

Agency for Strategic planning and reforms of the Republic of Kazakhstan Bureau of National statistics

# **Quality report**

The tables "Resources - Use" of the Republic of Kazakhstan for 2019 Content

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#### S.1 Contact details

S.1.1 Organization

Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan

S.1.2 Structural subdivision

Department of National Accounts

S.1.3 Name of contact person

Nursultanova Ainur Abylkhairovna

S.1.3.1 Name of the head of the responsible structural unit

Nakipbekov Asset Erikovich

S.1.5 Contact person's mailing address

010000, Kazakhstan, Nur-Sultan, Left Bank, st. Mangilik el 8, 4 entrance

S.1.6 E-mail address of the contact person

ai.nursultanova@aspire.gov.kz

# S.1.7 Contact person's phone number

- +7 (7172) 74-95-26
- S. 2 Introduction-Relevance

Tables "Resources - Use" (hereinafter - TRU) are one of the main components of the integrated structure of the System of National Accounts (hereinafter - SNA), describing the supply of goods and services in the economy, their use, the formation of added value and serving as the basis for constructing tables "Costs - Release "(hereinafter - TCR).

For the purposes of compiling TRU, concepts, definitions and classification systems of statistical units, types of economic activities, products, used in international practice and accepted in the national economy, are used.

Currently, the relevance of the formation of TRU is due to the need for economic analysis, building a macroeconomic model for forecasting and forming a global value chain.

The main users are government bodies, research institutes and international organizations such as the Eurasian Economic Commission, the Organization for Economic Cooperation and Development.

- S.3 Updating metadata
- S.3.1. Latest confirmation of updated metadata
- S.3.2. Last metadata placement

- S.3.3. Latest metadata update
- S.4. Presentation of statistical information
- S.4.1 Data description

The TRU structure includes two closely related tables - the resource table and the usage table.

The supply table describes the supply of goods and services in the economy. The supply or resources of the economy are made up of the output of products produced in the country and imports. The output of goods and services is valued at basic prices. Each column of the resource table provides information on the production of goods and services in the industry, produced by primary and secondary activities.

The usage table is a rectangular table with three quadrants, two at the top and one at the bottom. The upper left quadrant consists of a sub-matrix showing the use of different products by different groups of producing units. In other words, this quadrant contains intermediate consumption data disaggregated by product in rows and by industry in columns. The upper right quadrant consists of final consumption, gross capital formation, and exports. The lower left quadrant contains value added data disaggregated to show elements of the generation of income account, that is, wages, gross margins or gross mixed income, and production taxes minus production subsidies

#### S.4.2 Classification system

General classifier of economic activities (NK RK 032019), harmonized with the international classifier NACE rev. 2.

Product classifier by type of economic activity (GK RK 04-2008) harmonized with the international classifier CPA 2008.

The classifiers are available on the website of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan www.stat.gov.kz in the "Classifiers" section.

#### S.4.3 Sectoral coverage

Resident institutional units, which together make up the country's economy, are grouped into five mutually exclusive institutional sectors: the sector of non-financial corporations; financial corporations sector; public administration sector; the household sector; the sector of non-profit organizations serving households. TRUs are formed as a whole for the economy.

#### S.4.4 Statistical concepts and definitions

A consumer price use table consists of a set of product balances covering all products available in the economy, organized in a rectangular matrix with groups of products valued at purchasers' prices, which are reflected in rows and columns showing the assignment of products to different uses.

The supply table at purchasers' prices consists of a rectangular matrix with rows representing the same product groups as in the corresponding use table and columns representing the inflow of domestically produced inputs valued at basic prices, imports, and valuation adjustments required. to obtain the total value of the resources of each product group, valued at buyers' prices.

The basic principle for the formation of these tables is that the total amount of resources should be equal to the total volume of use of goods and services when the measurement is carried out at the same price:

Output + imports = intermediate consumption + final consumption + gross capital formation + exports.

And also, the total output by industry in the resource table is equal to the amount of costs (including the components of Gross Value Added), that is, output at basic prices is equal to the sum of intermediate consumption and GVA.

#### S.4.5 Statistical object

Goods and services.

Economic activities.

#### S.4.6 General population (principle of selection of survey units)

Not applicable.

#### S.4.7 Territorial coverage

Republic of Kazakhstan as a whole.

S.4.8 Time coverage

2001-2019

- S.4.9 Base period
- S.5 Unit of measure

Thousand Kazakh tenge

#### S.6 Reporting period

year

S.7 Legal basis

S. 7.1 Legal framework

1. Law of the Republic of Kazakhstan dated March 19, 2010 No. 257-IV "On state statistics".

2. The plan of statistical work, approved in accordance with the established legislation.

3. Schedule for the dissemination of official statistical information, approved by the Order of the Head of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan.

