Approved by the order of the Chairman of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan on November 27, 2015

no. 189

Methodology for calculating the gross regional product in current and constant prices

1. General provisions

1. The methodology for calculating the Gross Regional Product by the production method (hereinafter - Methodology) was developed in accordance with the methodology of the System of National Accounts 2008 (hereinafter - SNA 2008), 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.

2. This Methodology is applied by the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan (hereinafter **-** the Committee) in order to form the Gross Regional Product in accordance with international standards and is used exclusively for the purposes of the System of National Accounts.

3.The purpose of compiling national accounts at the regional level is to create a macroeconomic database as a tool for formulating and analyzing regional policies. This database contains macroeconomic information that makes it possible to obtain a comprehensive description of the level and dynamics of the economic development of regions, to objectively determine their place and role in the country's economy, to evaluate the effectiveness of the ongoing regional policy, to compare the levels of development of individual regions both within the country and between countries.

4. This Methodology uses the main concepts with the corresponding definitions according to SNA 2008:

1) intermediate consumption is equal to the value of goods and services that are transformed or completely consumed in the production process in the reporting period;

2) deflator - an indicator that characterizes the average change in prices in the economy over a certain period;

3) gross value added (GVA) - the difference between the output of goods and services and intermediate consumption. This indicator includes the value of fixed capital consumed in the production process;

4) gross regional product (GRP) - the final result of the production activities of resident producer units of a particular region, over a certain period of time and calculated at market prices;

5) gross output is the total value of goods and services produced in the economy in the reporting period;

6) gross domestic product (GDP) - one of the most important indicators of the system of national accounts, characterizing the final result of the country's economic activity;

7) index of physical volume (IPV) - a relative indicator that characterizes the change in production volumes in the periods being compared. It is calculated by dividing the value of a certain indicator in the current period, valued at the prices of the base period, by its value in the base period;

8) taxes on products include taxes, the amount of which directly depends on the cost of products produced and services rendered. Taxes on products include: value added tax, excises, tax on imported goods and services, and others;

9) subsidies for products - current non-compensated payments from the State budget to enterprises, provided they produce a certain type of goods and services;

10) net taxes on products are taxes less relevant subsidies;

11) system of national accounts (hereinafter - SNA) - a system of statistical indicators, built in the form of a specific set of accounts and tables characterizing the results of the country's economic activity.

# The main values of regional calculations of SNA indicators

5. Regions are relatively independent economic systems, and their relations with other regions are theoretically considered as relations between countries, the construction of regional accounts, completely analogous to national accounts for the economy as a whole, is very problematic. The reasons why the application of some SNA definitions at the regional level causes practical difficulties is the lack of full correspondence between the economic territory of the country and the sum of the territories of the regions. In addition, the economies of the regions are more closely related than the economies of different countries; the flow of goods and services between them is more intense. This leads to the fact that in a particular region the production of goods and services, the formation of income is less related to their use than in the country as a whole. To reconcile supply and use data, it is necessary to have information on interregional flows of goods, services, income and assets, which is usually not available at the regional level. The algorithm for compiling the GRP is presented in Appendix 1 to this Methodology.

6. To increase the comparability of indicators of regional accounts, the following conditions must be met:

1) regional calculations are carried out on the basis of national accounts, which are comprehensive, reliable and comparable in economic terms;

2) calculations have the same understanding of the content of indicators, use the same principles and definitions for all regions;

3) use common approaches to solve the problem of missing data by region using indirect methods, that is, use the same indicators to allocate national totals to the corresponding indicators;

4) consistency in the use of different methods over time.

7. Data from regional accounts are necessary for both territorial and central governments of any country. The presence of a comparable information base is a prerequisite for the implementation of an effective regional policy.

Calculations of regional macroeconomic indicators stimulate the development of the regional statistical system by expanding the relevant information base, the data of which are used both for scientific and applied research and development, as well as for modeling economic processes carried out by scientific and educational institutions and other organizations studying the economic situation in the regions.

The presence of practical difficulties leads to certain limitations when using various methods and sections in the calculation of GRP. GDP is calculated using three methods: production, distribution and use. Due to the fact that there is no information base for the implementation of full-fledged calculations at the regional level of all components of end-use and distribution, GRP is calculated using the production method.

1. **Approaches and methods for distributing data by region, the concept of a local unit and an institution**

8. To maintain regional accounts, a prerequisite is the definition of a statistical unit, according to which indicators are classified , both by type of activity and by region. Below is a brief description of the statistical units used in the SNA for this purpose.

9. An enterprise (institutional unit in the role of a producer) is a unit that has the right to independently manage income, own assets, incur liabilities on its own behalf, and for which a complete set of accounting accounts, including a balance sheet, is drawn up. The enterprise has the right to engage in several activities in one or more places.

