

Industrial production

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2 Metadata update	
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3 Statistical presentation	
3.1 Data description	
Industrial production (IP) is one of the most important business indicators and calculation is based on the change of production volume representatives in reference month compared to the reference year 2015, based on the List PRODSLOV (compatible with European list PRODCOM) and on the two-stage weight system. Trends of industrial production are generalised by gradual aggregation of indices of production of selected representatives. The representatives are the products covering minimum 80 % of production volume. Individual indices of production of these representatives are calculated on the basis of change of volume of their production in monitored period in comparison with basic period, and they are aggregated into individual indices of product groups by their weights. For weight specifying there are used data on value added from yearly of enterprise survey for the year 2015 and data on manufacturing the products in value expression from monthly industrial surveys for year 2015. The values of IPI for approximately 40 % of representatives surveyed in value expression, are calculated on the basis of fixed prices (December 2015 = 100). New price deflator is constructed on the basis of price development of products manufactured in SR for domestic and foreign markets. Data adjusted by working days or seasonal adjusted, are monthly reviewed from the beginning of time series. The variables surveyed in the monthly questionnaire Priem 1-12 are: • Production of industrial goods and services – value and physical volume of production; industrial goods and services are classified according to the "PRODSLOV" list (Slovak national version of PRODCOM List); VAT and excise duties are excluded; • Hours worked - actual hours worked on manufacture of products with a long term period of production	
3.2 Classification system	

Odvetvová klasifikácia ekonomických činností (SK NACE Rev. 2) - Branch classification of economic activities – NACE rev.2.

Klasifikácia štatistických územných jednotiek- NUTS 2016 - Nomenclature of Territorial Units for Statistics - NUTS 2016.

Štatistická klasifikácia produktov podľa činností - CPA 2015 - Classification of products by activity - CPA 2015.

Zoznam vybraných priemyselných výrobkov (PRODSLOV) – PRODCOM.

3.3 Sector coverage

Industry includes activities related to mining and quarrying, industrial production, electricity, gas, steam and cold air supply and water supply; cleaning and disposal of wastewater, waste and waste removal services (divisions 05-39 of the SK NACE Rev.2 statistical classification).

3.4 Statistical concepts and definitions

Industrial production expresses changes in the volume of production of industrial products and the provision of industrial services in the Slovak Republic based on the selection of enterprises and product representatives. The production of industrial products and services is measured in both value and physical volume of production; industrial products and services are classified according to the list of PRODSLOV. VAT and excise duties are excluded.

The survey according to PRODSLOV is carried out on a monthly basis at the level of 10-digit selected codes in physical units, in terms of value and for hours worked.

In addition to the production of products, the survey also monitors subcontractor relationships, which are also detected at the 10-digit level of product codes.

The variables collected are:

r 177

3.5 Statistical unit

Enterprise and kind of activity unit is the reporting as well as observation unit, where relevant.

3.6 Statistical population

The statistical survey Priem 1-12 addresses reporting units (enterprises) registered in the commercial register and maintained in the register of organizations of the Slovak Statistical Office with the number of employees of 20 or more persons, whose main activity is classified in divisions 05-39 of the Statistical Classification of Economic Activities NACE Rev.2 and selected important reporting units whose main activity is non-industrial activity or those whose sales exceeded 5 million Euros.

Number of reporting units: 2767

Significant non-industrial reporting units are addressed if the value of product production exceeds more than 50% of the average production of the enterprise at the product level of enterprises classified in the relevant 4-digit NACE Rev. 2

Number of enterprises: 15

For the population of reporting units with the number of employees up to 19 persons (inclusive), registered in the business register and maintained in the register of organizations of the Slovak Registry of Internal Affairs and for natural persons doing business on the basis of a trade license according to Act no. 455/1991 Coll. on trade, as amended, the number of which is determined on the basis of the number of trade licenses issued, an estimate is made by combining data from the annual statistical survey.

Register of organizations maintained by the Statistical Office of the Slovak Republic pursuant to Act NR SR no. 540/2001 Coll. on state statistics, as amended, is a source of information on subjects of the population addressed by statistical surveys. Legal entities and natural persons - entrepreneurs are registered in the register of organizations on the basis of data obtained by the Statistical Office of the Slovak Republic in accordance with the Act on State Statistics and other special laws. The register is used for statistical purposes and the data recorded in it are updated daily from various sources, e.g. with information from statistical surveys, data from the commercial register, the social insurance company, etc.