4. Order of the Chairman of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan dated October 1, 2019 No. 10 "On approval of the Methodology for compiling the" Resources-Use "and" Input-Output "tables".

S.8 Privacy and data protection

#### S. 8.1 Privacy Policy

1. Article 8 of the Law of the Republic of Kazakhstan dated March 19, 2010 No. 257-IV "On state statistics", in accordance with which a guarantee of confidentiality and protection of the submitted data by respondents is ensured.

2. Article 28 of the Entrepreneurial Code of the Republic of Kazakhstan dated October 29, 2015 No. 375-V ensures the protection of information constituting a commercial secret.

3. Information security policy (hereinafter referred to as the Policy), approved by the Order of the Head of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan dated February 10, 2021 No. 20, defines the goals, objectives, guidelines and practical techniques in the field of information security of the Bureau of National statistics. The main goal of the Policy is to ensure the availability of official statistical information, the confidentiality of information stored and processed on the computer facilities of the Bureau of National Statistics under the conditions of its integrity and authenticity.

S.8.2 Privacy-handling of data

The rules for the provision and use for scientific purposes of databases in a de-identified form, approved by order of the Chairman of the Agency of the Republic of Kazakhstan on statistics dated July 2, 2010 No. 168. Registered with the Ministry of Justice of the Republic of Kazakhstan on August 13, 2010 No. 6388.

S.9 Publication policy

# S.9.1 Publications calendar

Clause 1, Clause 2 of Article 26 of the Law of the Republic of Kazakhstan "On State Statistics" dated March 19, 2010 No. 257-IV.

The statistical work plan and the Schedule for the dissemination of official statistical information are posted on the website of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan www.stat.gov.kz in the "Home" / "Basic Documents" section.

### S.9.2 Access to the Graph

Simultaneous and equal access for all users on the website of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan www.stat.gov.kz in the section "Home" / "Basic documents".

S.9.3 User access

The website of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan www.stat.gov.kz. Official statistics / By industries / National accounts statistics.

S.10 Propagation frequency

year

- S.11 Dissemination format, accessibility and clarity
- S.11.1 News publications
- S.11.2 Publications

The statistical bulletin "Tables" Resources - Use "of the Republic of Kazakhstan" in Excel format in Kazakh and Russian languages is published annually on the website of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan www.stat.gov.kz in the section Official statistics / By industry / Statistics National Accounts / Statistics / Bulletin.

S.11.3 Databases in on-line mode

Information and analytical system "Taldau"> National accounts statistics

S.11.3.1 AC1. Data tables-consultation

Not implemented.

S.11.4 Access to microdata

Dissemination of data collected for the preparation of official statistics is based on the requirements provided for in Article 8 of the Law of the Republic of Kazakhstan dated March 19, 2010 "On State Statistics", in accordance with which the confidentiality and protection of the submitted data by respondents is guaranteed.

Access to microdata and anonymity of microdata are governed by the Rules for the provision and use of databases for scientific purposes in a de-identified form, approved by order of the Chairman of the Agency of the Republic of Kazakhstan on statistics dated July 2, 2010 No. 168. Registered with the Ministry of Justice of the Republic of Kazakhstan on August 13, 2010 No. 6388.

- S.11.5 Other
- S.11.5.1 AC2. Metadata consultation

Not implemented.

## S.12 Availability of documentation

S. 12.1 Methodology Documentation

1. System of National Accounts, 2008 (published by the Commission of the European Communities EUROSTAT, International Monetary Fund (IMF), Organization for Economic Cooperation and Development (OECD), United Nations (UN), World Bank). https://unstats.un.org/unsd/nationalaccount / docs / SN A2008Russian.pdf.

2. Guidelines for the compilation of input-output tables and their analysis (United Nations (UN)).

3. Order of the Chairman of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan dated October 1, 2019 No. 10 "On approval of the Methodology for compiling the" Resources-Use "and" Input-Output "tables".

# S. 12.2 Quality documentation

 Quality policy approved by the Head of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan on November 16, 2020.
Documented information of the quality management system: Quality manual; Documented procedures; Instructions; Process maps.

 Typical methodology for describing the process of production of statistical information by state bodies, approved by the Order of the Chairman of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan dated March 30, 2015 No. 53.
Methodology for assessing the quality of official statistical information, approved by the Order of the Chairman of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan dated May 23, 2018 No. 63.

