Labour indicators in industry

1 Contact	
1.1 Organization	The Statistical Office of the Slovak Republic
1.2 Address	Miletičova 3, 824 67 Bratislava
1.3 Contact name	Jana Višňovská
1.4 Organization unit	Industrial statistics department
1.5 Phone number	+421 2 50236 341; +421 2 50236 339
1.6 Email address	info@statistics.sk

2 Metadata update	
2.1 Date of last update	08.07.2020

3 Statistical presentation

3.1 Data description

The variables collected in monthly and quarterly survey:
A. Number of employees.
B. Wages and salaries.
C. Hours worked.
On the base of above mentioned information the estimation of number of persons employed is realised.

3.2 Classification system

Odvetvová klasifikácia ekonomických cinností (SK NACE Rev. 2) - Branch classification of economic activities – NACE rev.2.
Klasifikácia štatistických územných jednotiek- Nomenclature of Territorial Units for Statistics– NUTS 2010.

Enterprises with principal activity in Divisions 05 to 39 of SK NACE Rev. 2 and selected enterprises with a non-industrial principal activity.

3.3 Sector coverage

Enterprises with principal activity in Divisions 05 to 39 of SK NACE Rev. 2 and selected enterprises with a non-industrial principal activity.
All enterprises with 20 and more employees registered in the business register.
In addition enterprises in the business register with less than 20 employees that:
- Are statistically important according to expert judgement;
- Or have a turnover in excess of 5 million Eur.

In addition there are estimates of small enterprises based on quarterly sample survey and sole proprietors performing their business activity on the base of issued trade licences according to Act no. 455/1991 [Digest] (the data source is the number of issued trade licences).

3.4 Statistical concepts and definitions

A.The **number of persons employed** variable includes:
- Paid employees, e.g. those persons who have a contract of employment and who are on the payroll of the enterprise. Paid working proprietors, paid students and homeworkers, part-time workers, seasonal workers persons on short-term leave are included in the variable. It is measured as an average number;
- Unpaid persons employed, e. g. unpaid working proprietors (owners), unpaid family workers. The data for the unpaid working proprietors is estimated using the data from the structural business statistics survey.

B.Wages and salaries include the total remuneration of employees counted on the payroll in return for their work, before deduction of their share of social security charges. It includes gratuities and bonuses paid from the profit of the enterprise, payments for emergency work. The particular items are based on the company accounting headings.

C. **Average gross nominal monthly wage** consists of basic (tariff) wages set by wage rules including basic components of contracted wage and salaries for working overtime, compensation of wage for hours not worked, monthly and long-term bonuses paid according to performance and evaluation criteria, extra payments for working overtime, night work, work during Saturdays and Sundays, holidays, for environment damaging health, noise, risky and hard work, in-kind wages expressed in financial terms and other wages in the form of wage advantages whose level and periodicity are set in advance regardless of the situation in an enterprise.

D. **Hours worked** include all hours which have actually been worked during the current period (basic or normal hours, overtime hours, hours worked during nights, Sundays or public holidays, short periods of rest at the place of work including tea and coffee breaks, time spent on business trips). The variable excludes hours which are paid but not worked such as paid annual holidays, public holidays, sick leave, or due to accidents, strikes, lock-outs or slack time.

Estimates of this variable are realised **for population of small enterprises based on quarterly sample surveys** and **for self-employed** performing their business activity on the base of issued trade licences according to Act no. 455/1991 [Digest] (the data source is the number of issued trade licences).

The Business register is the frame for identifying units for the population. The Business register is updated in daily frequency from: the business register, the trades register, the professional chambers, and from other ministries. The Business register is updated with information from the tax register, the social insurance company register and from statistical surveys.

3.5 Statistical unit

3.6 Statistical population

Enterprises with principal activity in Divisions 05 to 39 of SK NACE Rev. 2 and selected enterprises with a non-industrial principal activity.

