment, volunteer, and informal activities, working hours, income from self-employment and youth unemployment.

During the Covid19 pandemic, PAPI was replaced by CATI. However, the current round is again back to PAPI. The BNS plans to move to a mixed-Mode approach (CAPI, CATI, CAWI, and using mailing surveys), and to use GPS coordinates to geo-locate respondents. The sample size of the LFS is large. This allows that mode effects can be studied by mixed PAPI and multi-mode approach before going fully multi-mode.

The BNS also collects information on wages through surveys to businesses drawn from the statistical business register. A labour cost index is calculated annually based on these surveys.

The BNS plans to replace surveys to a large extent by administrative registers. Developments are most advanced with respect to wage and salary statistics. Initially prefilled information in survey questionnaires can be used to test the quality of registers while at the same time reduce the response burden. The planned use of unique identifiers across the various registers might allow for linking information at the individual level in a similar way as now is available only through surveys such as the LFS.

Interviewing that is not carried out in person needs complete and good quality sample frames. This seems to be the case in Kazakhstan. CAWI first is an option for areas with good internet and/or mobile phone coverage. In the Census, 42% responded online. This is a good starting point to further increase online response. It is important to have good instructions built into CAWI questionnaires and additional instruction and information material being available to respondents. The BNS is working on instruction videos.

### **Recommendations**

71. Given the large sample size, the BNS should use the LFS to test mode effects and the right order for applying different modes, considering preferences of specific respondent groups.

72. The BNS should collaborate closely with the ICC in developing and testing online questionnaires with clear instructions and references to additional information.
73. The BNS should continue with the plan to use more administrative sources, but with thorough testing and comparison with survey results.



## **Chapter 17: Other household statistics**

### **Overview**

The BNS conducts all major internationally recommended household surveys and additionally, the Multi Indicator Custer Survey and a survey to measure the level of trust in law enforcement. The Statistical Housing Stock register serves as the sample frame for household surveys. Surveys are weighted by population structure (age and sex). The ICC is the service partner to collect data. A move to from interviewers using paper forms (PAPI) towards other collection modes is underway. Additionally, a gradual transition from using surveys to administrative sources is planned. There are still several issues with administrative registers (see previous section) and not all information is available digitally.

Methodologies and questionnaires have been revised to make them in accordance with internationally recommended methodologies. On various occasions, the BNS has involved external experts to improve existing or develop new methodologies. For example, with respect to calculating the national index of multidimensional poverty, the OECD Quality of Life methodology, or with developing a toolkit to measure travel expenses and ICT usage.

The Labour Force Survey is described in Chapter 16, and the Living Conditions / Household Budget Survey is described below. Other household surveys have smaller sample sizes or are less a burden on respondents. Experiences from the Labour Force Survey and the Survey on Living Conditions can be applied to these surveys as well. Ensuring hard(er) to reach groups is important as well. Moving to telephone and web-based interviews might miss out on these groups. Using administrative data could have similar issues but could also provide better coverage. This needs to be tested thoroughly.

### **Living Conditions Survey and Household Budget Surveys**

A panel survey of 12,000 households (to make national and regional level statistics possible) with 25% annual rotation, is used. It is now being transitioned to EU-SILC methodology. In 2023, it was extended with questionnaires on energy consumption; information and communication technologies; and survey on travel expenses.

Response burden leads to refusal to take part or to dropouts. The BNS is looking into ways to reduce the response burden, for example by scanning cash register receipts. Currently, the approach would be CAPI first for new and CAWI for recurrent & further data collection, e.g. reporting on daily expenditures etc.). At the same time, the BNS plans to have a web first followed by an in-person visit (CAPI). An alternative would be in-person-visit-at-first round follow-up by CAWI or CATI round.

Another issue is that the sample size does not allow for district level statistics. Moving away from PAPI, will reduce staff being involved in data entry but will need more capacity towards quality control. More phone, chatbot/online help is needed. Online instruction videos are planned (and partially already available).

The ICC is involved in producing multi-mode forms. Testing of CAPI, CATI and especially CAWI should be done jointly with methodologists and field workers involved in Household Surveys and the ICC.

Living Conditions/Household Budget surveys are complex and, for respondents, time consuming. Non-response and item non-response and reporting errors are serious issues with such surveys. The quality of the information is therefore a challenge. Reducing the response

burden is therefore particularly important. Using Apps and other tools to make reporting automatic or easier is important as well as using alternative data sources.

## **Recommendations**

74. The BNS and ICC should collaborate closely in developing CAPI and CAWI forms and platforms, especially instructions to respondents are important, but also routings and direct error correction.
75. The BNS should consult with other countries to identify tools and practices that reduce the response burden or to use more sources to collect information automatically.

## **Chapter 18: Statistics for the Sustainable Development Goals**

### **Overview**

The BNS has been steadily increasing the volume of data produced for measuring and monitoring progress towards the Sustainable Development Goals (SDGs). It has contributed to Voluntary National Reviews of SDGs in 2019 and 2022. Since 2022, responsibility for coordinating SDG statistics activities within the BNS has been given to a new “International Cooperation and Sustainable Development Department”, which is also responsible for gender statistics, statistics on children and international cooperation.

The BNS maintains a National Reporting Platform for SDG statistics based on the free and open-source Open SDG software tool. The international standard SDMX format has been implemented for data and metadata transfers, and there are plans to increase the availability of metadata. A compendium publication of SDG statistics is also currently prepared every 2 years.

The Kazakh government has adopted a set of 262 indicators, of which 190 correspond to the globally agreed indicator set. The remainder are a mixture of national and proxy indicators. Some of the rest of the global indicators are not relevant for Kazakhstan (e.g. related to maritime areas). Data for 203 indicators are currently available, and there is a plan in place to add data for the remaining 59. It is worth noting that two-thirds of all indicators adopted by the Kazakh government are developed by state organs other than the BNS.

In the context of the national Roadmap for SDG Statistics 2020-2022 (based on the model provided by the Conference of European Statisticians), there has been an increased focus on providing disaggregated data. Breakdowns of summary data are now available for now available for 123 indicators. A new Roadmap will include work to expand the range of disaggregated data available.

As is the case in many other countries, there is growing pressure from many sources to produce greater volumes of data on SDG implementation. No country has the resources to produce all the data requested by different users, so some prioritisation is always needed. In Kazakhstan, the BNS has recently come under pressure to provide forecasts for some SDG indicators. This would require the development of new methodologies, and would be very resource intensive, therefore the BNS will need to carefully evaluate the costs and benefits of going down this route. The Global Assessment Team feels that the available resources might be better used to increase the number of indicators for which data are available, as well as the number of disaggregations that can be provided for key indicators.

For some indicators, for example on persons living with disability, BNS has concerns about their international comparability. In other cases, values are significantly different from international estimates. A thorough analysis of the methodology, including at the level of questionnaire and wording, might reveal the cause of discrepancies.

### **Recommendations**

76. The BNS should continue with plans to develop a new Roadmap for SDG Statistics, with a focus on filling current data gaps.

77. The BNS should carefully prioritise new demands, for example for forecast data, weighing up costs and benefits and recognising that it will not be possible to meet all user requests.
78. In case of unexpected values or significant discrepancies with international estimates, the BNS should contact specialized agencies to compare in detail methodologies, including input data and exact survey design.