



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

# **Quality report**

*"Supply - Use" tables*  
*of the Republic of Kazakhstan for 2022*

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## S.1 Contact details

### S.1.1 Organization

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

### S.1.2 Structural subdivision

Department of National Accounts

### S.1.3 Contact name

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

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## S.2 Introduction-Relevance

The "Supply - Use" tables (further SUT) are one of the main components of the integrated structure of the System of National Accounts (hereinafter referred to as the SNA), describing the supply of goods and services in the economy, their use, value added and serving as a basis for the construction of "Input-Output" tables (further IOT).

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

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

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

## S.3 Metadata Update

### S.3.1 Last confirmation of updated metadata

Not applicable.

### S.3.2 Last metadata placement

Not applicable.

### S.3.3 Last metadata update

Not applicable.

## S.4 Presentation of statistical information

### S.4.1 Data Description

Structure SUT includes two closely interrelated tables - the supply table and the use table.

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

The use table is a rectangular table with three quadrants two at the top and one at the bottom. The upper left quadrant consists of a submatrix 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 accumulation and exports. The lower left quadrant contains value added data, disaggregated to show the elements of the income generation account, i.e. wages, gross profit or gross mixed income and taxes on production minus subsidies on production.

### S.4.2 Classification system

The general classifier of types of economic activity (NC RK 032019), harmonized with the international classifier NACE rev.2.

Classifier of products by types of economic activity (CC RK 04-2008) harmonized with the international classifier CPA 2008.

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](http://www.stat.gov.kz) in the “Statistical Classifications” 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; the sector of financial corporations; the sector of public administration; the sector of households; the sector of non-profit organizations serving households.

SUT are formed in the economy as a whole.

### S.4.4 Statistical Concepts and Definitions

The customer price use table consists of a set of product balances covering all products available in the economy, organized in the form of a rectangular matrix

with groups of products priced at customer prices, which are reflected in rows and columns showing the attribution of products to different types of use.

The table of supply in buyers' prices consists of a rectangular matrix with rows that reflect the same product groups as in the corresponding table of use, and columns that reflect the receipt of resources of domestic production, estimated at basic prices, imports and valuation adjustments necessary to obtain the total amount of resources of each product group, estimated in the prices of buyers.

The basic principle for generating the SUT is that the total quantity of resources should equal the total utilization of goods and services when measured at the same price:

Output + imports (= all supply) = intermediate consumption + exports + final consumption + gross capital formation (= all use).

And also, the total output of the industry in the supply table is equal to the amount of costs (including components of Gross value added), that is, output in basic prices is equal to the sum of intermediate consumption and GVA.

#### S.4.5 Statistical object

Goods and services.

Types of economic activity

#### S.4.6 Frame (principle for selecting survey units)

Not applicable.

#### S.4.7 Territorial coverage

The Republic of Kazakhstan as a whole.

#### S.4.8 Time coverage

2001-2022

#### S.4.9 Base period

Not applicable.

#### S.5 Unit

Thousand Kazakh tenge

#### S.6 Reporting period

Year

#### S.7 Legal basis

##### S.7.1 Legal basis

1. Law of the Republic of Kazakhstan dated March 19, 2010 No. 257-IV "On State Statistics".
2. Plan of statistical work, approved in the established legislative order of the Republic of Kazakhstan by the Order of the Head of the Bureau of

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

3. The schedule for the dissemination of official statistical information, approved by 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 tables " Supply - Use " and "Input-Output"".

## 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", according to which the confidentiality and protection of the data submitted by respondents is guaranteed.
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 trade secret.
3. The Information Security Policy (hereinafter referred to as the Policy), approved by the Order of the Head of BNS ASPR of the Republic of Kazakhstan dated February 10, 2021 No. 20, defines the goals, objectives, guidelines and practices in the field of ensuring information security of the Bureau. The main goal of the Policy is to ensure the availability of official statistical information, the confidentiality of information stored and processed on the Bureau's computer facilities under conditions of its integrity and authenticity.

### S.8.2 Privacy – data handling

Rules for the provision and use of databases in de-identified form for scientific purposes, 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 Publication 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 Unified Platform of Internet Resources for Government Agencies [www.gov.kz](http://www.gov.kz) in the section of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the

Republic of Kazakhstan in the section "Main" / "Activities" / "Main documents" / "Plans".

The plan of statistical work and the Schedule of dissemination of official statistical information are posted on the website of the Unified Platform of Internet Resources for Government Agencies (EPIR GO) [www.gov.kz](http://www.gov.kz) in the section of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan in the section "Main" / "Activities" / "Main documents" / "Plans".

#### S.9.2 Access to the Chart

Simultaneous and equal access to all users on the website of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan in the section "Main" / "Activities" / "Main documents" / "Plans".

