

# Supply and Use tables

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<b>2 Metadata update</b>	
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<b>3 Statistical presentation</b>	
<b>3.1 Data description</b>	
<p>National accounts data refer to all data generated and disseminated for the economy according to the definitions and guidelines of the European System of Accounts ( <a href="#">ESA 2010</a> ). Supply and use tables (SUT) and symmetric input-output tables (SIOT) are part of the transmission program for sending national accounts.</p>	
<b>3.2 Classification system</b>	
<p>The statistical classification of economic activities (SK NACE Revision 2). The statistical classification of products by activity (CPA) 2008.</p>	
<b>3.3 Sector coverage</b>	
<p>The supply and use tables and SIOT describe the country's overall economy.</p>	
<b>3.4 Statistical concepts and definitions</b>	
<p>All statistical terms and definitions used in national accounts are described in Annex A of EU Regulation 549/2013 (ESA 2010 methodology). <b>Supply and use tables</b> (SUT) reflect the whole economy by industry and product. The tables show the link between components of gross value added, industry inputs and outputs and supply and demand for the product. Supply and use tables link various institutional sectors of the economy with detailed data on imports and exports of goods and services, general government expenditure, household expenditure, non-profit institutions serving households and capital formation. The compilation of supply and use tables makes it possible to verify the consistency and coherence of the components of national accounts in a single detailed framework and, once</p>	

the components of the three methods of measuring GDP (production, expenditure and income approach) have been integrated, will allow a uniform estimate of GDP.

Supply and use tables are matrices that describe the values of transactions in products in the national economy, broken down by product type and industry. These tables reflect:

- a. The cost structure of production and income generated in the production process,
- b. Flow of goods and services produced in the national economy,
- c. Flow of goods and services between domestic economy and abroad.

The supply and use tables are the central framework for industry analyses. They contain flows in the following accounts:

- a. Goods and services account,
- b. Production account,
- c. Generation of income account.

Symmetric input-output tables (SIOT) are derived from the data in the supply and use tables.

These tables contain symmetrical (for each product or for each industry) use tables separately for domestic and imported production. They form a theoretical framework for structural analyses of the economy.

### 3.5 Statistical unit

Not relevant for this domain.

### 3.6 Statistical population

Reference population for the supply and use tables is the overall economy of the country.

### 3.7 Reference area

Reference area for the supply and use tables are all regions of the territory of the Slovak Republic.

### 3.8 Time coverage

The ESA 2010 transmission program generally requires supply and use tables and SIOT since 1995. In the database of National Accounts within the predefined tables, the TDP are published for the period 1995 -2016. The data for the years 1995 -2013 take into account the revision of the annual national accounts from September 2015. Data for 2014 take into account the revision of annual national accounts from September 2017 and data for 2015 and 2016 take into account the benchmark revision from September 2019. SIOT are compiled and published once every 5 years. The SIOT for the years 1995, 2000, 2005 and 2010 are published in the National Accounts database in accordance with the revision of the yearly national accounts of September 2015 and the SIOT for 2015 in accordance with the benchmark revision of September 2019.

### 3.9 Base period

The supply and use tables are compiled and sent to Eurostat at current prices and constant prices of the previous year (PPY). SIOT are compiled and sent to Eurostat at current prices.

## 4 Unit of measure

Data are sent to Eurostat in mill. Euro. In the national database, TDP and SIOT data are in thousand Euro.

## 5 Reference period

The reference period for the indicators is the calendar year.

## 6 Institutional mandate

### 6.1 Legal acts and other agreements

#### At European level:

The national accounts are compiled in accordance with the methodology of the European System of National Accounts (ESA 2010), which is Annex A to Regulation (EU) No. 549/2013 and defines common standards, definitions, classifications and accounting rules to be used for the compilation of accounts and tables on a comparable basis.

