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Approved by the order of the Chairman of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

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no. 171

**Methodology for accounting for changes in inventories**

1. **General provisions**
2. The methodology for accounting for changes in inventories (hereinafter - Methodology) was developed taking into account the principles and recommendations of the System of National Accounts 2008 (hereinafter - SNA-2008), prepared by the International Monetary Fund (IMF), the Organization for Economic Cooperation and Development (OECD), the Bureau of Statistics European Communities (Eurostat), the United Nations (UN) and the World Bank.
3. This Methodology is intended for use by the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan when compiling the capital account in accordance with international standards and is used exclusively for the purposes of the System of National Accounts .
4. The purpose of this Methodology is to determine approaches for calculating indicators characterizing changes in inventories, as well as improving the quality of calculations of macroeconomic indicators as part of the implementation of SNA-2008.
5. This Methodology uses the main definitions:
6. work in progress is the output produced by an enterprise that is not yet sufficiently processed to be in the state in which it is supplied to other institutional units. Work -in -progress is subdivided into work-in-progress of cultivated biological resources and other work-in-progress.
7. military tangible assets- These are disposable objects such as ammunition, projectiles, rockets, bombs delivered by weapons or weapons systems;
8. other work in progress is the output of products (other than cultivated biological resources) that is not yet sufficiently processed to be in the state in which it is supplied to other institutional units;
9. finished goods are manufactured goods that the producer does not intend to undergo further processing before supplying them to other institutional units;
10. goods for resale are goods purchased by businesses, such as wholesalers or retailers, for the purpose of reselling them to customers;
11. tangible assets are produced assets consisting of goods and services that appeared in the current period or an earlier period and are intended for sale, use in production or for other uses at a later date;
12. work in progress of cultivated biological resources is the release of resources that have not yet reached the productive state in which they are supplied to other institutional units;
13. raw materials and materials are products that are held by the enterprise in inventories and are used as intermediate consumption in production.
14. **Accounting procedure for changes in inventories according to SNA-2008**
15. The change in inventories is defined as the value of additions to inventories less the value of disposals from inventories and less the value of any current losses of goods held in inventories during the reporting period.
16. At the same time, they are evaluated at market prices that are valid at the time of receipt or withdrawal, respectively. Inventories of purchased inventories are valued at purchasers' prices. Stocks of material circulating assets of own production are valued at basic prices.
17. The change in inventories is the sum of raw materials, finished products, military inventories , goods for resale , work in progress, work in progress of cultivated biological resources, and other work in progress:
18. enterprises have in stocks various types of goods, called raw materials and materials. The most common of these are: fuel, industrial and agricultural raw materials and materials, semi-finished products, assembly components, packaging materials, food products, office supplies. Raw materials do not include works of art or stocks of precious metals or stones purchased by businesses as valuables. However, there are some producers who use gold, diamonds as an intermediate consumption in the production of other goods or services, such as jewelers or dentists. Stocks of gold, diamonds intended for use in production are reflected in the accounts as raw materials;
19. work-in-progress takes many forms, from unripe crops to unfinished films or computer programs. Although work in progress is an output that has not reached the state in which it is delivered to other units, ownership of it, however, is transferable if necessary. For example, when transferred in case of special circumstances, such as the liquidation of an enterprise. Construction in progress and major repairs in progress are also classified as work in progress if they are produced without a contract with the customer and if payment has not been received for them. If there is a construction contract, as well as if it is carried out in an economic way, construction in progress and incomplete overhaul are related to fixed capital;
20. in the work-in-progress of cultivated biological resources, it is necessary to distinguish between single-use plants, trees and livestock, which produce products only once (when plants are cut, trees are uprooted, and livestock are slaughtered for meat), and trees (including vines and shrubs) and livestock, which used repeatedly or continuously for more than one year to produce products such as fruits, nuts, resin, milk, wool, energy, transportation services and entertainment ;
21. other work in progress consists of the output of products (other than cultivated biological resources) that are not yet sufficiently processed to be in the state in which they are supplied to other institutional units;
22. stocks of finished products can only be held by enterprises that produce them. Finished products that are part of inventories are valued at the basic prices of goods that existed at the time they entered inventory; Finished products retired from inventories are valued at the basic prices prevailing at the point in time when they were retired. Finished products are considered finished when their producer has completed the intended production process, even though they may subsequently be used for intermediate consumption in other production processes;
23. most disposable objects for military purposes are accounted for as tangible assets, but some types of missiles with a very high destructive capacity are considered as fixed assets due to their ability to provide a long-term service in deterring aggressors;
24. goods for resale entering the inventories of enterprises are valued at purchasers' prices, actual or imputed. These prices include any additional transport costs paid by the enterprises (other than the supplying enterprises), but do not include the costs of transport services produced by the own transport of the enterprise receiving the delivery of the goods. Goods for resale are not further processed by the businesses that buy them.
25. Accounting for changes in inventories is formed for the following sectors of the economy:

1) the change in stocks in the non-financial sector is calculated as the difference between the value of stocks at the end and the beginning of the period according to the financial statements of enterprises or other reports. If, in the accounting of enterprises, inventories are valued at prices at the time the products enter stocks, then in this case the amount of change in stocks will include a change in the cost of products as a result of price changes during the time it was in stocks;

2) it is unusual for financial institutions to have all types of inventories. They have in their stocks stationery, non-fixed equipment, spare parts for cars, computers and office equipment, various household materials, low-value and wear-and-tear items;

3) a type of inventories characteristic of the public administration sector are state reserves - stocks of strategic materials, grain, food and other goods of particular national importance and used by the state in case of unforeseen situations (natural disasters, man-made disasters, wars) . The report on the execution of the state budget as part of current expenditures reflects the expenditure on the purchase of goods, that is, receipts in stocks, data on the balance sheet for the execution of estimates of income and expenses of budgetary institutions, which reflects the balances of inventory at the beginning and end of the reporting period;

4) work in progress, finished goods and goods for resale are uncharacteristic types of inventories, but they may be held by units of this sector engaged in the production of goods or trade as a business activity. In the balance sheets, inventories are recorded at prices at the time of acquisition, and therefore the amount of change in inventories calculated on the basis of these data will include the change in the value of inventories as a result of changes in prices during their time in inventory (holding gain or loss) ;

5) in the household sector, the change in inventories is calculated as the difference between the receipts of products into inventories and withdrawals from them. At the same time, they are evaluated at market prices that are valid at the time of receipt or withdrawal, respectively.

1. To eliminate the effect of price changes, a simplified method is used, which consists in the fact that the assessment of stocks at the beginning and end of the reporting period is made at average prices of this period.

**3. Calculation of changes in stocks of inventories according to SNA-2008**

1. To determine the calculation of changes in inventories in average prices of the reporting period, a calculation is made that includes the following steps:

1) determination of the cost of inventories at the beginning and end of the reporting period, according to accounting reports;

2) determination of the cost of inventories at the beginning and end of the reporting period in the prices of the base period;

3) the calculation of the cost of inventories at the beginning and end of the reporting period in average prices of the reporting period is carried out using price indices, in accordance with Appendix 1 to this Methodology;

4) determination of changes in the value of inventories for the reporting period in average prices of the reporting period.

Below is a general formula for calculating changes in the cost of inventories at average prices of the reporting period, reflecting all stages of this calculation:



where:

- change in the cost of inventories for the reporting period in average prices of the reporting period;

- the cost of inventories at the beginning of the reporting period according to accounting reports;

- the cost of stocks at the end of the reporting period according to accounting reports;

- the average price index for the period during which the products in stocks at the beginning of the reporting period were stored, to the prices of the base period;

- the average price index for the period during which I was stored products in stock at the end of the reporting period, to the prices of the base period;

- the average price index for the reporting period to the prices of the base period.

1. And price indices are calculated for the same base period.
2. To calculate the change in inventories by type of economic activity, data on the main types of stocks at the beginning and end of the reporting period are used from the statistical forms “Report on the financial and economic activities of the enterprise” (index 1-PF, quarterly frequency ) and “Report on activities small business "(index 2 - MP, quarterly frequency ).
3. In order to exclude the influence of price changes (holding gain/loss), to determine the change in inventories, a calculation is used, according to which the assessment of inventories at the beginning and end of the reporting period is carried out at average prices of the reporting period.
4. Due to the uneven change in stocks and prices during the year, the calculations are carried out quarterly, and the sum of data by quarter is the amount of change in inventories for the year.
5. Appendix 2 to this Methodology shows the calculation of stocks for 2012 using the example of the "Crop and livestock breeding, hunting and provision of services" industry.
6. The calculation of changes in the value of inventories in other industries is calculated in a similar way.