3.7 Reference area

All regions of the Slovak Republic are covered by the survey. The reporting units are residents at the territory of the Slovak Republic and provide data on their domestic activities and activities outside, if the activities carried out are of a subject of the tax and other duties in relation to Slovak legislation.

3.8 Time coverage

Data from the reference year 2008 are available in the Datacube database, published as gross data and adjusted from the influence of number of working days.
The data have been sent to Eurostat since the reference year 2008 as unadjusted data, adjusted from the influence of number of working days and seasonally adjusted data.

3.9 Base period

The base year 2015=100 is implemented since January 2018.
Indices are calculating in the current prices for selected products and recalculated with constant prices (December 2015=100).

4 Unit of measure

Data are presented as indices.

5 Reference period

The monitored period is a month.

6 Institutional mandate

6.1 Legal acts and other agreements

The reporting obligation to submit statistical questionnaires is laid down in Act no. 540/2001 Coll. on state statistics as amended (§ 18, paragraph 3) and cannot be refused (§ 18, paragraph 8) from [Regulation \(EU\) 2019/2152 of the European Parliament and of the Council of 27 November 2019](#) on European business statistics, repealing 10 legal acts in the field of business statistics and [Commission Implementing Regulation \(EU\) 2020/1197 of 30 July 2020](#) laying down technical specifications and arrangements pursuant to Regulation (EU) 2019/2152 of the European Parliament and of the Council on European business statistics repealing 10 legal acts in the field of business statistics.

The Statistical Office of the Slovak Republic is responsible for the protection of confidential data obtained and guarantees their use exclusively for statistical purposes. The statistical surveys are part of the [Program of State Statistical Surveys](#) issued for a three-year period in the Collection of Laws of the Slovak Republic.

6.2 Data sharing

Statistical information from SOSR's surveys is a source for fulfilling the obligations of the Slovak Republic resulting from the requirements of the European statistical system, the requirements of international institutions, to ensure the needs of the information system of the Statistical Office of the Slovak Republic. Statistical information are regularly provided to international and national organizations (Eurostat, National Bank of SR) or irregularly to other users.

7 Confidentiality

7.1 Confidentiality - policy

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 SOSR may not publish confidential statistical data, but only information resulting from the aggregation of confidential statistical data, which does not allow direct or indirect identification of the reporting unit.

The Statistical Office of the Slovak Republic has introduced principles and procedures for the protection of confidential data in internal directives and instructions. The directive on the protection of confidential statistical data regulates the method of management and implementation of activities related to ensuring the protection of confidential statistical data in the Statistical Office of the Slovak Republic. The internal methodological instruction of the Statistical Office of the Slovak Republic regulates specific methods and parameter values used in the protection of confidential statistical data of individual statistical surveys and data sets.

7.2 Confidentiality - data treatment

SOSR ensures the protection of confidential statistical data in disseminated data. SOSR applies in all cases the rule of minimum frequency for $n = 3$ and dominance of 90%. Values in sensitive cells and also values in other cells, that are not sensitive, are marked with a flag ("D") in order to prevent a sufficiently accurate primary and secondary confidentiality treatment.

8 Release policy

8.1 Release calendar

The First Release Calendar contains the timetable for the first publication of selected indicators in the next 4 months. The calendar is updated monthly. The Catalogue of Publications contains basic information about published publications, publication dates and language versions. All publications are available on the Internet portal of the Statistical Office of the Slovak Republic. The edition program is available on the website of the SOSR.

8.2 Release calendar access

The First Release Calendar is available on the website of the SOSR here:

[First Release Calendar](#)

The SOSR's web portal and the online database Datacube of the SOSR are updated in accordance with the Principles of the policy of publication and provision of statistical information

8.3 User access

The first release is performed in the form of an informative report published on the office's website. According to the established principle of equal access to all users, data are available to all at the same time and published at 9:00 a.m. on the website of the Slovak Statistical Office (www.statistics.sk) in the section Information reports Catalogue.

[Information reports Catalogue](#)

[DATAcube](#)

9 Frequency of dissemination

10 Accessibility and clarity

10.1 News release

Published monthly in electronic form:
Informative news

Published quarterly in electronic publications:
Statistical report on the economy of the Slovak Republic

The data in Press releases are published in the terms of the First Release Calendar on the web portal of the SOSR.

10.2 Publications

Data are published monthly in Datacube.

The data are published quarterly in the publication:
Statistical report on the economy of the Slovak Republic in the 1st-4th quarter of 2023.