The ESA 2010 transmission program can be found in Annex B to the Regulation and sets out the dates and scope of the data to be sent to Eurostat according to the ESA 2010 methodology.

#### At national level:

The Act on State Statistics of the National Council of the Slovak Republic no. 540/2001 regulates the conditions for obtaining statistical information needed to assess socio-economic development, the position and competence of bodies performing state statistics, the role of public authorities in the field of state statistics, rights and obligations of reporting units, protection of confidential statistical data from misuse, provision and publication of statistical data, ensuring comparability of statistical information and fulfilment of agreements in the field of state statistics, by which is the Slovak Republic bound.

Statistical surveys are governed by the Decree of the Program of Statistical surveys for a three-year period, which is compiled by the Office in cooperation with ministries and state organizations. The program contains a description and scope of surveys, including surveys carried out by other central authorities and ministries.

Basic information on the compilation of the program of state statistical surveys for the relevant year, the number of conducted surveys in the relevant year and the evaluation of the administrative burden of respondents are contained in the annual reports on the implementation of the program of state statistical surveys.

### 6.2 Data sharing

National accounts data are key sets of indicators used and published by many international organizations to improve data consistency and exploit synergies for data collection and validation. The inter-departmental group on economic and financial statistics was established in 2016 (composed of representatives of the Bank for International Settlements, the European Central Bank, Eurostat, the IMF, the Organization for Economic Cooperation and Development, the United Nations, and the World Bank) and it has started its work under the G20 to improve data sharing for national accounts.

## 7 Confidentiality

### 7.1 Confidentiality - policy

[Regulation \(EC\) No 223/2009 on European Statistics](#) (recital 24 and article 20 (4) of 11 March 2009 OJ EC L 87, page 164) establishes a need to set common principles and guidelines to ensure the confidentiality of used data for the production of European statistics, and it provides

access to such confidential data with due account for technical development and the requirements of users in a democratic society. The European Statistics Code of Practice provides additional conditions that statistical offices must comply with in the field of protection of confidential statistical data (Principle 5).

The Statistical Office of the Slovak Republic is responsible for the protection of confidential data obtained and guarantees their use exclusively for statistical purposes. In accordance with the Act on State Statistics no. 540/2001 Coll. §2g and §30, the Statistical Office of the Slovak Republic may not publish confidential statistical data, but only information that has been created by summarizing confidential data, which does not allow direct or indirect identification of the reporting unit.

The Directive on the Protection of Confidential Statistical Data at the Statistical Office of the Slovak Republic (No. SME-1/2015) is available on the internal website of the Statistical Office of the Slovak Republic, which regulates specific methods and parameter values used in protecting confidential statistical data of individual statistical surveys.

## 7.2 Confidentiality - data treatment

Confidential statistical data is defined as data relating to an individual statistical unit, which enables direct or indirect identification and was obtained for statistical purposes according to the law. The Statistical Office of the Slovak Republic provides or publishes statistical data and information without direct identifiers in such a form that the data provided by the applicant cannot be directly or indirectly identified in them, this means it applies active protection for all reporting units.

In ensuring the protection of confidential statistical data in tables with aggregated data, the Statistical Office of the Slovak Republic applies in all cases the rule of the minimum frequency for  $n=3$ , that is in each cell of the table there is a data that is an aggregation of data for at least 3 reporting units. The problem of sensitive cells may mainly concern data tables in more detailed breakdowns.

## 8 Release policy

### 8.1 Release calendar

Tables of supply and use with SIOT are published in the national database, usually within one month after the approval of the data in Eurostat.

### 8.2 Release calendar access

Not relevant for this domain.

### 8.3 User access

In accordance with the Community's legal framework and [the Code of Practices for European statistics](#) (Principle 6 on impartiality and objectivity, Principle 13 on timeliness and punctuality and Principle 15 on accessibility and comprehensibility), national accounts data that meet quality standards, including relevant metadata, should be available to users. Users should be informed of the availability of the data and how it can be made available.