Appendix 1

to the Methodology for accounting for changes in inventories

**Information sources**

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| Name of specieseconomic activity | Information sources |
| Crop and animal husbandry, hunting and provision of services in these areas | Price index of sales of agricultural products in the Republic of Kazakhstan |
| Forestry and logging | Price index of enterprises producing industrial products and services and forestry in the Republic of Kazakhstan |
| Fisheries and aquaculture | Price index for fishery and aquaculture products in the Republic of Kazakhstan |
| Mining and quarrying/Coal and lignite mining | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Mining of metal ores | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Other mining industries | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Food production | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Beverage production | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Textile production | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Manufacture of wearing apparel | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Manufacture of leather and related products | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Manufacture of wood and cork products, except for furniture; manufacture of products from straw and plaiting materials | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Production of paper and paper pulp | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Printing and playback of recorded materials | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Production of coke and refined petroleum products | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Production of chemical industry products | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Production of basic pharmaceutical products | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Manufacture of rubber and plastic products | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Manufacture of other non-metallic mineral products | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Metallurgical industry | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Manufacture of finished metal products except machinery and equipment | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Manufacture of computers, electronic and optical products | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Production of electrical equipment | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Manufacture of machinery and equipment n.e.c. | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Manufacture of motor vehicles, trailers and semi-trailers | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Manufacture of other vehicles | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Furniture manufacture | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Manufacture of other finished products | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Repair and installation of machinery and equipment | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Power supply, gas supply, steam supply and air conditioning | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Collection, treatment and distribution of water | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Sewer system | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Collection, treatment and disposal of waste; recycling | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Reclamation and other waste disposal services | Price index of enterprises-manufacturers of industrial products and industrial services in the Republic of Kazakhstan |
| Construction | Price index in construction in the Republic of Kazakhstan |
| Wholesale and retail trade in cars and motorcycles and their repair | Retail trade price index in the Republic of Kazakhstan |
| Wholesale, except for cars and motorcycles | Wholesale trade price index in the Republic of Kazakhstan |
| Retail trade, except for motor vehicles and motorcycles | Retail price index in the Republic of Kazakhstan |
| Land transport and pipeline transport | Index of tariffs for the transportation of goods by all modes of transport in the Republic of Kazakhstan |
| Water transport | Index of tariffs for the transportation of goods by all modes of transport in the Republic of Kazakhstan |
| Air Transport | Index of tariffs for the transportation of goods by all modes of transport in the Republic of Kazakhstan |
| Warehousing and auxiliary transport activities | Index of tariffs for the transportation of goods by all modes of transport in the Republic of Kazakhstan |
| Postal and courier activities | Index of tariffs for postal, courier and communication services for legal entities in the Republic of Kazakhstan |
| Accommodation services | Price and tariff indices for paid services in the Republic of Kazakhstan |
| Food and Beverage Services | Price and tariff indices for paid services in the Republic of Kazakhstan |
| Information and communication | Index of tariffs for postal, courier and communication services for legal entities |
| Financial services, excluding insurance and pension fund services | Price and tariff indices for paid services in the Republic of Kazakhstan |
| Ancillary activities for the provision of financial services and insurance | Price and tariff indices for paid services in the Republic of Kazakhstan |
| Operations with real estate | Index of prices and tariffs for paid services in the Republic of Kazakhstan |
| Professional, scientific and technical activities | Price and tariff indices for paid services in the Republic of Kazakhstan |
| Arts, entertainment and recreation | Price and tariff indices for paid services in the Republic of Kazakhstan |
| Provision of other types of services | Price and tariff indices for paid services in the Republic of Kazakhstan |

A ppendix 2

to the Methodology for accounting for changes in inventories

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| **Calculation of reserves for 2012** |  |  |
|  |   |   |  |  |   |   |  |   |   |   |  |   |
| Crop and livestock production, hunting and service provision |  |  |  |  |  |  |  |  |
| Period | Inventory value according to accounting reports, according to enterprises | Price indices for inventory revaluation | Inventory value at average prices of the reporting period | Change in inventory value at average prices of the reporting period | Value adjustment (holding gain) |
| month to the previous month (prices) | linked indices | average price index for the holding period (2 months) | average price index for the reporting quarter to the prices of the base period | at the beginning of the period | at the end of the period |
| at the beginning of the period | at the end of the period | change in inventory value | at the beginning of the period | at the end of the period |
| A | 1 | 2 | 3=2-1 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11=10-9 | 12=3-11 |
| november |  |  |  |  |  |  |  |  |  |  |  |  |
| p/year |  |  |  | 97.9 | 100.7 |  |  |  |  |  |  |  |
| December |  |  |  |  |  |  |  |  |  |  |  |  |
| p/year |  |  |  | 99.3 | 100.0 |  |  |  |  |  |  |  |
| January | 64 120.8 |  |  | 93.9 | 93.9 | 100.4 |  |  | 54,860.3 |  |  |  |
| February |  |  |  | 91.6 | 86.0 |  |  | 85.9 |  |  |  |  |
| March |  | 60,500.6 | -3,620.2 | 90.5 | 77.8 |  | 81.9 |  |  | 63,455.5 | 8,595.2 | -12,215.4 |
| April | 60,500.6 |  |  | 100.2 | 78.0 | 81.9 |  |  | 57 102.5 |  |  |  |
| May |  |  |  | 99.2 | 77.4 |  |  | 77.3 |  |  |  |  |
| June |  | 59,305.8 | -1,194.8 | 99.0 | 76.6 |  | 77.0 |  |  | 59,536.9 | 2434.4 | -3,629.2 |
| July | 59,305.8 |  |  | 98.6 | 75.5 | 77.0 |  |  | 58,304.5 |  |  |  |
| August |  |  |  | 99.8 | 75.3 |  |  | 75.7 |  |  |  |  |
| September |  | 67,424.4 | 8,118.6 | 101.3 | 76.3 |  | 75.8 |  |  | 67,335.4 | 9,030.9 | -912.3 |
| October | 67,424.4 |  |  | 114.0 | 87.0 | 75.8 |  |  | 83,257.6 |  |  |  |
| november |  |  |  | 109.6 | 95.4 |  |  | 93.6 |  |  |  |  |
| December |  | 71,977.2 | 4552.8 | 103.1 | 98.4 |  | 96.9 |  |  | 69,526.0 | -13,731.6 | 18,284.4 |
| Year | 64 120.8 | 73,234.5 | 7,856.4 |  |  |  |  |  |  |  | 6328.9 | 6328.9 |