The data are published annually:
Statistical Yearbook of the Slovak Republic 2023

10.3 On-line database

[DATAcube](#)
[STATdat.](#)

10.4 Micro-data access

Users are provided with aggregated data, microdata are not published.

10.5 Other

International and national organizations have also defined their own specific data requirements, which are provided mainly for the National Bank of Slovakia under the annually Framework agreement on mutual cooperation in the provision of statistical data and statistical information between the SOSR and the National Bank of Slovakia, ministries, associations and others.

10.6 Documentation on methodology

Statistical questionnaires including methodological guidelines and explanations of variables and methodological explanations within the Glossary of the statistical terms are published on the web portal of the SOSR. Each publication contains methodical explanations and a contact for the information service of the SOSR.

10.7 Quality documentation

Following internal project documentation exists for the compilation of statistical outputs:

- technical projects within the Integrated Statistical Information System called ISIS
- methodological guidelines for applying mathematical-statistical methods for statistical surveys
- methodological guidelines for quality indicators of statistical outputs and statistical processes.

11 Quality management

11.1 Quality assurance

The Quality policy is defined and publicly accessible in the Quality Declaration and Quality Policy documents. The Quality Declaration expresses the basic ideas and commitments of the President and top management of the SOSR for the Quality Policy as well as increasing efficiency and effectiveness of the integrated management system of the SOSR.

[Quality Declaration](#)

Quality policy is based on the mission of the Statistical Office of the Slovak Republic: to provide high quality and objective statistical products and services by keeping confidentiality of statistical data and by minimising burden on interested parties using effectively existing resources with the aim to support improvement of the information and intellectual capital of our customers. In this way we want to contribute to reduce risks and improve effectiveness in their decision making processes and so to support the sustainable development of the Slovak Republic as the part of EU.

[Quality policy](#)

The Quality manual describes the documented procedures of the quality system that are used for implementation and continuous improvement of the quality management system in SOSR. It contains a description of the quality management system and the fulfillment of requirements ISO 9001 standards. Application of the manual in practice ensures that all activities that have an impact on the quality of the products created are planned, managed, reviewed, evaluated and meet requirements.

[Quality manual](#)

The European Statistics Code of Practice is the basis of the common quality framework of the European Statistical System. It is a self-regulatory tool and it is based on 16 Principles covering the institutional environment, statistical processes and statistical outputs. A set of indicators of best practices and standards for each of the Principles provides guidelines and benchmarks for reviewing the implementation of the Code of Practice, thus increasing transparency within the European Statistical System.

[European Statistics Code of Practice](#)

11.2 Quality assessment

Coverage, reference period, data collection, control and data processing are in line with the Eurostat methodological guidelines. The data collection process is conducted in the Integrated statistical information system called ISIS. SOSR creates technical projects of the statistical surveys describing data collection and its evaluation, including a description of statistical controls and algorithms within the integrated ISIS. The data collection process is ensured by the regional offices of the SOSR during the phase of electronic data collection, ensure using statistical controls and algorithms the data collection process itself. Data validation is done during the data collection, processing and validation of relevant data by the SOSR experts. A data comparison is done with previous periods. Statistics are available in the system to evaluate the quality of the completed questionnaires, the number of questionnaires with errors or outliers, the number of reminders etc. SOSR also performs internal methodical audits. Evaluation of statistical surveys and methodical audits including the analysis of the results are integrated into the existing quality management system.

12 Relevance

12.1 User needs

The requirement to conduct consultations with users of statistical information is stipulated in the Act on State Statistics itself. Consultations during the preparation of state statistical surveys take place within the framework of the preparation of the Program of State Statistical Surveys (PSSZ). PSSZ is a generally binding legal regulation compiled by the SOSR in collaboration with ministries, other central authorities and state organizations and contains statistical surveys organized and carried out by the SOSR, ministries, other central authorities and state organizations. SOSR publishes [The Program of state statistical surveys](#) by decree in the Collection of Laws of the Slovak Republic. The Coordinating Council for State Statistics ensures the fulfilment of the tasks of the SOSR. Key users of specific statistical products are listed in the Marketing Plan, e.g. international organizations - Eurostat, OECD, UN and national institutions, e.g. National Bank of Slovakia, etc.