Monthly survey Priem 1-12:

All enterprises with 20 and more employees registered in the business register. In addition enterprises in the business register with less than 20 employees that:

— Are statistically important (the decision about including them into survey of big enterprises was done by experts of particular activities, for example responsible for industry data);
— O r have a turnover in excess of EUR 5 million.
Number of units: 2762.
In addition enterprises with less than 20 employees are selected, which are statistically important according to expert judgement.
Trade register
Business register is the frame for identifying units for the population
Business register is updated in daily frequency from: the business register, the trades register, the professional chambers, and from other ministries.
Yearly frequency of updating from: the tax register, the social Security Insurance company register and from statistical surveys.

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 are rebased from 2000 year for all type of data.

3.9 Base period

The base year 2015=100 is implemented since January 2018 data from the beginning of the year 2018.

4 Unit of measure

Indices are transmitted to Eurostat from 2017 and indices are also published nationally.

5 Reference period

Month.

6 Institutional mandate

6.1 Legal acts and other agreements

Right to collect data in general is governed by the Slovak National Council law No 540/2001(Digest) on the state statistics as amended and supplemented by further regulations.
The obligation to provide data is stated in the Statistical Law and its provisions (Programme of State Statistical Surveys), which is fixed for a 3-year period.
Survey Priem 1-12 is part of this Programme of State Statistical Surveys

6.2 Data sharing

From 2000 the required variables are transmitted regularly to Eurostat in GESMES format.
From 2017 the required variables are transmitted regularly to Eurostat in SDMX format.
Data is also used for estimation purposes in national accounts and data is also transmitted to OECD, UN, IMF, National Bank of Slovakia, Ministries, Government institutions, Federations of industrial associations.

7 Confidentiality

7.1 Confidentiality - policy

Confidentiality of statistical data is laid down in act No. 540/2001 Coll. On state Statistics, as amended, § 30.
Instructions and guidelines are provided in internal directive SME – 1/2015 - Directive on confidentiality data protection complemented by Methodological guideline MET-1/2013. Directive contains general issues related to the confidentiality, while the methodological guideline is focused on concrete methods and parameter values used in the phase of confidentiality treatment of particular statistical surveys results and data files.

7.2 Confidentiality - data treatment

We apply the primary and secondary confidentiality data treatment - data cell for less than 3 enterprises is protected.

8 Release policy

8.1 Release calendar

First Release Calendar provides the precise release dates for the coming four months in advance. The calendar is updated monthly. It covers main economic and social indicators established currently within the EU regulations and IMF special standard, which define timeliness standards as well.
In the First Release Calendar compilation release dates defined by Eurostat are taken into consideration.
The Catalogue of Publications is released every year. It contains information on particular publications, periodicity and dates of release.

8.2 Release calendar access

First Release Calendar is publicly accessible. It is disseminated on the office's website.
Users are also informed about the availability of the release calendar in a notice published in the relevant activity's publication.
The data are released simultaneously to all interested parties by issuing Information Reports which are posted on the website of the Statistical office of the Slovak Republic.

8.3 User access

The first release is performed in the form of an information report or a press conference. There is a standing rule, that all users have the right to be provided with information at the same time. Outputs (information reports) are released at the standard daily time (at 9.00 o'clock) at the

Internet portal of the SOSR in accordance with Principles of Release and Provision of Statistical Information.

9 Frequency of dissemination

(1) Absolute values of indicator Number of persons employed, Wages and salaries and Working hours are transmitted to Eurostat monthly from the year 2000.
From the year 2017 are indices transmitted to Eurostat monthly.
(2) Indices of indicators Number of persons employed, wages and salaries and working hours are disseminated monthly to national users as well.

10 Accessibility and clarity

10.1 News release

Released monthly in electronic publications:
- " Information reports " according to the release calendar;
- "Industry - Selected indicators and Industrial production "

10.2 Publications

"Industry - Selected indicators and Industrial production "
"StatisticalReport on Basic Development Tendencies in the Economy of the SlovakRepublic"
Number of persons employed, wages and salaries and working hours at total level of the Slovak Republic 2017, quarterly 2017 and half year index calculated from monthly data (comparison with the same period of the previous year=100).
Number of persons employed, wages and salaries and working hours at total level of the Slovak Republic 2017 and divided by number of persons employed, quarterly 2017 and half year index calculated from monthly data (comparison with the same period of the previous year=100).