Accessibility and comprehensibility of statistical data is one of the principles of [the Declaration of Quality of the Statistical Office of the Slovak Republic](#).

The independence and impartiality of the Statistical Office of the Slovak Republic, ministries and other state administration bodies and organizations established by them in obtaining, processing,

disseminating and evaluating statistical information is provided for in Act no. 540/2001 Coll. On State Statistics as amended (paragraph 3, part 2 of the Act on State Statistics).

## 9 Frequency of dissemination

The data are published once a year.

## 10 Accessibility and clarity

### 10.1 News release

Not relevant for this domain.

### 10.2 Publications

Publications related to national accounts data are published on the website of the Statistical Office of the Slovak Republic in the Catalogue of Publications section.

These publications, which relate to national accounts data, include e.g. Statistical Yearbook of the Slovak Republic, Statistical Yearbook of the Regions of Slovakia and Statistical Report on Basic Tendencies in the Slovak Economy.

### 10.3 On-line database

The supply and use tables and SIOT are published under National Accounts data within predefined tables.

### 10.4 Micro-data access

Micro-data are not published for national accounts indicators.

### 10.5 Other

Data can also be provided within defined specific outputs to international organizations, especially Eurostat, IMF, OECD, etc.

### 10.6 Documentation on methodology

The general methodological framework for compiling national accounts in the EU is ESA 2010 methodology.

All important metadata and methodological explanations for national accounts are available on the website of the Statistical Office of the Slovak Republic:

[National Accounts – Metadata](#)

Description of the new ESA 2010 methodology, or the transition from the old ESA95 methodology to the new ESA 2010, as well as other manuals and handbooks are available on the website of the Statistical Office of the Slovak Republic.

[New methodology for national accounts – ESA 2010](#)

### 10.7 Quality documentation

The importance of national accounts requires that documentation of quality management and quality assessment processes are available. Such documentation includes, for example, [the Declaration of Quality of the Statistical Office of the Slovak Republic](#), which is available on the website of the Statistical Office of the Slovak Republic.

Reports on the quality of national accounts, quality studies and reports on the analysis of revisions are also available on the website of the Statistical Office of the Slovak Republic.

[Quality reports – National accounts](#)

## 11 Quality management

### 11.1 Quality assurance

The quality of national accounts data is ensured by the exact application of the ESA 2010 concepts and the application of the ESS handbook guidelines on quality reporting.

Part of the revision policy is to ensure the quality of source data that enter into the calculation of national accounts indicators, e.g. GDP, in the collection, processing and subsequent evaluation of data, in order to ensure comparability of data at quarterly, annual and regional level.

Technical validation of national accounts data is ensured by means of the IT tool 'STRUVAL' and numerical validation of data via 'CONVAL'.

The management supervision of data collection and compilation of statistical data is regularly verified through internal audits (IA) according to a predetermined plan.

The Statistical Office of the Slovak Republic holds a quality management system certificate according to ISO 9001:2008, which was awarded in November 2006. It undergoes external and recertification audits at regular intervals; in 2010, 2011, 2013 and 2014, Bureau Veritas Certification Agency performed supervisory audits. Recertification audits in 2009, 2012, 2015 and 2017 confirmed the validity of the certificate of the Statistical Office of the Slovak Republic.

[The quality manual](#) describes the documented procedures of the quality system, which are used in the construction, implementation and continuous improvement of the quality management system in the Statistical Office of the Slovak Republic. It contains a description of the quality management system and compliance with the requirements of the ISO 9001 standard.

### 11.2 Quality assessment

During the whole compilation process, several quality checks of national and regional accounts data are performed, e.g. ex-ante (statistical resources), preliminary (results), ex-post (methods used) and external controls (Eurostat, European or National Court of Auditors, IMF).

Detailed information concerning quality reports after approval by Eurostat is published on the website of the Statistical Office of the Slovak Republic, as stated in point 8.7.