12.2 User satisfaction

Since the 2009, SOSR carries out satisfaction surveys of customers with their products and services at two-year intervals. The goal of surveys is to determine customer satisfaction with the products

and services of the SOSR, to obtain information about users, their interest and opinion on provision and quality of statistical products and services. The facts obtained are a valuable resource for the direction of other activities of the SOSR. One of the main goals defined in the Development Strategy. The goal of the SOSR until 2022 is to systematically increase the value of the institution and its recognition at the national and international level.

The office also monitors the fulfilment of the stated goal with the help of indicators of the credibility of the SOSR and the rate of use of the information provided by the public.

SOSR conducts credibility surveys through an external independent organization once every 2 years, with the intention of ensuring the objectivity and indisputability of the results from public view.

[Credibility survey](#)

[Satisfaction survey](#)

12.3 Completeness

Time series of indicators in accordance with the regulation are available from 2008 in Datacube and historical time series in SLOVSTAT.

13 Accuracy and reliability

13.1 Overall accuracy

Overall accuracy is considered very good. SOSR makes great efforts to prevent the occurrence of errors in the data and performs data verification to detect the errors. Most errors are directly consulted at regional offices with the reporting units.

13.2 Sampling error

Not relevant for exhaustive statistical surveys.

13.3 Non-sampling error

The technical project of data processing is part of ISIS. This project includes a description of all logical data controls at the microdata level performed during electronic data collection. The electronic questionnaire and information system ISIS itself provides many arithmetic and logical checks between variables, which we distinguish between serious and informative. Data collection is provided by the office of the SOSR in Banská Bystrica. After the deadline for submission of the statistical questionnaire, the reporting units that did not respond are contacted again to fulfil their legal obligation. In case of serious errors in the form, this form is not accepted and with the help of experts from the regional office its correctness is ensured so that it can enter into the data processing. Automatic validation checks during data collection and informative checks are incorporated with the aim to follow logical checks, reducing the rate of partial non-responses, anomalies and outliers. The purpose of this process is to minimize errors already in the data collection itself and subsequently during data processing. The basic step in the process of calculating unit non-response is the analysis of the population with regard to the state of activity of the reporting units. For this purpose, we use a specific classification of responses and non-responses codes. Individual codes describe active and inactive units and are assigned to each reporting unit. Subsequently, we determine the population of active units entering the data processing.

Response rate for September 2023

At the time data are provided to Eurostat:	97,33 %
At the time data are first published nationally:	97,33 %

14 Timeliness and punctuality

14.1 Timeliness

Data dissemination in the public database Datacube is in accordance with the set up deadlines. Data are disseminated on 40. day after the reference period.

14.2 Punctuality

Publication deadlines were met.

15 Coherence and comparability

15.1 Comparability - geographical

The statistical survey of Priem 1-12 is compiled for the entire territory of the Slovak Republic.

15.2 Comparability - over time

The time series are comparable from the reference year 2008.

15.3 Coherence - cross domain

SOSR performs the following analytical data comparisons:

- comparing the results of monthly surveys with the results of quarterly surveys of production industries for the needs of national accounts (used for quick calculation of GDP)
- comparison with data from the structural business survey on an annual basis
- regular monthly analyzes and consultations of industry statistics experts with experts from national accounts to monitor the development of the economy
- comparison of trends in the development of STS indicators with the results of conjunctural surveys

The results of the comparisons show a high level of data comparability for the population of reporting units addressed exhaustively t. j. by addressing all units above a certain level according to stratification criteria. In case of differences between the compared periods and the populations of the reporting units, these are the subject of further analyses.

15.4 Coherence - internal

No differences are detected.

16 Cost and burden

SOSR regularly monitors the cost and burden of reporting units. As part of the optimization of statistical surveys, it takes measures aimed at reducing their burden: e.g. by personalised pre-filling of selected variables in statistical questionnaires, reducing the frequency of selected surveyed variables and using administrative data resources if they are available in the required quality and at the specified time. The cost and burden measurement at the level of European Statistical Products is in competence of the Resources Directors Group within Eurostat.

17 Data revision

17.1 Data revision - policy

The Revision policy regulates the general rules and procedures applied in revisions at the SOSR. The same revision policy applies to national and international users. In accordance with the Revision policy, the reason of the revision is always indicated.

The Revisions policy as well as the Revisions calendar is available to users on the web portal of the ŠÚ SR.

