



## ~Methodology~

# QUARTERLY REPORT ON SERVICES PRODUCER PRICE INDEX (SPPI)

### **LEGAL BASIS**

The survey is carried out pursuant to the Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska", No. 85/03) and the Statistical Programme of Republika Srpska for the period 2018-2021.

The obligation to provide data to the Republika Srpska Institute of Statistics (the Institute) is based on the Article 8 of the Republika Srpska Law on Statistics ("Official Gazette of Republika Srpska", No. 85/03).

According to Article 27 and Article 28 of the Republika Srpska Law on Statistics and in accordance with the Rulebook on the protection of confidential data, the Institute is obliged to protect the submitted confidential data. In this regard, the Institute may not use the data collected for statistical purposes for other purposes and publish them individually.

### **METHODOLOGICAL BASIS**

#### ***AIM AND CONTENT***

The main purpose of the survey is to obtain timely information on the changes of producer prices for services that reflect the conditions of supply and demand on the services market in Republika Srpska. The aim is to monitor the prices of services that are important for the selected enterprises, either in terms of their frequency or the enterprises' turnover. The data obtained through this research are used for macroeconomic analysis and are used as deflators for measuring the real value of turnover of service activities in constant prices. Data are also used to assess the overall performance of the service sector. Results of the survey can be applied to compare average price movements and to analyse other business aspects (costs, productivity, for the creation of an escalation clause in the contract, etc.)

#### ***OBSERVATION UNITS / REPORTING UNITS***

The quarterly report on the prices of services is completed by business entities selected using the top-down method, according to the size of the turnover for the selected service activities.

## ***COVERAGE***

The survey covers business/legal entities that are registered in the following service activities according to their main activity:

- M71.1 Architectural and engineering activities and related technical consultancy,
- N80 Security and investigation activities and
- N81.2 Cleaning activities.

For the purposes of the survey, the Classification of Activities of Bosnia and Herzegovina - KD BiH 2010 was used, which is fully harmonised with the European Classification of Economic Activities NACE Rev.2. Entrepreneurs were not covered by the survey.

## ***METHOD AND PERIOD OF DATA COLLECTION***

Data collection is carried out using the reporting method, using a set of forms (by type of service) "Quarterly report - services producer price index (SPPI)". The main observation variable is the prices of representative services for the selected service activities, expressed in KM without VAT. The data collected from the reporting units, through separate forms, represent the basis for estimating the price movements of the total target population. In addition to data on prices, data on the total annual turnover of the business entity by service group are also collected, which serve as weights when calculating the price index. Data on the realised turnover of the enterprise for the previous year, classified by service groups, are collected in the questionnaire for the first quarter of the reference year. The collected data are the basis for the calculation of individual price indices and indices for groups of services, subsequently linked to the price index of services of a specific service activity.

## ***DATA PROCESSING***

The implementation of the SPPI survey is carried out in the traditional way using paper questionnaires (by post) and e-mail. The reference observation period is the quarter. Enterprises enter the average prices for the reference period in the questionnaire and submit the completed questionnaire to the authorised statistical institution within 30 days after that period. In the questionnaire, reporting units show the prices of representative services in the reference and previous quarter (t-1).

## ***DEFINITIONS OF MAIN FEATURES - INDICATORS***

**Services producer prices** represent the invoiced prices for the services performed by the service provider, shown according to the users of these services, i.e. enterprises or individuals. The specified transaction price should reflect the realised income realised by the service provider for the service performed in the contracted period. When determining the price, all discounts, rebates, surcharges, etc. which may relate to the user of the service should be taken into account. Since the producer price reflects the income realised by the service provider, the service tax should be excluded from the prices, while the subsidies on the services received by the service provider, if any, should be added. Producer (output) prices are monitored from the perspective of service providers, in contrast to consumer prices, which are monitored from the perspective of end users. Services producer price index is defined as the output service price index of resident enterprises. This means that SPPI measures changes in producer prices for services provided by enterprises registered in Republika Srpska.

## **Compilation of indices**

The total producer price index for the selected service activity is calculated in several steps. First, elementary indices of services within the enterprise are calculated, where the prices of the current and previous period (price relatives) are compared. If two or more prices are available in the enterprise for the same group of services, the elementary index is calculated using the Geomean-Jevons formula. Weights are not available at this level, so the elemental index represents an unweighted index at the enterprise service group level. After that, elementary indices are calculated at the level of service groups in one enterprise. The next step involves the calculation of an aggregated index at the level of service groups of all enterprises. The aggregated index of the group represents the price index for each individual group of services of all enterprises that reported prices for services from that group. It is a weighted average of the elementary indices within that group of services. The Laspeyres formula is used for the calculation. Weights are shares in the turnover of one group of services in the total turnover of each individual enterprise included in the specified group of services. This leads to the calculation of the total index as a weighted average of the price index for all groups of services. In accordance with EU Regulation (EC) No. 472/2008, the application of the base year (2015) is prescribed from January 2018 in EU member states. The base year 2015 was applied to H49.41 Freight transport by road and H 52.10 Warehousing and storage. Republika Srpska does not have data for the mentioned period, so for N80 Security and investigation activities and N81.2 Cleaning activities, the base year (2017) is used, while for M71.1 Architectural and engineering activities and related technical consultancy, the base year (2018) is used. A chain index consists of a series of consecutive indexes, each of which is connected to its predecessor. Merging consists of multiplying the value of each consecutive index with the value of its predecessor in the overlapping period, so that the base period of the reference index is the same as for the previous index.

## ***COMPLIANCE WITH INTERNATIONAL RECOMMENDATIONS AND STANDARDS***

The methodology for the SPPI survey is harmonised with the concepts and definitions from the Regulation on short-term statistics of the EU no. 1165/98. (Annex D) and its amendments and additions as well as guidelines from the Methodological Guide for Developing Producer Price Indices for Services (OECD, Eurostat, 2014, Second Edition).

## **IMPLEMENTATION ORGANISATION**

### ***AUTHORITIES IMPLEMENTING THE STATISTICAL SURVEY***

The responsible producer of data on services producer price index (SPPI) is the Republika Srpska Institute of Statistics. The collection of reports, data processing and production of results is carried out in the Division for Services Statistics of the Institute. Formal, computational and logical controls, treatment of extreme values of microdata, production and analysis of results, etc. are carried out in this department.

### ***IMPLEMENTATION FREQUENCY***

Reporting units are obliged to submit data to the Republika Srpska Institute of Statistics 20 days after the end of the quarter.

Data are published 55 days after the end of the quarter.

### **INSTRUMENTS**

The following methodological instruments have been established for conducting the survey:

- Questionnaires,
- Instructions for filling out the questionnaire and
- Letter to reporting units.

### **PUBLISHING**

Data are published for the Republika Srpska level, in a regular quarterly dynamics, starting from May 2021.

Quarterly release of “Services producer price index”, is available at the official website of the Institute [www.rzs.rs.ba](http://www.rzs.rs.ba).

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