## 12 Relevance

### 12.1 User needs

National accounts data provide important information for economic policy monitoring, decision-making, forecasting, administrative purposes, informing the public about economic development (either directly or indirectly through news agencies) and they also serve as inputs in economic research.

At the national level, the main users of national and regional accounts data are the Ministry of Finance, the Ministry of Transport and construction, the National Bank of Slovakia, scientific and academic societies and research institutes. Another group of users are students, analysts, journalists, foreign embassies in Slovakia and entrepreneurs.

At EU level, the main users of national accounts data are mainly Eurostat, OECD, the IMF and various national statistical institutes.

### 12.2 User satisfaction

The Statistical Office of the Slovak Republic regularly evaluates website traffic according to individual sections and departments. In addition, since 2009 it has been conducting regular customer surveys of its products and services at two-year intervals.

The aim of the surveys is to determine customer satisfaction with the products and services of the Statistical Office of the Slovak Republic, to obtain information about users, their interest and opinion on the provision and quality of statistical products and services. The obtained facts are a valuable source for directing other activities of the Statistical Office of the Slovak Republic.

The user satisfaction questionnaire, its evaluation as well as the reflection of the relevant requirements of the respondents in the action plans of the Statistical Office of the Slovak Republic are available on the website of the Statistical Office of the Slovak Republic.

[Satisfaction survey](#)

### 12.3 Completeness

The ESA 2010 transmission program, which consists of 22 tables from all areas of national accounts, specifies the minimum range of national accounts data that must be available in each EU member state.

The completeness of data for the supply and use tables and SIOT is at the level of 100 %.

## 13 Accuracy and reliability

### 13.1 Overall accuracy

Revisions of national accounts data are described in detail in the regular GNI data quality reports. At the national level, standard cross-domain checks are usually performed.

At present, some revision indicators are subjects to the so-called pilot exercise, that is aimed at providing relevant information in the quality report and in the future, after approval by Eurostat, this procedure will be applied as standard in national practice.

### 13.2 Sampling error

Not relevant for national accounts indicators.

### 13.3 Non-sampling error

Not relevant for national accounts indicators.

## 14 Timeliness and punctuality

### 14.1 Timeliness

The ESA 2010 transmission program sets out the required time frame for all national accounts tables.

The supply and use tables are only published as a definitive variant of T + 36 months from the reference period in accordance with the relevant revision of the annual national accounts. The same is applied for SIOT.

### 14.2 Punctuality

National accounts data under the ESA 2010 transmission program should be supplied to Eurostat on the exact dates stated in the transmission program (or earlier).

Usually, all required data is supplied on time.

## **15 Coherence and comparability**

### **15.1 Comparability - geographical**

The geographical comparability of the national accounts of the EU member states is ensured by the application of the common rules of the European System of Accounts (ESA 2010). A geographical comparison can also be made at international level, as most non-European countries use SNA 2008 standards that are in line with ESA 2010.

We have no information on the lack of comparability.

### **15.2 Comparability - over time**

As the data for all reference periods are compiled according to the requirements of ESA 2010, the national accounts data are fully comparable over the whole period. Even in the case of major changes in methods or classifications, revisions of long time series are usually made far into the past.

Until now, national accounts data have been compiled without significant interruptions in time series.

### **15.3 Coherence - cross domain**

Within the system of national accounts, there is full consistency in these areas: annual and quarterly national accounts, government accounts, sector accounts, financial accounts, regional accounts, supply and use tables. However, in practice it is sometimes not possible to ensure full consistency and therefore temporary deviations may occur. They are usually the result of older differences.

The input to national accounts is mainly primary statistics, such as structural business statistics (SBS), short-term statistics (STS) and labour force statistics (LFS). However, there is no complete consistency between these statistical domains and national accounts. The main reasons are differences in concepts, definitions and scope. The balance of payments is also used as a significant source of national accounts. The wording and scope of the balance of payments, as defined in the BPM6 manual, are fully compatible with ESA 2010. Balance of payments variables are in principle fully coherent with the relevant national accounts variables.

