

# Price indices of construction work

| 1 Contact   |   |
|---|---|
| 1.1 Organization  | The Statistical Office of the Slovak Republic |
| 1.2 Address   | Lamačská cesta 3/C, 840 05 Bratislava         |
| 1.3 Contact name  | Andrea Veselská                               |
| 1.4 Organization unit   | Price 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   | 07.11.2023                                    |
| 3 Statistical presentation  |   |
| 3.1 Data description  |   |
| <p>The price indices of construction works measure the average price development in construction. This indicator is used as deflator in construction statistics and national accounts.</p> <p>Quarterly survey contains data on:</p> <ul style="list-style-type: none"><li>- prices of the selected representatives including all materials, complete costs of building of the structure (object) and profit.</li></ul> <p>The prices of construction work are monitored without VAT and excise duties.</p> |   |
| 3.2 Classification system   |   |
| <p>Štatistická klasifikácia ekonomických činností (SK NACE Rev. 2) - Statistical classification of economic activities – SK NACE rev.2.</p> <p>Štatistická klasifikácia produktov podľa činností - Classification of products by activity - SK CPA 2015.</p> <p>Klasifikácia stavieb (KS 2010) - Classification of types of construction - CC.</p>  |   |
| 3.3 Sector coverage   |   |
| <p>Activities covered :</p> <ul style="list-style-type: none"><li>Enterprises with principal activity in Section F of NACE Rev. 2.</li><li>Activity (6-digit NACE), employment (20+ employees).</li><li>CC coverage: Sections 1 and 2.</li></ul> <p>Size classes covered : No size thresholds are used.</p>   |   |

### **3.4 Statistical concepts and definitions**

Construction output price index includes construction in progress, reconstruction, extension and restoration of buildings, repairs and maintenance of buildings, including construction assembly and the value of built-in materials (excluding VAT).

The construction output price indices is broken down by the kind of works carried out:

- new construction, reconstruction and modernisation;
- repairs and maintenance;
- other works.

New construction, reconstruction and modernisation, repairs and maintenance are broken down by the Classification of Types of Constructions:

- residential buildings
- non-residential buildings
- engineering works.

Prices for important construction works invoiced in a period of 75 days of the reference quarter.

### **3.5 Statistical unit**

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

### **3.6 Statistical population**

Sample of approximately 200 enterprises with 20 and more employees registered in the business register with annual turnover in excess of 5 Mill. EUR.

Section F of the NACE Rev. 2.

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.

### **3.7 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 available from the reference year 2000.

### **3.9 Base period**

Base period 2015=100.

## **4 Unit of measure**

Indices are transmitted to Eurostat.

## 5 Reference period

Reference period is quarter.

## 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). 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 Calendar contains timetable of the first release of selected indicators. Data will be published in the given day at 9 o'clock on the Internet website of the SOSR ( [www.statistics.sk](http://www.statistics.sk) ) in the part Information reports Catalogue of the SOSR and there will be also at the disposal at the spokesperson of the SO SR (phone number: +421 2 5023 6553). You will also find notice for amendments of dates on the Internet website of the SOSR.

# 9 Frequency of dissemination

Data on output prices in construction are transmitted to Eurostat quarterly.

# 10 Accessibility and clarity

## 10.1 News release

Data in [Press releases](#) are published in the terms of the First Release Calendar on the web portal of the SOSR.

Website: <http://www.statistics.sk/>

## 10.2 Publications

Data are published in online database DATAcube.

Website: <http://www.statistics.sk>

## 10.3 On-line database

Public database DATAcube.

## 10.4 Micro-data access

Micro-data are not disseminated.

## 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](#) - Please mention that the "Quality manual" is only available in Slovak version

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.

## 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 methodological audits including the analysis of the results are integrated into the existing quality management system.

STS compliance assessment is carried out by Eurostat. Concerning the results of particular data production processes, the overall quality of the indicators is considered to be as good.

## 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](#)

Please mention that the credibility survey and the satisfaction survey is only available in Slovak version

### 12.3 Completeness

100%.

Time series of indicators in accordance with the regulation are available from 2000 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

Sampling errors are monitored during data processing.

### 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 Trenčín. 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 3.Q.2022 is 98,00 %.

## 14 Timeliness and punctuality

### 14.1 Timeliness

Data are released in line with the Release calendar. There are no differences in timeliness between the different aggregation levels or between the statistical variables presented. Data dissemination in the public database DATAcube is in accordance with the set up deadlines. Data are disseminated on 28. day after the reference period.

### 14.2 Punctuality

Publication deadlines were met.

## 15 Coherence and comparability

### 15.1 Comparability - geographical

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

### 15.2 Comparability - over time

The time series are comparable from the reference year 2000.

### 15.3 Coherence - cross domain

The following data comparison analysis is done:

- 1) comparison of quarterly survey results with quarterly data surveyed for the purposes of national accounts (for the calculation of quarterly GDP);
- 2) a regular meeting of the STS experts with the national accounts experts is organised;
- 3) the trends of the STS data are compared with the business tendency surveys.

### 15.4 Coherence - internal

There are no problems with internal consistency in case of output prices in construction.

## 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. 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.

The policy on vintage database is laid down in the Revision Policy of SOSR.

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.

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

## 17.2 Data revision - practice

Data on output prices in construction are final and are not subject to revision.

MAR=MR=0

## 18 Statistical processing

### 18.1 Source data

The source is a sample survey of enterprises with 20 and more employees with annual turnover in excess of 5 Mill. EUR. It is based on Register of Statistical Units (RSU).

The data collection is based on a sample survey.

The sampling method is not formalised. A judicious selection of reporting units is performed.

The reporting enterprises covers the subjects selected by kind and value of construction output and by territorial aspect regardless of their legal form.

A new weighting system was calculated on the basis of the structure of construction output in SR and a detailed special statistical survey on construction output in 2015. The weighting schema allows to aggregate price indices into types, divisions, groups and categories according to Classification of

types of Construction (CC) Within the harmonized system EU, indexis has been published according to the CPA 2015 classification since 2009. Price base is the average of 2015.

The index scheme includes about 8558 representatives - selected types of construction work. Collected prices of the selected representatives include all materials, complete costs of building of the structure (object) and profit.

The values of the indices also include the prices of assembling work. Separately are given the indices for repairs and maintenance of the construction nature. Other indices are calculated as aggregates for the new construction, modernisation and reconstruction.

The sample updating frequency is every 5 years.

## 18.2 Frequency of data collection

Quarterly data collection.

## 18.3 Data collection

The regional office of the SOSR in Trenčín 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 15th day last month of the actual quarter on the website [www.statistics.sk](http://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

Non-response for active reporting units is corrected by data imputation. The results for the population of active enterprises are grossed up using the Horwitz-Thomson estimator in accordance with survey stratification. Initial weights are modified due to non-response rates and

unit inactivity. Administrative data and a model approach are used for estimates for self-employed persons.

### **18.6 Adjustment**

The index is not seasonally adjustment.

### **19 Comment**

Not available.