Indicators of employment in information and communication

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2 Metadata update	
2.1 Date of last update	17.06.2020

3 Statistical presentation

3.1 Data description

Monitored indicators are:
- Number of employees;
- Wages and salaries;
- Hours worked;

On the base of above mentioned information the estimation of number of persons employed is realized.

3.2 Classification system

Branch classification of economic activities – NACE rev.2.
Nomenclature of Territorial Units for Statistics.

3.3 Sector coverage

Enterprises with principal activity in Divisions 58 - 63 of NACE Rev. 2.
Size classes covered
- large enterprises with 20 and more employees registered in the business register,
- small enterprises in the business register with less than 20 employees having an annual turnover in excess of 5 Mill. EUR
- sole proprietors with 20 and more employees having an annual turnover in excess of 5 Mill. EUR).

Estimates for sole proprietors performing business activities on the basis of trade licenses issued under Act no. 455/1991 (the source of data is the number of trade licenses issued).

3.4 Statistical concepts and definitions

The **number of persons employed** 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 (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.

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. 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, time spent on business trips). The excludes hours which are paid but not worked such as paid annual holidays, public holidays, sick leave, strikes.

Estimates of these indicators are realised for population of small enterprises based on results of monthly sample surveys and 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 estimation of hours worked of selfemployed is based on hours worked by employees.

3.5 Statistical unit

The statistical unit is an enterprise.

3.6 Statistical population

Enterprises with main activity in the information and communication sectors.

3.7 Reference area

Data are available for the Slovak Republic total and divided into 8 regions.

3.8 Time coverage

Data for indicators:
- persons employed
- wages and salaries
- hours worked

Data are regularly transmitted to Eurostat with first reference period 1Q 2010.

3.9 Base period

Not applicable.

4 Unit of measure

Number of persons employed, wages and salaries and hours worked.

5 Reference period

Reference period for the number of persons employed and wages and salaries is month.
Reference period for hours worked is quarter.

6 Institutional mandate

6.1 Legal acts and other agreements

Information on statistics on information and communication The Statistical Office of the SR collects in the statistical survey IaK 1-12 included in the Program of State Statistical Surveys, issued for a three-year period in the Collection of Laws of the Slovak Republic. The reporting obligation to submit statistical statements to entities is based on Act no. 540/2001 Coll. on State Statistics as amended (Section 18 (3)) and cannot be rejected (Section 18 (8)). The Statistical Office of the Slovak Republic is responsible for the protection of confidential data obtained and guarantees their use exclusively for statistical purposes.

6.2 Data sharing

The required variables are sent to Eurostat (from 2017 in SDMX format) and to other national information system needs organizations.

7 Confidentiality

7.1 Confidentiality - policy

Protection of statistical confidentiality (protection of confidential statistical data) is a system of interrelated measures in the legislative, methodological, organizational, technical, security and personnel fields, preventing the leakage of confidential statistical data or the premature publication of statistical information. Authorities performing state statistics are obliged to ensure the protection of confidential statistical data from misuse in the manner set out in § 25a and § 29 and 30 of Act No. 540/2001 Coll. on State Statistics, as amended.
The principles of the application of confidential statistical data protection are available on the website of the SO SR at:
https://slovak.statistics.sk/wps/portal/ext/services/infoservis/confidential

7.2 Confidentiality - data treatment

Confidential statistical data are not disclosed. In the publications and databases of the Statistical Office of the Slovak Republic, the symbol "D" is placed in the respective places instead of the data.

8 Release policy

8.1 Release calendar

The schedule of statistical release dates.

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.
First Release Calendar
The “Catalogue of publications” is released every year. It contains information on particular publications, periodicity and dates of release.
Catalogue of publications
Statistical Yearbook of the Slovak Republic
DATACUBE

8.2 Release calendar access

First Release Calendar is ispublicly available on the Office's website:
First Release Calendar
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 SR:
Information Reports

8.3 User access

The statistical information dissemination policy is formulated in accordance with the State Statistics Act, the Statistical Office Development Strategy, the Eurostat Information Dissemination Strategy and the European Statistics Code of Practice.
The principles of publishing and providing statistical information are available on the website of the Statistical Office of the SR at:
https://slovak.statistics.sk/wps/portal/ext/services/infoservis/principles

9 Frequency of dissemination

Monthly, quarterly, annual.

10 Accessibility and clarity

10.1 News release

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10.2 Publications

Monthly publications:
- "Information reports" according to the release calendar;

Quarterly publications:
- "Statistical Report on Basic Development Tendencies in the Economy of the Slovak Republic".

Website: http://www.statistics.sk

Annual publications:
- "Statistical Yearbook of the Slovak Republic".

Statistical Yearbook
Regional Statistical Yearbook of Slovakia

10.3 On-line database

DATACUBE

10.4 Micro-data access

Micro data is not published.

10.5 Other

Eurostat, central government, professional and trade union associations.

10.6 Documentation on methodology

Methodological information on information and communication statistics can be found in the survey form IaK 1-12, in publications and tables of the public database of the Statistical Office of the Slovak Republic.
Statistical Questionnaires

10.7 Quality documentation

Internal documentation of the Statistical Office of the SR on ensuring the quality of statistical outputs:
- internal Methodological directive for application of mathematical-statistical methods for statistical surveys MET-3/2012,
- internal methodological directive - Quality indicators of statistical outputs and statistical processes MET-2/2012.

On a yearly basis, quality reports are prepared in the ESS Metadata Handler for individual indicators in accordance with the ESS Handbook for Quality Reports (EQHQR) based on Eurostat requirements.