10.3 On-line database

Public databases
DATACUBE

10.4 Micro-data access

Micro-data are not disseminated.

10.5 Other

International Monetary Fund, OECD, United Nations, Eurostat, national administration, National Bank of Slovakia and other significant users define their on specific requests

10.6 Documentation on methodology

Metadata for selected indicators are disseminated in ESMS structure. Dissemination of metadata for other indicators will be solved by implementation of Methodical directive for production of harmonised metadata being in preparation.
Metadata of statistical outputs are available independent from publication form in electronic format Metadata update is performed by persons responsible for the relevant topic following the methodology change.
The update of metadata disseminated in databases as well as of metadata on portal is conducted according to the annual time tables of updating; they are submitted to top management meeting for approval.
Each publication contains an introduction concerning methodological notes and contact for the information service. On the website of the SOSR there is available:
— Information on methodology is presented in SOSR portal in the section Metadata and publication Industry - Selected indicators and Industrial production index;
— Statistical questionnaires forms in national version including methodological notes;
— Methodological sheets (descriptions of statistical indicators in detail) in national version.
Methodology of industrial indicators

10.7 Quality documentation

Technical projects of statistical surveys and methodological directives Quality indicators of statistical outputs and processes (MET-2/2012) and Application of mathematical-statistical methods for statistical surveys (MET-3/2012) are available for statistical data production.
At present quality reports are elaborated if required by the European regulations in compliance with ESS Handbook fo Quality Reports (EQHQR).
The quality reports will be integrated into the new integrated stat. information system - ISIS (which is being implemented at present) and into the updated internal directives on value-adding processes. selfassessments of stat. surveys and methodological audits (in preparation), incl. analysis and reporting of the results are being integrated into the existing QMS system

11 Quality management

11.1 Quality assurance

Quality policy is defined and made available to the public in documents:
Quality declaration and Quality policy.The SOSR high level statements highlight customer orientation and quality of the SOSR products and services; this is then reflected in the development strategy of the SOSR for the given period of time in: Vision, mission, common shared values.
Quality Manual is covering all elements of the ISO 9001.
There are defined internal directives related to the value adding processes supported by supporting managerial processes and by supporting resource processes.
European Statistics Code of Practice is the backbone of the whole QMS.

11.2 Quality assessment

At present the technical projects are elaborated for each statistical survey including all necessary issues related to data entry, data completeness and statistical controls. This process is organised by specialised regional offices of the Statistical Office of the Slovak Republic. The cross-checking is done in the context of the statistical control process. A comparison with the development in previous periods is done.

The quality reports are integrated into the new integrated stat. information system - ISIS into the updated internal directives on value-adding processes, selfassessments of stat. surveys and methodological audits (in preparation), incl. analysis and reporting of the results are being integrated into the existing QMS system.
Regarding the results of particular data production processes the overall quality of the indicator construction production is considered to be as good.