[Policy and calendar of revisions of the SOSR](#)

SOSR distinguishes the following revisions:

from the content point of view

- incorporation of better quality data based on a more complete source, including replacing imputations with collected data,
- correction of data as a result of updating seasonal factors and changing the base period,
- data modification based on more accurate methodology (in concepts, definitions and classifications) and changes in statistical methods,
- performing corrections in source data and calculations.

in terms of time, SOSR divides the revisions into

- ordinary revisions are revisions without significant modifications of the methodologies. These are usually more significant data corrections, including large values obtained from new sources. They are carried out periodically on precisely set up dates, to update monthly and quarterly data, until the next publication of the data.
- annual revisions are revisions that are made when all monthly and quarterly data are available and more detailed results from annual surveys are already available.
- extraordinary and major revisions are revisions of definitive data due to significant methodological changes resulting from revision of methodologies, changes in procedures and statistical-mathematical calculation methods or data corrections. An extraordinary revision may result (e.g. by changing the definition) in break in time series data comparability.

17.2 Data revision - practice

The main source of information for routine revisions are new or revised data from reporting units.

18 Statistical processing

18.1 Source data

The statistical survey Priem 1-12 addresses reporting units (enterprises) registered in the business register and kept in the register of organizations of the Slovak National Register of Statistics with the number of employees of 20 or more persons, whose main activity is classified in divisions 05-39 of the Statistical Classification of Economic Activities NACE Rev.2 and selected important

reporting units, whose main activity is other than industrial activity (approx. 15 cooperative units) or those whose turnover exceeded 5 million Euros.

Number of contacted reporting units (September 2023): 2,767

Significant non-industrial reporting units are addressed if the value of product production exceeds more than 50% of the average company production at the product level of companies classified in the relevant 4-digit NACE Rev. 2

For the population of reporting units with the number of employees up to 19 persons (inclusive), registered in the business register and maintained in the register of organizations of the Slovak Registry of Internal Affairs and for natural persons doing business on the basis of a trade license according to Act no. 455/1991 Coll. on trade entrepreneurship as amended, the number of which is determined based on the number of trade licenses issued, an estimate is made by combining data from the annual statistical survey Roc 2-01.

18.2 Frequency of data collection

Monthly.

18.3 Data collection

The regional office of the SOSR in Banská Bystrica is responsible for data collection. From January 1, 2016, reporting units (legal entities, natural persons - entrepreneurs) are required to electronically submit statistical reports 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 law), which contains new rules for submitting statistical questionnaires.

The completed statistical questionnaire must be submitted electronically no later than the 25th day after the reference period on the website www.statistics.sk. In the event that the reporting unit has not submitted the electronic questionnaire, it is contacted by the relevant regional office of SOSR.

18.4 Data validation

The data entry, data completeness and statistical control are organised by specialised regional offices of the SOSR.

SOSR distinguishes between two levels of data checks:

- 1/ Formal checks, which are realised in the process of data entry automatically; (compatible with Validation level 0 and 1)
- 2/ Informal checks aim of which is to control the complexity and relations among the variables ((compatible with Validation level from 2 to 5).

According to the importance there are classified 2 basic types of checks:

- I – Informative checks- this check gives the additional information, which is important for the following process of corrections. It informs also about some inconsistencies in the state of fulfilment of the questionnaire, about item non-response, exceeding stated limits etc.
- Z – Check of great importance - it is mostly check indicating the exact error and it must be always corrected or explained.

Most of the errors are directly consulted with the reporting units by our regional offices.

18.5 Data compilation

The PP calculation is carried out on the basis of changes in the physical volume of product representatives and a two-level weight system. The representatives are the products identified at 10 local levels according to PRODSLOV. The share of production determined in terms of value is about 40%. One code is detected in hours worked. (NACE Class 30.11 – Construction of ships and floating vessels, 30.40 Manufacture of military combat vehicles). In the same way, subcontracting relationships are detected at the 10 local level of product codes.

Individual indices of these 6 local representatives are calculated based on changes in the physical expression of production for the monitored period compared to the base period, and these are aggregated into individual indices of aggregation groups according to weights. The weights are calculated on the basis of added value from annual business surveys in 2015 and on the basis of production in value terms of individual products from the annual survey of PRODSLOV for 2015.

In the case of products measured in terms of value, a price index is used to deflate this value. The new price deflator is constructed based on the price development of industrial products on the domestic and foreign markets.

The data, adjusted by number of working days and seasonal adjusted data, are recalculated monthly from the beginning of the time series.

The composite Laspeyres formula is used to calculate the index of industrial production.

18.6 Adjustment

Working day adjustment and seasonal adjustment procedures are carried out using JDEMETRA+ and TRAMO-SEATS.

19 Comment