The company has complete information about all its economic operations. To analyze the production of an enterprise that is engaged in various activities and operates in several regions, the SNA requires more detailed information on the activities of the enterprise in terms of activities and regions. To calculate the production account indicators, data on production and production costs related to business units are needed. The availability of such information makes it possible to single out statistical units in the composition of the enterprise, provided for the analysis of production in national and regional accounts.

Enterprises that locate their production in several geographical areas, it is advisable to classify on a territorial basis. A local unit is an enterprise or part of an enterprise that carries out production activities in or from one place. Such a definition reflects only one aspect, since it does not correspond to the type of activity performed. The location is defined differently depending on the purpose: for example, in a narrow sense, it is a specific address, and in a broader sense, it is an area within a region, region.

10. The concept of "establishment" includes two aspects - the type of activity and location. An establishment is an enterprise or part of an enterprise that is located in one place and which is engaged in only one type of production activity or in which the main activity accounts for the predominant share of value added. Establishments are sometimes referred to as local kind-of-activity units.

11. Assignment of producers to a certain region is recommended to be carried out on the basis of the residency principle. This is consistent with the approach used at the national level, which is that the institutional unit refers to the country where its center of economic interest is located, that is, where it carries out its production activities, owns land and buildings. The residency principle is formulated in relation to institutional units, but in fact it applies to other statistical units, since an institutional unit has a unit (establishment) in another country, it is considered as a conditional institutional unit that is a resident of another country.

A similar approach is applied at the regional level. Subdivisions of enterprises operating in different regions are considered as conventional units that are residents of these regions. When calculating GRP, gross value added refers to the region of which the local unit producing it is a resident.

The implementation of this principle in practice in regional calculations depends on the possibility of obtaining information about the activities of units that are residents of the region.

12. If a manufacturer carries out production activities in an enterprise located in one place, problems with its regional classification usually do not arise. If producers have production units in several regions that are engaged in different activities, then the classification of such units depends on the availability of information about their activities, and the following situations are possible here:

1) the manufacturer provides all the necessary data on the activities of its establishments. In this case, there are no problems with their regional and sectoral classification;

2) the producer provides the required data separately for local units and for units of the type of activity. In this case, the problem of the industrial classification of local units arises;

3) the manufacturer provides the required data only for local units. In this case, too, the problem of the industrial classification of local units arises;

4) the producer provides the required data only for units of the type of activity. In this case, the problem of regional classification of production units arises;

5) the manufacturer provides the necessary data only for the enterprise as a whole. In this case, the problem of both regional and sectoral classification of its constituent production units arises.

In the first case, when GRP calculations are provided with information at the establishment level, the obtained data are directly used. For this, it is necessary that the reporting of enterprises makes it possible to obtain basic data on production (products and production costs by main elements) in the context of the most significant types of activities that are considered as establishments (for example, the allocation of large fuel and energy, in addition to the main production, as part of an engineering enterprise, transport, repair and construction, socio-cultural divisions).

In the case of multi-regional enterprises, provision should be made for the possibility of obtaining such data in a regional context by statistical services in the regions both at the location of the parent organization of the multi-regional unit and at the location of its establishments. In all other cases, data in the regional context (in combination with the sectoral profile) are obtained only by calculation.

13. Ancillary activities are treated as a cost of the main or secondary activity and are attributed to the establishment they serve (or are shared among several establishments). In regional calculations, it refers to the same industry as in national calculations and to the regions where the establishments served are located. In the case of allocation of ancillary activities to a separate institution that has the characteristics of a local unit, then it refers to the region where it is located.

14. For households, as predominantly consumer-based units, the center of economic interest is in the region where household members live (where they have their main residence) and not where they work. In the case when employees live in one region and work in another, their remuneration is considered to be a contribution to the GRP of the region of which their employer is a resident (and not the region where they live and where they spend their income).

If a household has an unincorporated enterprise operating in another country, then this enterprise, in accordance with the general rule, is treated as a notional unit that is non-resident and does not belong to the household sector of this country. If a household has an unincorporated enterprise operating in another region of the country, then this enterprise is treated as a notional unit that is resident in that region and belongs to the household sector. Compliance with this rule ensures consistency between national and regional household accounts. If a household has land and/or a second dwelling in another country, then this land and dwelling is treated as a notional unit that is resident in that country. If a household has land and / or a second dwelling in another region, then this land and dwelling is considered as a conventional unit that is a resident of this region.

15. The sum of the regional values rarely equals the national sum, so adjustments to the regional figures need to be made. This discrepancy arises from arbitrary and other errors in the regional data themselves, or from specific differences in coverage or quantification at a national scale.