12 Relevance

12.1 User needs

Description of users and their respective needs with respect to the statistical data.
Consultations with users are required by statistical act stressing the cooperation with other organisations (ministries and other state organisations) during preparation of the Programme of State Statistical Surveys.
An advisory body the Statistical Council consists of members representing main users (representatives of ministries, state organisation and public institutions).
The Council is the permanent expert advisory body for the President of the SOSR in the field of state statistics. The task of the Council is to draft /submit proposals and recommendations regarding state statistics concepts, to discuss the Programme of the state statistical surveys and other tasks according to the Status on the Statistical Council.
In practice the consultations with users run on bilateral bases as well as within activities covered by the action programme Activities focussing on learning about expectation of key users and on supporting better interpretation and better use of statistical products.
Users are consulted:
- In accordance with internal directives on Value adding processes, part Communication with users;
- Via Survey on satisfaction of users with products and services of the SO SR, in two-year periodicity;
- Via conduct of activities focussing on learning about expectations of key users and on supporting better interpretation and better use of statistical products (action programe defined by the development strategy of the SOSR and reflected in Marketing plan for respective year); the activities are evaluated in annual Evaluation of Marketing plan; document Overview of activities focussing on learning about expectation of key users and on supporting better interpretation and better use of statistical products.
- Via meetings with users conducted in accordance with the action programme defined by the development strategy of the SOSR and reflected in the Marketing plan for the respective year: to carry out activities focussing on learning about expectations of key users and on supporting better interpretation and better use of statistical data.
Key users of particular statistics products are listed in Marketing plan:
Data on Number of persons employed are provided quarterly to Federation of Employers' Associations of the Slovak Republic and to Ministry of Economy of the Slovak Republic and National Bank of Slovakia as well.

12.2 User satisfaction

User satisfaction is monitored via “Survey on satisfaction of users with products and services of the SO SR” conducted regularly with two-year periodicity. Evaluation of the user satisfaction survey also includes satisfactions rate (overall and for specified areas as well as for groups of products) and it is submitted together with conclusions and suggestions for improvements to top management meeting for approval.

12.3 Completeness

100%.

13 Accuracy and reliability

13.1 Overall accuracy

The return on the exhaustive survey for enterprises with 20 or more employees, which have a significant share in the industry, is more than 95%, so the overall accuracy of industry statistics is very good.
The Statistical Office of the Slovak Republic makes great efforts to prevent the occurrence of errors in the data, for example in the form of inspections, and performs thorough verification of data to detect errors.

13.2 Sampling error

Sampling errors are negligible. The deviation is not measured.

13.3 Non-sampling error

For each survey the Technical project (TP) of data processing is elaborated. One part of TP is dedicated to the description/definitions of checks.
Response rate is the same at the time data are provided to Eurostat and also at the time data are first published nationally.
Response rate (October 2017):

1. At the time data are provided to Eurostat: 97,83 %
2. At the time data are first published nationally: 97,83 %

Response rate is followed-up by regional statistical Office each day.

14 Timeliness and punctuality

14.1 Timeliness

For the indicator Number of persons employed, Wages and salaries and working hours there are no differencies in timeliness between the different aggregation levels (Total, MIGs, special aggregates, NACE Sections, Divisions, Groups or Classes, if relevant).
Data are released approximately T+43 days after reference month. See details in next point.

14.2 Punctuality

All deadlines have been respected.

15 Coherence and comparability

15.1 Comparability - geographical

Number of persons employed, wages and salaries and working hours data are calculated for all territory of Slovak Republik, sections B,C,D,E, MIGs, special industrial branches, size groups of enterprises by number of persons employed and also divided to regions.

15.2 Comparability - over time

Data is comparable over time.

15.3 Coherence - cross domain

The following data comparison analysis is done:
1) Comparison of monthly survey results with quarterly data surveyed for the purposes of national accounts (for the calculation of quarterly GDP);
2) Comparison with structural business statistics data;
3) A regular analysis and discussion of the STS experts with the national accounts experts is organised;
4) The trends of the STS data are compared with the business tendency surveys.
The analysis shows very good compliance level in case of parts of population surveyed exhaustively. Some differences appear when comparing data from monthly, quarterly and yearly samples, which are the subject of further detailed data analysis.

15.4 Coherence - internal

There are no problems with internal consistency in case of Number of persons employed.