### **15.4 Coherence - internal**

The data for the supply and use tables and SIO Tare fully internally coherent.

## **16 Cost and burden**

Not relevant for national accounts indicators.

## **17 Data revision**

### **17.1 Data revision - policy**

The revision policy is an important tool for improving the quality of statistical data. It regulates the basic rules and general procedures applied in revisions in the Statistical Office of the Slovak Republic.



For the purposes of this regulation, any change in the statistical value of indicators stored in the relevant databases and publicly published statistics is considered a revision of statistical data. The reasons for these changes are changes in current legislation, adjustment of methodological definitions and procedures, revisions of classifications and code lists, implementation of new statistical-mathematical methods, availability of later more accurate data as well as the errors in the source and calculated data. The aim of revisions is to achieve or maintain consistency in the content of statistical data.

The basic rules and general procedures applied in revisions at the office are regulated by the SME-1/2020 Directive – Revision Policy of the Statistical Office of the Slovak Republic and the decision of the president of the Statistical Office of the Slovak Republic issuing [the Revision calendar of the Statistical Office of the Slovak Republic](#) (updated every year).

**Definitive data** – data that is compiled from verified revised reports, administrative sources and data obtained on the basis of specified statistical – mathematical methods and other additional information. The definitive data changes only in the case of special revisions, otherwise these data are unchanged.

However, in terms of compliance with the annual national accounts, TDP and SIOT may be revised. The reason for the revision is considered to be:

In terms of content, the reason for revision is considered to be:

- Incorporation of better quality data on the basis of a more complete source,
- Clarification of data due to the update of seasonal factors and changes in the base period,
- Specification based on updated methodology (in concepts, definitions and classifications) and changes in statistical methods,
- Corrections in source data and calculations.

In terms of time, revisions can be divided into these types:

- **Routine revisions** are revisions without major methodological changes. These are usually major data corrections, including large values obtained from new sources. They are carried out periodically at precisely defined dates, for updating monthly and quarterly data, until the next publication of the data.
- **Annual revisions** are revisions that are made when all monthly, quarterly data are available and more detailed results from annual surveys are already available.
- **Special and major revisions** are revisions of definitive data due to significant methodological changes resulting from the revision of methodologies, from changes in the procedures of statistical – mathematical methods of calculation or corrections of data. Special revision may result (e.g. by changing the definition) in disruption of time comparability of the data.

The schedule for revisions of annual and quarterly national accounts data is implemented in accordance with Annex B of European Parliament and the Council (EU) Regulation No 549/2013 of 21 May 2013 on the European system of national and regional accounts in the European Union (ESA 2010). The aim of the national accounts revision policy is to achieve consistency in the data supplied under the ESA 2010 Transmission program in line with the harmonized European revision policy.

## 17.2 Data revision - practice

The supply and use tables (TDP) are used to balance the whole system of national accounts within the 2-digit SK NACE Rev. 2 and CPA2008, as a basis for the definitive annual version of sector accounts and to convert annual national accounts into constant prices. TDP are compiled by T + 36 months after the end of the reference year, including the revision of data. A symmetric IOT is compiled every 5 years.

Detailed information on revision changes is provided in the quality reports on the website of the Statistical Office of the Slovak Republic.

## 18 Statistical processing

### 18.1 Source data

The supply and use tables data are aggregated data compiled according to the ESA 2010 methodology, based on a combination of several data sources – statistical surveys, administrative sources as well as alternative data sources. In addition to the basic statistical sources already mentioned, data from the surveys of sectoral statistics, the Population and Housing Census, the Farm Census, balance of payments statistics, foreign direct investment statistics and the international investment position are also used for national accounts. These surveys are generally carried out in accordance with specific laws adopted for this purpose.