1. **Calculations of gross output at current prices**

**Paragraph 1. Formation of gross output**

16. Gross regional product by the production method is obtained as the difference between the output of goods and services in the whole region on the one hand and intermediate consumption on the other, or as the sum of value added created in the sectors of the economy of each region. At the same time, the volumes of value added by types of economic activity are calculated at basic prices, that is, they do not include taxes on products, but include subsidies on products. To calculate GRP at market prices, net taxes on products and imports (taxes minus subsidies) must be added.

17. Three types of gross output are distinguished in the system of national accounts: market output, non-market output of goods and services, and output for own final use.

Market output refers to output that is sold at economically significant prices or otherwise put on the market. Prices are considered economically significant when they have a significant impact on the amount of output that producers are willing to supply and on the amount of output that buyers are willing to purchase. The value of market output is calculated as the sum of the value of the following items for the period under review:

1) the cost of goods and services sold at economically significant prices;

2) the value of goods and services bartered for other goods and services or assets;

3) the value of goods and services used as payments in kind, including wages in kind;

4) the value of goods and services supplied by one establishment to another establishment belonging to the same market enterprise for use as intermediate consumption, when the risk associated with the continuation of the production process is transferred along with the goods;

5) the value of the change in stocks of finished but not sold goods and work in progress intended for one or the other mentioned type of use;

6) trade margin for the supply of goods and services, transportation costs, margin in transactions for the acquisition and sale of financial assets, and so on.

Non-market output includes goods and individual or collective services produced by non-profit institutions serving households (NPISHs) or governments that are provided to other institutional units or to society at large free of charge or at economically insignificant prices. The cost of non-market services is estimated at the sum of production costs, the items of which are given below:

1. intermediate consumption;
2. salary;
3. consumption of fixed capital;

4) other taxes on production less other subsidies on production.

18. Output for own final use includes products used by the producer for his own final consumption or accumulation. The value of output for own final use is defined as the sum of the following items:

1) the value of goods produced by the household's unincorporated enterprise and consumed by the same household;

2) the cost of services provided to the household by hired paid servants;

3) the value of imputed housing services produced by dwelling owners for their own consumption;

4) the value of fixed assets produced by the establishment for its own use, which remain in the same enterprise for use in future production (gross fixed capital formation);

5) the cost of changing inventories of finished goods and work in progress for the various uses mentioned above.

19. The methodology for calculating the output of some economic activities is designed to be defined for the economy as a whole, which makes it difficult to calculate the output of establishments located in different regions. This applies primarily to the output of indirectly measured financial intermediation services, insurance services, other financial services and the non-observed economy.

20. Since there is no information on individual types of economic activity at the regional level, GRP calculations are carried out using the “top-down” approach. This approach consists in distributing data on the economy as a whole between regions in accordance with indirect indicators characterizing the types of economic activity of the regions. For the distribution of GDP, statistical data of sectoral and structural statistics in the regional context are used. Gross output of the SNA, which has developed in the economy as a whole, taking into account adjustments and adjustments for the non-observed economy, is distributed in accordance with sectoral outputs for each type of activity by region.

 $Output\_{SNSRj}=\frac{Output\_{IRj }}{Output\_{Ij}}\* Output\_{SNSj} $(1)

Where,

$Output\_{SNSRj}- gross output of the regional SNA by industry j$;

$$Output\_{IRj }– industry gross output of the region by industry j; $$

$$Output\_{Ij}- industry gross output of all regions for industry j;$$

$$Output\_{SNSj}- gross output of the SNA of the republic by industry j.$$

**Paragraph 2. Gross outputs by types of economic activity**

21. The calculation of gross outputs by industry is made in accordance with the General Classification of Economic Activities (GCTEA).

22. Section A "Agriculture, forestry and fisheries" includes the use of natural resources of plant and animal origin and contains such activities as growing crops, raising and breeding animals, collecting forest and other plants, breeding animals on farms or in their places of habitual a habitat.

When calculating agricultural output, the general rules for estimating products are observed, which, in particular, exclude the influence of prices on the amount of change in work in progress and finished products during the time the product is in stocks (that is, holding profit).

The "Forestry and logging" section includes the production of round timber, as well as the extraction and collection of wild forest materials. The market output of forestry is defined as the sum of marketable products and changes in the balance of work in progress. The cost of marketable products is determined in the amount of the cost of laying and growing forest plantations, forest maintenance, other work that promotes natural regeneration of forests, performed under contracts, as well as the cost of seeds, seedlings, seedlings and other products sold to the side.

The “Fisheries and Aquaculture” section includes: fishing (fishing on the high seas or inland waters, harvesting of aquatic animals, collection of marine materials such as natural pearls, sponges, corals or algae and their primary processing other than processing in fish factories) and aquaculture.

23. Industrial output includes mining and quarrying, manufacturing, electricity supply, gas and steam supply, and also includes air conditioning, water supply, sewerage, and waste management.

Gross industrial output is defined as the value of products produced by all enterprises, the main and non-main activity of which is "Industry".