# S.13 Quality control

# S.13.1 Quality assurance

The quality and reliability of data from national accounts statistics is supported by generally accepted procedures:

- formation in accordance with international recommendations to ensure the comparability of data in accordance with international standards;

- use of standard statistical classifications of goods, products, services;
- conducting a comparative analysis of statistical data.

# S.13.2 Quality control

The quality is ensured by the strict application of the concepts of the international standard SNA 2008 and the reliability of the data.

#### S.14 Relevance

#### S.14.1 Needs

Main users:

state bodies (Ministry of National Economy of the Republic of Kazakhstan and others);

research institutes (Institute for Economic Research and others);

international organizations (EAEC, OECD and others);

university teachers, students and others.

S.14.2 User Satisfaction

The Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan annually conducts a survey of users of official statistical information according to the questionnaire Q-002 "Survey of users".

S.14.3 Completeness / Rl. Data completeness-share

In accordance with the international standard SNA 2008.

S.15 Accuracy and reliability (to be completed according to the type of

observation)

S.15.1 Overall accuracy

The accuracy of the initial data is controlled by assessing the methodological soundness of data sources and adherence to methodological recommendations.

S.15.2 Sampling errors - indicators / A1.

Not applicable.

S.15.3 Non-sampling error

Not applicable.

S.15.3.1 Coverage error

Not applicable.

S.15.3.1.1 A2.Excess coverage-share

Not applicable.

S.15.3.1.2 A3.Common Units-Ratio

Not applicable.

S.15.3.3 No response errors

S.15.3.3.1 A4. Absence unit-fraction

Not applicable.

S.15.3.3.2 A5.No answer item - share

Not applicable.

S.16 Timeliness and punctuality

S.16.1 Timeliness

S.16.1.1 TP1.Waiting period - first results

TRU is published 11 months after the reporting period (T + 11).

S.16.1.2 TP2. Waiting Period - Latest Results

The first results are final.

- S.16.2 Punctuality
- S.16.2.1 Punctuality / TP3

The data are published and disseminated in accordance with the Statistical Work Plan and the Schedule for the dissemination of official statistical information.

- S.17 Comparability
- S.17.1 Geographic comparability

Internationally comparable, as calculations are carried out in accordance with the 2008 SNA methodology.

S.17.1.1 Asymmetry by mirror flow statistics - coefficient / CC1

Unacceptably.

S.17.2 Length of comparable time series / CC2

Published since 2001.

- S.18 Consistency
- S.18.1 Consistency, external, cross

Calculations are carried out in accordance with the methodology of the System of National Accounts 2008 prepared by the International Monetary Fund (IMF), the Organization for Economic Cooperation and Development (OECD), the Statistical Office of the European Communities (Eurostat), the United Nations (UN) and the World Bank, which ensures the application uniform concepts, definitions, classifications and assessment methods.

# S.18.2 Internal consistency

To form TRU, data from industry statistics, structural statistics, as well as summary data of the National Bank of the Republic of Kazakhstan and the Ministry of Finance of the Republic of Kazakhstan are used.

The main and very important problem in the formation of TRU is the lack of sources of information at a detailed level on trade and transport margins, VAT, intermediate consumption, and the use of imported products. Conducting a survey of all business entities to obtain information on missing data entails a very large burden on respondents, and is also an expensive and very time-consuming process. In this regard, the following ways of evaluating them are used.

To obtain the "resources = use" identity, it is necessary to estimate the resources in the consumer price based on the producer price, that is, the availability of components for trade, transport margins and VAT is required. Currently, in order to obtain trade, transport margins and VAT for each type of product by type of consumption, estimates are made from the side of use. The method for calculating them is described in the Methodology for Compiling the "Resources - Use" and "Input - Output" tables.

To describe the structure of intermediate consumption by type of economic activity in the context of products in the national statistical practice, data from the state statistical observation for large and medium-sized enterprises "Report on the financial and economic activities of the enterprise" (index 1-PF, periodicity - annual) are used. According to the instructions of this form, enterprises show 20-30 names of the main types of products used, consumed in the production process, accounting for at least 50% of the total amount of goods and services used. In TRU, regardless of the fact that the production process may differ for large, medium and small enterprises, the resulting structure based on 1-PF data is used for the entire economy as a whole, of course, this affects the quality of the direct and total cost coefficients in the TIO.