#### S.9.3 User access

Website of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan [www.stat.gov.kz](http://www.stat.gov.kz) Main / Economics / Statistics of National Accounts.

#### S.10 Frequency of propagation

Year

#### S.11 Distribution format, accessibility and clarity

##### S.11.1 News publications

##### S.11.2 Publications

The statistical bulletin «Supply - Use» tables of the "Republic of Kazakhstan" in Excel format in Kazakh, Russian and English 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](http://www.stat.gov.kz) in the section Home / Economics / National Accounts / Publications / Bulletin, and Home / Economics / National Accounts / Electronic tables.

##### S.11.3 Online data bases

Information and analytical system "Taldau" > National accounts statistics.

##### S.11.3.1 AC1. Data tables- consultations

Not implemented.

##### S.11.4 Access to microdata

Dissemination of data collected for the purpose of preparing 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

a guarantee of confidentiality and protection of the data provided by respondents is ensured.

Rules for the provision and use of databases in de-identified form for scientific purposes, 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

Not applicable.

##### S.11.5.1 AC2. Metadata-consultations

Not implemented.

#### S.12 Documentation availability

##### 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/SNA2008Russian.pdf>.

2. Guidelines for the compilation of input-output tables and their analysis (by the 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 tables " Supply - Use".

##### S.12.2 Quality documentation

1. Standard methodology for describing the process of producing statistical information by government bodies, approved by 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.

2. "Methodology for assessing the quality of official statistical information", approved by 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. Registered with the Ministry of Justice of the Republic of Kazakhstan on June 7, 2018 No. 17011.

#### S.13 Quality management

##### S.13.1 Quality Assurance

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



- formation according to international recommendations to ensure comparability of data in accordance with international standards;
- use of standard statistical classifications of goods, products, services;
- a comparative analysis of statistical data is carried out.

#### S.13.2 Quality assessment

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:

National Bank of the Republic of Kazakhstan;

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

research institutes (Institute of 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 Reform of the Republic of Kazakhstan annually conducts a survey of users of official statistical information according to questionnaire Q-002 “User Survey”.

##### S.14.3 Completeness/R1. Data completeness-share

In accordance with the international standard SNA 2008.

#### S.15 Accuracy and reliability (to be completed taking into account the type of observation)

##### S.15.1 Overall Accuracy

The accuracy of the source data is controlled by evaluating the methodological validity of the data sources and compliance with 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. Unit of absence - share

Not applicable.

S.15.3.3.2 A5. No response item - share

Not applicable.

S.16 Timeliness and punctuality

S.16.1 Timeliness

S.16.1.1 TP1.Waiting period - first results

SUT are 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

Data are published and disseminated within the time frames in accordance with the Statistical Work Plan and the Dissemination Schedule of Official Statistical Information, approved by order of the head of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan.

According to the Plan of statistical work for 2023, the bulletin "Tables " Supply - Use" of the Republic of Kazakhstan for 2022" was published on November 29, 2023.

S.17 Comparability

S.17.1 Geographical comparability

Comparable at the international level, since calculations are carried out in accordance with the SNA 2008 methodology.

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

Unacceptable.

S.17.2 Duration 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 2008 System of National Accounts methodology prepared by the International Monetary Fund (IMF), the

Organization for Economic Co-operation and Development (OECD), the Statistical Office of the European Communities (Eurostat), the United Nations (UN) and the World Bank, which ensures the application common concepts, definitions, classifications and assessment methods.

#### S.18.2 Internal consistency

Data from industry statistics, structural statistics, as well as summary data from the National Bank of the Republic of Kazakhstan and the Ministry of Finance of the Republic of Kazakhstan are used to generate the SUT.

The main and very important problem in the formation of the SUT 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 heavy burden on respondents, and is also an expensive and very time-consuming process. In this regard, the following ways of evaluating them are used.

##### Estimated indicators

To obtain the identity "supply = use", it is necessary to estimate the resources in the consumer's price based on the producer's 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 use side. The method of their calculation is described in the Methodology for compiling the tables "Supply - Use" and "Input - Output", approved by Order No. 10 of the Chairman of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan dated October 1, 2019.

##### Intermediate consumption

To describe the structure of intermediate consumption by type of economic activity in the context of products, national statistical practice uses data from the national statistical observation for large and medium-sized enterprises "Report on financial and economic activities of the enterprise" (index 1- PF, frequency – annual). According to the instructions of this form, enterprises show 20-30 names of the main types of products used, consumed in the production process, amounting to at least 50% of the total amount of goods and services used. SUT, regardless of the fact that the technological process of production 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 direct and full cost coefficients in IOT.