Gross output by industry is defined as the value of:

1) finished products (goods produced by all departments of the enterprise);

2) services of an industrial nature performed by the enterprise;

3) products from customer-supplied raw materials;

4) semi-finished products of their production;

5) intra-factory turnover, that is, products used by the enterprise for its own industrial and production needs;

6) changes in the balance of work in progress.

The calculation of the volume of gross output consists of the following stages: determination of the volume of gross output of the non-financial sector; determination of the volumes of manufactured products of hidden activity; determination of volumes of produced products of informal activity.

24. Gross output of section F " Construction" represents the cost of construction and reconstruction of buildings and structures, carried out by contract or economic method, as well as the cost of construction work performed by individual developers. The output of the industry includes the volume of construction and installation works of new construction, major repairs of buildings and structures, taking into account the volume of the hidden and informal economy.

The peculiarity of construction is that it is an industry with a long period of production. In connection with this feature, in order to coordinate the output and obtain the real value of the added value, the output is taken into account as it is produced, and not completed.

The procedure for calculating the volume of gross output consists of the following steps: determining the volume of construction work in the formal economy; determination of the volume of construction work of new construction; determination of the scope of work for the overhaul of residential and non-residential buildings and structures; determination of the scope of construction work of informal and covert activities.

25. Section G “Wholesale and retail trade; repair of automobiles and motorcycles" includes wholesale and retail trade (that is, sale without modification) of all types of goods and the provision of services related to the trade in goods. This section also includes the repair of motor vehicles and motorcycles.

Since wholesalers and retailers buy and sell goods, the purchased goods are not considered intermediate consumption when they are resold with a minimum degree of processing such as sorting , cleaning, packaging, and so on. It is believed that wholesalers and retailers provide services to their customers by storing and arranging a range of goods in convenient places for customers, thereby making it easier for customers to purchase them. Their output is measured as the total value of the markup earned on the goods they purchase for resale.

A trade margin is defined as the difference between the actual or implied price resulting from the sale of an item purchased for resale and the price that a merchant would have to pay to purchase an identical item (to replace one sold) at the time it was sold or used. in some other way. Trade margins on some goods are negative when their prices decrease. They are also negative for goods that were never sold because they were damaged or stolen.

26. Section H “Transport and warehousing” includes the provision of passenger or freight transport services, whether scheduled or unscheduled, by rail, pipeline, road, water or air, as well as other related services, such as the equipment of a transshipment base and sites for parking, loading and unloading, storage and other works and services. This section also includes the rental of transport equipment with a driver or operator.

Also, this division includes postal and courier services, such as services for the collection, transportation and delivery of letters and parcels under various conditions. Also included are local deliveries and the services of messengers and couriers. The output of an industry is defined as the sum of incomes of communication enterprises from the delivery of mail, periodicals, parcels, the sale of postage stamps and postcards.

The output of transport services is calculated as the sum of income received as payment for freight and passenger transportation, and is produced by type of activity:

1) land transport;

2) water transport;

3) air transport;

4) auxiliary and additional transport activities.

The output of postal and courier services is calculated as the sum of income received as payment for services rendered to the population, enterprises and organizations.

The volume of services from all types of postal communication in value terms includes income received for:

1) sold postage stamps and letter post (excluding express mail and EMS);

2) parcels and parcels (excluding express mail and EMS);

3) periodicals on a contractual basis (delivery, forwarding, forwarding);

4) post office services for the sale of postage stamps, postcards, envelopes, parcel boxes and other post office services;

5) services from other activities: services for the forwarding and return of postal items, services for the provision of mailboxes for use by the population, for forwarding teletype messages, for home delivery of pensions, benefits, money transfers, EMS postal services, special communication services, postal services for the delivery and forwarding of bulky postal items, direct mail postal services and other services not included in other groups.

27. Section I , Lodging and Dining Services, includes the provision of short-term lodging facilities, as well as the provision of a full range of food and beverages suitable for immediate consumption. Catering output at basic prices is equal to its turnover (that is, in addition to the realized overlay, it includes the value of products used in cooking and sold without processing) less VAT and other taxes on products plus subsidies on products.

28. Section J “Information and Communication” includes the acquisition and distribution of cultural information and products, the provision of transmission and dissemination of these products, such as communications, information technology and data processing, and other information service activities.

The Communications industry includes the provision of telecommunications and other related services such as the transmission of voice, text, sound or video data.

The output of an industry is defined as the sum of the income of communication enterprises from payment for the use of telephone and telegraph channels, for the installation of telephones, as well as income from the provision of communication services by individuals.

29. Section K“Financial and insurance activities” includes financial services, including insurance, reinsurance and pension fund activities, as well as financial services support activities.

Financial activities include financial intermediation, insurance, activities ancillary to financial intermediation and insurance.