16 Cost and burden

17 Data revision

17.1 Data revision - policy

Revisions are in conformity with standards, time-tested and transparent. They are described in decision ROZ-3/2018 Revision Policy of the SOSR.
The same revision policy is applied to STS data released nationally and transmitted to Eurostat.
According to Revision Policy of the SO SR the revised data are accompanied by all necessary explanations (reasons, character, etc.), they are accessible via the SOSR Portal.
The Revision Policy and Calendar of Revisions of the SOSR as well as all necessary explanations are accessible via the SOSR Portal.
The Revision Policy of the SO SR
We distinguish:
Routine revisions – regular revisions of data not influenced by change of methodology. In general, the monthly/quarterly data is considered to be preliminary.
Routine revisions of data may be necessary due to data available from quarterly enterprise surveys, new data received from reporting units, correction of price indices or corrected data from reporting units. The revised data for the last 3 months of the quarter are published together with the preliminary

results of the following month/quarter. The publication of the revised data is done periodically in line with Calendar of revisions

Extra-ordinary revisions – not scheduled in the Calendar of revisions. Extra-ordinary revisions include revisions of definitive data due to changes of methodology, changes of classifications, change of base year, changes of mathematical/statistical methods of data calculation. Those revisions may result in a break in time series of data. The users are informed via Press releases in advance.

At present, numeric information on the size of revisions of data is not available.

The policy on vintage database is laid down in the Revision Policy of SOSR. Practical implementation of the policy is being prepared in the statistical information system.

Vintage database of raw data exists in source database and is not publicly accessible. Data and documents regarding the revision is kept. General information about revision and methodological explanation is published, if relevant.

Coherence of the revision policy is respected for the data released nationally and disseminated to Eurostat.

17.2 Data revision - practice

The primary source of routine revisions is the need of data revisions due to data available from quarterly enterprise surveys, new data received from reporting units or corrected data from reporting units. The revised data for the last 3 months of the quarter are published together with the preliminary results of the following month. The publication of the revised data is done periodically in line with Calendar of revisions.

18 Statistical processing

18.1 Source data

Monthly survey Priem 1-12:

All enterprises with 20 and more employees registered in the business register. In addition enterprises in the business register with less than 20 employees that:

— Are statistically important (the decision about including them into survey of big enterprises was done by experts of particular activities, for example responsible for industry data);

— O r have a turnover in excess of EUR 5 million.

Number of units: 2762.

In addition enterprises with less than 20 employees are selected, which are statistically important according to expert judgement.

Trade register

Estimates for sole proprietors performing their business activity on the base of issued trade licences according to Act no. 455/1991 [Digest] (the data source is the number of issued trade licences).

18.2 Frequency of data collection

Monthly data collection.

18.3 Data collection

Data collection is organized by specialised regional office of the SO SR in Banska Bystrica.

The electronic data collection of monthly/quarterly data is compulsory since the 1 st January 2016 in line with the obligation laid down in the Slovak National Council law No 326/2014 (Digest) amending the Slovak National Council law No 540/2001 on the state statistics.
Formal and logical checks are realised in the process of data entry automatically; (compatible with Validation level 0 and 1), informal checks aim of which is to control the complexity and relations among the variables ((compatible with Validation level from 2 to 5). Most of the errors are directly consulted with the reporting units by our regional offices.
Data should be submitted on the 17th calendar day following the end of the reference month. The non-responding units are informed about their reporting duty and contacted by regional offices again. There are no problems with reporting discipline in the case of big enterprises, nevertheless the situation in this area shows the decreased tendency in the last years.
The basic step in the process of unit non-response calculation is the analysis of population with regard to the status of activity of reporting units. For this purpose we use the classification of special response and non-response cases. The particular codes describing active and non-active units are allocated to every reporting unit. Afterwards we define eligible units: they are all active responding and non-responding units. In some cases it is not possible to obtain any information about the unit. In this case we suppose there is the same share of active and non-active units as in the known population. The part corresponding to active units we consider to be non-responding units.

18.4 Data validation

The data entry, data completeness and statistical control are organised by specialised regional offices of the SO SR.
It has been distinguished between two levels of checking:
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 informal checks:
I – Informative check- 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

Imputation is made from data of the previous months - max. 3 months after surveyed period or is necessary to find a donor.

The results for the population of small enterprises are estimated based on data obtained from quarterly enterprise surveys.

The number of issued trade licenses is used to estimate the sales of sole traders.

18.6 Adjustment

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

19 Comment