A detailed description of the data sources for the compilation of the main national accounts aggregates can be found in Chapter 10 of the [GNI Inventory](#).

### 18.2 Frequency of data collection

The supply and use tables are compiled on an annual basis. SIOT are compiled once every 5 years.

Information on individual statistical surveys and administrative sources, as well as their periodicity of data collection, is given in Chapter 10 of the '[GNI Inventory](#)' or in part 'C' of the '[ASA Inventory](#)'.

### 18.3 Data collection

Data collection for statistical surveys organized by the Statistical Office of the Slovak Republic is carried out in the form of statistical forms, in paper or electronic form.

Electronic data collection is a system enabling reporting units to fill in statistical forms online in the integrated statistical information system of the Statistical Office of the Slovak Republic. As of 1 January 2016 reporting units (legal entities, natural persons – entrepreneurs) are obliged to submit statistical reports electronically in accordance with the amendment to Act no. 540/2001 Coll. On state statistics as amended by Act no. 326/2014 Coll. (hereinafter referred to as the Act), which contains new rules for the submission of statistical reports.

The collection, control and processing of statistical information for the Office's statistical surveys for individual statistics according to industry, type and size category of reporting units is performed by the Office's field offices – mainly regional administrations, specialized for the entire territory of the Slovak Republic. Statistics on family accounts, labour force sample surveys, crop yield estimates, consumer prices, area censuses, city and municipal statistics are performed by regional administrations territorially.

All administrative data sources are obtained on the basis of signed agreements and protocols on technical cooperation with external institutions (e.g. National Bank of Slovakia, Ministry of Finance, State Treasury, Ministry of Interior, Ministry of Labour, Social Affairs and Family, Financial Administration, Data Centre, Geodesy, Cartography and Cadastre Authority of the Slovak Republic, National Centre for Health Information, etc.). By default, these agreements consist of a general part concerning the version of the contract, the specification and characteristics of the data provided between the two institutions, the forms and methods of data provision and the contact names from both institutions responsible for providing data in bilateral data exchange.

Samples and descriptions of all statistical forms are available on the website of the Statistical Office of the Slovak Republic.

[Samples of statistical forms](#)

#### 18.4 Data validation

Source data from statistical surveys are monitored and validated at several levels, directly in the environment of the Integrated Statistical Information System (ISIS), as well as outside it, e.g. standard software tools and applications.

Initial validation and logical checks take place directly when the electronic form is filled in by the reporting unit, when in the case of input logical errors it is not even possible to send the form. The delivered report is subjected to further validation checks, from which error logs are prepared.

The analysis and subsequent validation of work outputs is carried out at the level of the responsible departments and is focused on capturing and possible elimination of disproportions in the relevant statistical domain. In case of more serious errors, extreme data, etc. the relevant reporting units are contacted directly in order to clarify the information provided.

The national accounts output data are compiled by aggregation from several data sources and are also subject to a validation process. The Statistical Office of the Slovak Republic provided metadata to support the validation process, taking into account revisions and extreme values. As part of internal management processes, the validation checks on the data related to the ESA 2010 transmission tables before the final data are sent to Eurostat are performed.

The results of these validation checks are the subject of quality reports (via ESS Metada Handler).

#### 18.5 Data compilation

Statistical procedures for data processing (e.g. imputations, calculation of weights, adjustments with respect to non-response, calibrations, etc.) are applied to individual statistical surveys, according to their type, nature, coverage and periodicity.

National accounts are compiled by aggregation from several data sources that have undergone the above statistical processing and calculations. In general, the data are compiled in accordance with the definitions and concepts of ESA 2010.

The methodology of compiling the main national accounts aggregates is described in more detail in the [GNI Inventory](#).

#### 18.6 Adjustment

Not relevant for national accounts indicators.

#### 19 Comment