Financial intermediaries incur liabilities on their own account in financial markets by borrowing funds that they otherwise lend to other institutional units. They mediate in the transfer of funds from lenders to borrowers, while taking on a certain risk. These include all institutions referred to as Banks, as well as non-corporate enterprises engaged in financial intermediation on a small scale. The rates of return they receive on the funds they lend usually exceed the rates they pay on the funds they borrow, and the greater part of the funds they raise is used by them to cover their expenses and, accordingly, to earn profits and equivalent incomes.

The output of banking services is determined separately for state (national) banks, commercial banks and other financial and credit organizations. The output of services of the National Bank of the Republic of Kazakhstan consists of non-market output and the output of ancillary financial services. Non-market output is determined in the amount of current costs for it, including the consumption of fixed capital. Output and intermediate consumption is compiled on the basis of the data reflected in the report "Breakdown of income and losses" for the National Bank of the Republic of Kazakhstan and second-tier banks.

The output for the National Bank of the Republic of Kazakhstan includes: administrative expenses, non-monetary activities, other items, wages with all deductions, depreciation, taxes, commission paid. Intermediate consumption includes items: administrative expenses, non-monetary activities, other items, paid commission.

Financial intermediation services consist in the accumulation by banks and other financial institutions acting as financial intermediaries of temporarily free funds of some units and providing them for use by other units. The interest charged by banks for the provision of funds ensures that they pay interest on borrowed funds, as well as cover their current costs and make a profit. The cost of these services is determined indirectly as the difference between the property income received by financial intermediaries (excluding the net income received from investing their own funds) and the interest paid to their creditors.

30. Section O “Public Administration and Defense; compulsory social security" includes activities of a public nature in the field of public administration, also includes the adoption of laws and judicial interpretation of laws and relevant regulations, as well as the management of programs based on them: lawmaking, taxation, national defense, public order and migration services, foreign affairs and implementation of state programs. This section also contains mandatory activities aimed at ensuring public safety.

Non-market establishments earn income from the sale of a market issue produced as a result of a secondary activity: for example, the sale of reproductions by a museum that is a non-market producer. Since non-market establishments earn income from sales, their total output, covering both non-market and market output, is valued at the sum of production costs. The value of market output, equal to the proceeds from sales of market products, is subtracted from the total output of the non-market establishment, and the resulting difference represents the non-market output of the non-market establishment. The value of sales of non-market goods or services at economically insignificant prices remains part of the value of non-market output.

The source of information for calculating the output is the State Budget Execution Report of the Ministry of Finance of the Republic of Kazakhstan.

31. Section P "Education" includes public as well as private education at any level and training of any profession, full-time and part-time, as well as on radio and television, Internet resources and through mail.

This includes education provided by various institutions within the regular school system at various levels, as well as adult education and literacy programs. Also included are military schools and academies, prison schools of the corresponding level.

Each level of primary education includes special education for children with physical and mental disabilities.

This section also includes training aimed primarily at the organization of sports and recreational activities, such as playing tennis or golf, and ancillary educational activities.

The output of commercial enterprises consists of the cost of paid services. Data on market services are determined according to the statistical form “Report on the main indicators of the financial and economic activities of educational organizations” (Sotsfin index (education)). The total output of services of institutions financed from the state budget is determined according to the “Report on the execution of the state budget of the Republic of Kazakhstan” of the Ministry of Finance of the Republic of Kazakhstan, as the sum of current expenditures on education (net of scholarships, with the addition of consumption of fixed capital).

32. Section Q Health and Social Services includes the provision of health and social work services. Activities range from health care activities conducted by qualified medical professionals in hospitals and other institutions, therapeutic interventions at home to social work without any involvement of medical professionals.

The output of commercial enterprises consists of the cost of paid services. Data on market services are determined according to the statistical form “Report on the main indicators of the financial and economic activities of healthcare organizations” (Sotsfin index (health care)). The total output of services of institutions financed from the state budget is determined according to the “Report on the execution of the state budget of the Republic of Kazakhstan” of the Ministry of Finance of the Republic of Kazakhstan, as the sum of current expenditures on health care (with the addition of consumption of fixed capital).

33. Industry "Services" includes:

1. publishing, film and video production, television programs and music recordings, programming and broadcasting activities, computer programming, consulting and other related services, and information services activities;
2. activities of landlords, agents, intermediaries engaged in the following activities: sale or purchase of real estate, rental of real estate, provision of other real estate services, such as valuation of real estate or acting as agents of escrow accounts. The output on real estate transactions also includes the Notional calculated cost of services for living in one's own dwelling, which is calculated in two ways:

Option 1. To calculate this indicator, the total area of apartments owned by individuals is taken and multiplied by the average monthly rental price for comfortable and unfurnished housing per square meter without utilities. To calculate annual data, the resulting value is multiplied by 12 months.