11 Quality management

11.1 Quality assurance

The SO SR has a quality management system in place. The Quality Manual includes a description of the quality management system and the fulfillment of ISO 9001 requirements. The application of the Manual ensures that all activities that affect the quality of the products being produced are planned, managed, reviewed, evaluated and meet the requirements accepted in the order.
The Quality Guide is available at:

https://slovak.statistics.sk/wps/wcm/connect/9ca43aa4-bfaf-4101-9dae-5263aa834df7/Prirucka_kvality.pdf?MOD=AJPERES&CVID=mu8R9IM&CVID=mu8R9IM
The basis of the whole quality management system is the Code of Practice for European Statistics: https://slovak.statistics.sk/wps/portal/ext/aboutus/key.documents/code.of.practise

11.2 Quality assessment

The quality of information and communication is very good, harmonized with the methodology of the EU Member States. The process of data collection and output generation is ensured within the integrated statistical information system, which incorporates data collection controllers and output generation algorithms that ensure the quality of output information. In order to evaluate the quality, the system has statistics on return, completed questionnaires, number of erroneous questionnaires, number of claims, etc.

12 Relevance

12.1 User needs

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.
Key users of particular statistics products are listed in Marketing plan:
International organizations – Eurostat.
National institutions – Ministry of Economy of the Slovak Republic (MH SR), Ministry of Finance of the Slovak Republic(MFSR), National Bank of Slovakia (NBS),
Trade - Union of KOVO.

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.
Result of the surveys are published on the website of the Statistical Office of the SR at:
https://slovak.statistics.sk/wps/portal/ext/aboutus/marketing/survey.of.satisfaction

12.3 Completeness

100%
Quarterly time series for Divisions 49-53 of NACE Rev. 2. are available since 1Q 2010.

13 Accuracy and reliability

13.1 Overall accuracy

The SO SR performs thorough verification of data in order to prevent the occurrence of errors.

13.2 Sampling error

The data are found:

- exhaustingly (enterprises with 20 and more employees)
- sample survey (enterprises with less than 20 employees), one third of the sample changes annually
- estimates for tradesmen.

13.3 Non-sampling error

To avoid non-selectable errors, i. errors in the process of collection and processing The SO SR has integrated logical and data controls in the integrated statistical information system (IŠIS) at the level of micro-data as well as at the level of aggregated data that are performed during data collection and processing.
The electronic questionnaire itself provides many arithmetic and logical controls between variables that we distinguish between serious and informative. In the event of serious errors in the form, this is not accepted and, in consultation with the reporting agent, is corrected to be correct and entered into processing. With these tools we try to minimize errors already in the collection itself and then during data processing.

14 Timeliness and punctuality

14.1 Timeliness

Publication of data in the public database of the Statistical Office of the Slovak Republic „DATACUBE" is in accordance with the schedule of its updating.

14.2 Punctuality

Publication dates are respected.

15 Coherence and comparability

15.1 Comparability - geographical

The same statistical methods are applied for the entire area of Slovak Republic.

15.2 Comparability - over time

Comparable time series are available since 1Q 2010.

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) Regular meetings of STS experts with national account experts are organized;
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 surveys, which are the subject of further detailed analysis.

15.4 Coherence - internal

There are no deviations, statistical outputs are internally consistent.

16 Cost and burden

Estimation is based on the time required to complete the questionnaire provided by respondents. Average hours worked by one respondent in completing the questionnaire 38 min.

17 Data revision

17.1 Data revision - policy

The revision policy governs the basic rules and general procedures by which the pre-drafted data is later revised as well as applied in revisions for other reasons.

The revision policy and calendar is available on the SO SR website at:

https://slovak.statistics.sk/wps/portal/ext/products/revisions

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.
In the event of any revision (even in previous years), a note is given in the databases and in the relevant SO SR publications that the data have been revised.

18 Statistical processing

18.1 Source data

Statistical surveys:
- Dop 1-12 - Monthly survey in transport;
- Prod 3-04 - Quarterly survey in business statistics;

- Prod 13-04 - Quarterly survey in business statistics in small enterprises.

18.2 Frequency of data collection

Monthly, quarterly.

18.3 Data collection

Data collection is provided by specialized office of the SO SR in Žiline. Electronic data collection is obligatory from 1 January 2016 in accordance with the obligation stipulated by the Act of the Slovak National Council no. Amending and supplementing the Act of the Slovak National Council no. 540/2001 Coll. Data should be submitted on the 17th calendar day following the end of the reference month. Non-responders are informed of their reporting obligation and contact their affiliates again. Most of the errors are directly consulted with the reporting agents.

18.4 Data validation

Data validation is embedded in the integrated statistical information system of the SO SR. The following checks are distinguished when collecting data:
1- formal checks carried out automatically in the data collection process
2 - informal controls to check the complexity and relationships between variables.
From the point of view of the severity of errors:
I - Infomatic Errors - Provide additional information that is needed for the process of checking and correcting data. They provide information on possible overruns of specified limits, partial non-response, etc.
Z - material errors - indicating specific errors that need to be corrected or justified by the reporting agent. These errors are discussed by the SO SR staff with the reporting unit and corrected.
The ISIS system also defines controls and algorithms for creating outputs that ensure their desired quality

18.5 Data compilation

Non-responses are resolved by imputation of data from the previous month, but no more than three months.
1.The results of small enterprises are calculated using Horwitz-Thomson's estimate with respect to the business activity. Initial weights are modified according to the rate of non-response of inactive units.
2. The number of issued trade licenses is used to estimate the revenues of sole traders.

18.6 Adjustment

Indicators Number of persons employed and wages are not adjusted. Only the hours worked indicator is adjusted. Working days adjustment is done using JDemetra+ software method Tramo/Seats, which takes into account the number of working days, public holidays.

19 Comment