Previously, to obtain a matrix of the use of imported products, the vector of imports was proportionally distributed over the structure of use at basic prices, since there are no specific data sources to determine where and how imported goods were used. In 2020, to form a matrix for the use of imported products for 2019, a classifier by broad economic categories (hereinafter - BEC) was used. The BEC classifier was developed by the Statistical Division of the UN Secretariat and consists of 19 main categories. The UN Statistical Committee has developed special keys for the transition between the Harmonized System (HS) and BEC codes. Due to the fact that the EAEU TNVED code system complies with the international Harmonized system, the existing transition system can be used to form a matrix for the use of imports. In addition, it serves as a means of converting customs statistics on international trade into categories such as capital goods, intermediate goods, and consumer goods. Applying the BEC classifier to customs statistics for 2019, one can see that 29.11% are imported consumer goods, 29.63% are imported capital equipment and 41.27% are goods that are used for production.

	Means of production (capital equipment)	Intermediate goods	Consumer goods	Products not included in other categories	Total
Export, %	1,47	96,02	2,51	0,00	100,00
Import, %	29,63	41,27	29,11	0,00	100,00

In practice, after substituting all the original data into the resource table and into the use table, the balance equation "resources = use" is not satisfied. The discrepancy in data is the result of inconsistency in information received from different sources, incomplete presentation of data, incorrect distribution by type of product or other reasons. The discrepancy between supply and use was about 13% in 2019. More detailed information is presented in the following table:

Sections	Name	%
		discrepancies
А	Agriculture, forestry and fishery products	10,43
В	Mining products	8,92
С	Manufacturing products	7,21
D	Electricity, gas, steam and air conditioning	17,18
	Water supply; sewerage system, waste collection and disposal	
E	services	9,56
F	Construction works	14,29
	Wholesale and retail trade services; car and motorcycle repair	
G	services	44,62
Н	Transport, storage services	31,94
Ι	Accommodation and catering services	40,31
J	Information and communication services	31,68
K	Financial and insurance services	-8,89
L	Real estate services	17,50
М	Professional, scientific and technical services	19,49
	Administrative and support services	
Ν		2,05
	Public administration and defense services; compulsory social	
0	security services	0,07
Р	Educational services	20,33
	Services in the field of health care and social services for the	
Q	population	54,46
R	Services in the field of arts, entertainment and recreation	57,31
S	Other services	29,81
	Services of households employing domestic workers and	
	services for the production of goods and services for their own	
Т	use	0,00
U	Services of extraterritorial organizations and bodies	-
	Total	13,00

As can be seen from the table, most of the statistical discrepancies are positive, which means that the use side is underestimated or the resource part is increased.

Balance adjustments are made to TRU to eliminate discrepancies. Balancing is done manually for the second quadrant as well as for each product until the discrepancy is less than 5%. Further, balancing is carried out using a program written in macros in Excel mode. Its purpose is to distribute the difference, between the supply and use tables, in the intermediate consumption matrix proportionally across the rows as well as across the columns.

In the process of verification, the results obtained are compared with the indicators of the accounts of production, education, use of income. The discrepancy between GDP by production method and TRU was 2.9% in 2019.

## S.19 Load

Supply and use tables are generated by the Bureau of National Statistics staff in Excel. When forming these tables, departmental and administrative data are also used. Duplication with other statistical work - no.

## S.20 Revision of data

S.20.2 Revision of data / A6

The revision is carried out in cases of changes in the methodology, classifier.

- S.21 Processing of statistical data
- S.21.1 Initial data

The initial data for the formation of TRU are: industry

statistics data:

- volumes of products manufactured and services rendered;
- household income and expenses, retail trade;
- investments in fixed assets;
- other data;

departmental and administrative data:

- balance of payments, balance of services, etc. (National Bank of the Republic of Kazakhstan);

- report on the execution of the state budget, customs statistics, etc. (Ministry of Finance of the Republic of Kazakhstan);

structural statistics data:

- financial and economic activities of enterprises;

- information about the state of fixed assets;

indicators of accounts of production, education, use of income.

S.21.2 Inspection frequency

year

S.21.3 Method (method) of collecting primary statistical data

The results of national statistical observations were received in the form of an Excel table from the sectoral departments of statistics and the RSE IVC. Departmental and administrative data were obtained in the form of an Excel spreadsheet within the framework of existing joint orders on the exchange of information with government bodies, upon requests and from the official websites of data sources.

S.21.4 Reliability of primary statistical data

Analysis of data obtained from sectoral departments of statistics and administrative sources is carried out. During the verification process, the results obtained are compared with the previous period.

S.21.5 Imputation - share / A7

Not applicable.

S.21.6 Adjustment

Not applicable.

S.21.6.1 Seasonal adjustment

Not applicable.

S.22 Notes

Continue work to ensure the quality of statistical data.