Option 2. The imputed cost of services for living in one's own dwelling is estimated based on the market prices for renting (renting) the relevant categories of housing. In the absence of the necessary information, the imputed cost of services for living in one's own dwelling is calculated at current costs. They include payment of operating expenses by the owners of privatized apartments and apartments in housing cooperative houses, the cost of materials purchased for the current repair of individual housing, carried out by repair and construction organizations and individuals, tax on building owners, land tax and consumption of fixed capital. Currently, the calculations are carried out according to the first option;

1. professional, scientific and technical activities, which in turn include specialized professional, scientific and technical services. This type of service requires a high level of training and makes available to users special knowledge and skills;

The list of works to support the main activities of enterprises, such as: rent, rental, leasing; employment; activities of tour operators, travel agents and other organizations providing services in the field of tourism; security and investigation activities; activities in the field of maintenance of buildings and territories; activities in the field of administrative, management , economic and other support services;

4) a wide range of activities in the field of culture, entertainment, recreation, including live performances, exhibitions, gambling, sporting events and activities related to recreation;

5) repair of computers, personal items and household appliances, as well as a number of services that do not fall under another classification.

The section "Activities of affiliated organizations" includes the activities of organizations representing the interests of special groups and engaged in the promotion of ideas among the society.

34. Section T "Activities of households employing domestic workers and producing goods for their own consumption" includes activities of household members as employers of domestic workers such as governesses, cooks, gardeners, chauffeurs, nurses, home teachers, and also includes activities of households producing goods for own consumption, including the production of food, clothing and other goods. The data source is the household survey.

35. Detailed descriptions of the procedure and algorithm for calculating gross output by types of economic activity are given in the methods (Methodology) approved by the Committee, posted on the Committee's Internet resource in the "Methodology" section:

"Method of calculating the gross output of products (services) in the industry" Industry ";

"Methodological recommendations for determining the gross output in the industry" Construction ";

"Methodological recommendations for determining the volume of construction work, taking into account the parameters of the hidden and informal economy";

"Method of calculating the gross output of products (services) of agriculture, forestry and fisheries";

"Methodological recommendations for the formation of indicators of transport statistics";

"Methodology for the formation of communication statistics indicators";

"Methodology for the formation of service statistics indicators";

"Methodology for determining the volume of the non-observed economy in trade";

"Methodology for accounting for the services of the Central Bank";

"Methodology for accounting for insurance services";

"Methodology for accounting for the release of financial intermediation services";

"Methodology for accounting for financial services of second-tier banks";

"Methodology of accounting for services of pension funds";

"Methodology for assessing the volume of illegal activities";

"Methodology for estimating the volume of the non-observed economy".

**5. Calculation of intermediate consumption**

36. Intermediate consumption is the value of goods consumed (excluding the consumption of fixed capital) and the consumption of market services during a given period for the purpose of producing goods and services. Goods and services intended for intermediate consumption are valued at purchasers' prices.

37. Intermediate consumption includes the following elements:

1. material costs (goods and material services);
2. payment for intangible services;
3. travel expenses in terms of travel and hotel services;
4. other elements of intermediate consumption.

38. Material costs include the following items:

1) raw materials and materials used in the production process in accordance with conventional technology; for example, materials used in testing and quality control; materials for the current maintenance, operation and repair of equipment, tools, measuring instruments, fixtures, laboratory equipment not included in fixed assets, work clothes and footwear, special meals for workers and items of little value;

2) semi-finished products and parts assembled at the enterprise;

3) all types of fuel used for the production of all types of energy, for heating, transport work to service own production;

4) energy of all types, spent on technological and other production and economic needs of the enterprise; expenses for the production of electrical and other types of energy by the enterprise itself and for the transformation and transmission of purchased energy to the place of its consumption;

5) works and services performed by other enterprises, such as individual operations related to the production of products, processing of raw materials, repair and maintenance work;

6) expenses related to the delivery of products incurred by the enterprise itself, as well as transport services of other enterprises; the cost of transporting products within the enterprise itself;

7) payment for communication services and computing centers;

8) net value of packaging materials;

9) compensation to employees for the necessary tools, work clothes;

10) purchases of food, drinks and tobacco products by hotels, restaurants and cafes;

11) purchases of food and medicines by hospitals and other medical institutions for their patients, as well as educational institutions for students;

12) purchases by households of tools, work clothes, building materials, seeds and fodder, etc. for their own economic activities;

13) expenses of materials by the owners of dwellings for their current repairs;

14) food and uniforms for the army; these costs are included in the intermediate consumption of the defense establishment.

39. Payment for intangible services includes the following items:

1) payment for quality control of goods;

2) payments for financial services;

3) payments to educational institutions related to the professional training of personnel;

4) payment to health care institutions for services such as clinical examination, vaccination, and the like.