## Matrix of the use of imported products

The use of goods and services includes the supply of domestic and imported products. Therefore, it is necessary to separate the use of imported goods and services from the use of domestic goods and services. Since there are no sources of information on the formation of a matrix for the use of imported products, it was decided to use a Classifier for broad economic categories (hereinafter referred to as BEC). The BEC classifier was developed by the Statistical Department of the UN Secretariat and consists of 19 main categories. The UN Statistical Committee has developed special transition keys between the Harmonized System (HS) and the BEC codes. Due to the fact that the EAEU HS code system corresponds to the international Harmonized system, the existing transition system can be used to form an import usage matrix. In addition, it serves as a means of converting customs statistics on international trade into categories such as means of production (capital equipment), intermediate goods and consumer goods. Applying the BEC classifier to the customs statistics data for 2022, it can be seen that consumer goods were imported by 32.22%, capital equipment was imported by 24.12% and goods used for production were imported by 43.64%.

	<b>Means of production (capital equipment)</b>	<b>Intermediate goods</b>	<b>Consumer goods</b>	<b>Products not included in other categories</b>	<b>Total</b>
Export,%	2,13	93,67	4,20	0,00	100,00
Import,%	24,12	43,64	32,22	0,02	100,00

## Balance sheet adjustments

In practice, after substituting all the source data into the resource table and the usage table, the balance equation " supply = use " is not fulfilled. The discrepancy in data is the result of inconsistency of information received from different sources, incomplete presentation of data, incorrect distribution by product type or other reasons.

The discrepancy between supply and use was 7.9% in 2022. More detailed information is provided in the following table:

<b>Sections</b>	<b>Name</b>	<b>% of discrepancies</b>
A	Products of agriculture, forestry and fisheries	18,63
B	Mining industry products	-2,15
C	Manufacturing industry products	3,61
D	Electricity, gas, steam and air conditioning	14,89
E	Water supply; sewerage system, waste collection and disposal services	9,08
F	Construction works	15,08
G	Wholesale and retail trade services; car and motorcycle repair services	46,32
H	Transportation and warehousing services	-0,08

I	Accommodation and catering services	40,81
J	Information and communication services	25,78
K	Financial and insurance services	-7,24
L	Real estate services	11,42
M	Professional, scientific and technical services	-22,83
N	Administrative and support services	6,11
O	Public administration and defense services; compulsory social security services	0,00
P	Educational services	32,37
Q	Public health and social services	66,65
R	Services in the field of art, entertainment and recreation	40,05
S	Other services	54,47
T	Services of households employing domestic workers and services for the production of goods and services for their own consumption	-3,64
U	Services of extraterritorial organizations and bodies	
	Total	7,88

As can be seen from the table, most statistical discrepancies have a positive sign, which means that there is an underestimation of the use side or the supply part has been increased.

To eliminate discrepancies, balance adjustments are made in SUT. Balancing is performed manually for the second quadrant for each type of product, as well as for intermediate consumption, until the discrepancy is reduced by less than 5%. Next, balancing is performed using a program written in macros in Excel mode. Its task is to distribute proportionally across the rows, as well as across the columns in the intermediate consumption matrix, the remaining difference between the supply and use tables.

During the verification process, the results obtained are compared with the indicators of the accounts of production, education, and income use. The discrepancy between GDP by production and SUT was 0.3% in 2022.

#### NPISH Sector

In 2023, the statistical observation "One-time survey of non-profit organizations" (hereinafter referred to as form 1-NCO) made it possible to obtain data from non-profit units in the NPISH sector for 2022, which are necessary for building the System of National Accounts of the Republic of Kazakhstan, as well as SUT. This undoubtedly affects the quality of the indicators generated in this sector, since earlier an assessment (extrapolation) was made on the basis of statistical observation data conducted in 2009.

Based on the results of the data obtained, non-market output and final consumption costs of non-profit organizations serving households are calculated.

#### S.19 Load

Tables of supply and use are generated by the staff of the Bureau of National Statistics in Excel.

Departmental and administrative data are also used in the formation of these tables.

There is no duplication with other statistical works.

## S.20 Data revision

### S.20.2 Data revision/A6

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

## S.21 Processing of statistical data

### S.21.1 Input data

The initial data for the formation of the SUT are:

data from industry statistics:

- the volume of products produced 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, and income use.

### S.21.2 Survey frequency

Year

### S.21.3 Method (method) for collecting primary statistical data

The results of national statistical observations were obtained in the form of an Excel spreadsheet from the sectoral departments of statistics and the RSE of the IWC. 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 agencies, upon request and from official data source sites.

#### S.21.4 Reliability of primary statistical data.

The analysis of data received from industry departments of statistics and from 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 to work on ensuring the quality of statistical data.