5) lease payments for buildings, structures, machinery and equipment;

6) payment for utilities, such as cleaning and waste disposal;

7) payment for legal services;

8) payment for advertising and other business services such as photocopying, ticket reservations, payments to professional associations, and so on.

9) payment for licensing and certification of goods;

10) payments for fire protection.

40. Travel expenses include compensation to employees for travel, hotel, meals and personal services. Intermediate consumption includes travel expenses for transport and hotel services. Compensation to employees for the cost of food and personal services (daily allowances) are included in wages.

41. Other elements of intermediate consumption include part of the complex costs:

1) expenses for warranty repairs and maintenance;

2) expenses related to the sale of goods;

3) expenses for the maintenance of research laboratories and bureaus;

4) expenses for the reception and entertainment of guests (representation expenses);

5) the cost of transporting workers to and from work organized by the manufacturer;

6) recruitment costs.

42. The source of information for calculating intermediate consumption is the statistical forms “Report on the financial and economic activities of an enterprise” (index 1-PF) and “Report on the activities of a small enterprise” (index 2-MP). Based on these forms, the share of intermediate consumption in gross output for each industry by region is calculated. Intermediate consumption of SNA is distributed according to the following formulas:

$ IC\_{RRj}=Output\_{SNSRj}\* \%IC\_{STRj} $(2)

$ IC\_{SNSRj}=\frac{IC\_{RRj}}{IC\_{\sum\_{}^{}RRj}}\* IC\_{SNSj} $(3)

Where,

$IC\_{RRj}- estimated intermediate consumption of the region by industry j$;

$IC\_{\sum\_{}^{}RRj}- $estimated intermediate consumption of all regions by industry j ;

$$Output\_{SNSRj}- gross output of the regional SNA by industry j;$$

$\%IC\_{STRj}-$the share of the region's intermediate consumption by industry j (data from 1-PF and 2-MP);

$\%IC\_{STRj}$$-$share of intermediate consumption in region j (1-PF and 2-MP data) ;

$$IC\_{SNSj}- intermediate consumption SNA of the republic by industry j;$$

$$IC\_{SNSRj}- intermediate consumption SNA region by industry j.$$

6. Taxes in the context of the SNA

43. Taxes are obligatory gratuitous payments in cash or in kind made by institutional units to the government. They are called non-reimbursable because the individual unit making the payment receives no equivalent from the government in return, although the government uses the funds received in the form of taxes to provide goods and services to other units (individually or collectively) or to the public in in general.

44. According to the SNA 2008 methodology, taxes are classified as follows:

1. Taxes on production and imports

1.1. Taxes on products

1.1.1. Value Added Tax (VAT) Type Taxes

1.1.2. Import taxes and duties, excluding VAT

1.1.2.1. Import duties

1.1.2.2. Import taxes, excluding VAT and duties

1.1.3. Export taxes

1.1.4. Taxes on products, excluding VAT, import and export taxes

1.2. Other taxes on production.

45. A product tax is a tax payable on a unit of a good or service. A tax is defined as a set amount levied on a unit of measure of a good or service (a unit of measure reflects discrete units or continuous physical variables such as volume, weight, force, distance, time, and so on), or as a percentage of the unit price or total cost. sold goods and services. Product tax is payable at the time the product is produced, sold or imported, and is also payable in other circumstances where the product is exported, rented, transferred as a transfer, supplied to other units, or used for own consumption or accumulation.

In invoices issued by enterprises to their customers, the amount of tax on the product is allocated separately, or not allocated.

Taxes on products include taxes on goods and services paid in connection with their production, sale, transfer, rental or supply of goods and services, or in connection with their use for own consumption or accumulation. Other taxes on production consist primarily of taxes on ownership or use in production of land, buildings, or other assets, and taxes on labor or workers' wages. Whichever estimate of output is used, other taxes on production are always included in value added in the generation of income account.

 46. Taxes on products included in the GRP are distributed in proportion to the GVA structure of the region. A detailed description of the calculation of taxes on products can be found in the Methodology for Accounting for Taxes on Products and Imports, which is posted on the Committee's website.

**7. Calculation of GDP and GRP in constant prices**

 47. Evaluation of GDP and its components at constant prices is necessary for calculating volume indices, which are important indicators of the level of economic development, fluctuations in the economic environment, identifying structural changes, forecasting, and so on.

 48. Indices of the physical volume of GDP and its components are also important for analyzing labor productivity, the efficiency of using individual elements of national wealth, identifying changes in the structure of the economy, analyzing living standards, etc. Time series of GDP and its components at constant prices over long periods of time are used in economic modeling and forecasting.

 The index of physical volume of GDP is calculated by dividing the value of GDP in the current period, estimated at the prices of the base period, by its value in the base period:

 (4)

Where,

******index of physical volume of GDP;

the value of GDP in the current period at the prices of the base period;

****the value of GDP in the base period.

49. Estimating GDP at constant prices involves dividing GDP at current prices into its individual cost components and applying appropriate methods to them to obtain their valuation at base year prices. The main methods for estimating GDP and its components at constant prices are the methods of deflation and extrapolation. In some cases, the method of direct revaluation is also used.

50. The deflation method consists in dividing the value of goods and services in the current period by an index that reflects the change in prices for these goods and services in the current period compared to the prices of the base period. This revaluation procedure is described in general terms as follows:

 = (5)

Where,

- quantity of goods (services) in the current period;

and - prices in the current and base periods;

- cost of goods (services) in the current period at current prices;

- price index in the current period compared to the base period;

- the cost of goods (services) of the current period in the prices of the base period.

51. The extrapolation method consists in multiplying the value of goods and services in the base period by an index that reflects the change in the physical volume of a given set of goods and services (or goods and services representative of this set) in the current period compared to the base period. This procedure is described in general terms as follows :

 =  (6)

Where,

- quantity of goods (services) in the base period;

- cost of goods (services) in the base period;

- index of the physical volume of goods (services) in the current period compared with the base period.

52. Unlike other components of GDP, value added is not related to any observable flows of goods and services and therefore is not represented as a product of prices and volumes. Therefore, the main method for estimating value added at constant prices is "double deflation", in which the amount of value added at constant prices is obtained as the difference between the value of output and the value of intermediate consumption, estimated at constant prices. Double deflation is used, as a rule, when there is reliable information on the output and intermediate consumption of industries in current prices and price indices.

In the absence of this information, the method of "single deflation" is applied, that is, the assessment at constant prices of the gross value added of industries directly. It is produced in the following ways:

1. Direct deflation of the gross value added for the reporting year at current prices:

 1 ) the price index for the issue;

 2 ) price index for intermediate consumption;

 3 ) consumer price index;

 4 ) producer price index;

 5 ) wage index;

2. By direct extrapolation of the gross value added for the previous year at current prices:

 1 ) the index of the physical volume of output;

 2 ) index of physical volume of intermediate consumption;

 3 ) an index characterizing the change in the volume of goods (services) - representatives in physical terms;

 4 ) indices of individual cost elements (except for labor costs) in physical terms;

 5) wage index, which in turn is deflated by the wage index;

 6 ) the index of the number of employees;

 7 ) index of labor costs (worked man-hours);

8) index of labor costs, adjusted for changes in labor productivity.

The choice of specific methods and indices depends on the availability of information, as well as on which indices best characterize the change in value added in a given industry.

53. When calculating the IPV GVA GRP by type of economic activity, the IPV weighted by GVA, established at the level of the gross output of the industry, is used in such sectors as agriculture, forestry and fisheries, industry, construction, trade, transport, services. In cases where there is no IPV of the gross output of the industry, the change in the number of employees in this type of activity, or the method of deflation of GVA by average monthly nominal wage indices or price indices (for example, public administration, financial activities and certain types of services) is applied.

When calculating the IPV of taxes on products by region, the average IPV for the economy as a whole is used, calculated in accordance with the Methodology for Accounting for Taxes on Products and Imports, which is posted on the Committee's website.

54. The GRP is published on a quarterly basis and posted on the Internet resource of the Committee in the section "Official statistical information" - "National accounts - integrated accounts". The deadlines for submission and the frequency of releases of statistical information on GRP for users are presented in Appendix 2 to this Methodology.

Appendix 1

to the Methodology for calculating the Gross Regional Product at current and constant prices

Algorithm for compiling GRP:

1. Collection of statistical and administrative data (5-15 working days).
2. Preparation of a layout of development tables by types of economic activity, tables for calculating GRP at current and constant prices, summary tables and a final table of GRP (3-5 working days).
3. Transfer of data from information sources to development tables by types of economic activity, for calculating GRP in current and constant prices (10-15 business days, subject to adjustments and refinement of industry data)
4. Calculations and analysis of GRP in current and constant prices (10-15 business days)
5. Registration of express information (bulletin) on GRP. Verification and approval (1- 2 business days)
6. After verification and approval, publication in electronic format on the website of the Committee, in accordance with the deadlines specified in the Statistical Work Plan (July 11, October 10, December 30, April 29, August 22)

Appendix 2

to the Methodology for calculating the Gross Regional Product at current and constant prices

Table 1. Terms of submission and periodicity of releases of statistical information on GRP for users

|  |  |
| --- | --- |
| reporting periods | publication time (dates are adjusted depending on weekends and non-working holidays) |
| GRP for the 1st quarter of the reporting year | July 11 |
| GRP for the 1st half of the reporting year | October 10 |
| GRP for 9 months of the reporting year | December 30 |
| GRP for the reporting year (according to preliminary data) | April 29 |
| GRP for the reporting year (according to reporting data) | August 22 |