



REPUBLIC OF CROATIA
CROATIAN BUREAU OF STATISTICS



QUALITY REPORT FOR STATISTICAL SURVEY

Service Producer Price Indices for 2024

Organisational unit: Business Statistics Directorate / Service Statistics Department

Prepared by: Maja Dozet and Josipa Kalčić Ivanić

October 2025

0. Basic information

- Purpose and subject of the survey

Quarterly service producer price indices are important short-term indicators used for the analysis of business cycle trends in the services sector and as input data for national accounts statistics. They are aimed at measuring the dynamics of price movements, which reflect the conditions of supply and demand on the service market. They are also used as deflators for the compilation of the index of services production (ISP). The data are the result of a series of statistical surveys of the Croatian Bureau of Statistics which are used for collecting data on the prices of representative services in the observed service activities. In addition to data on prices, data on turnover by groups of representative services used as weights when calculating the price index are collected, along with some other relevant information specific to individual service activities.

- Reference period

Quarter

- Legal acts and other agreements

The survey methodology is in line with 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, 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 and with the Methodological Guide for Developing Producer Price Indices for Services (OECD, Eurostat, 2014, Second Edition). The survey is carried out pursuant to the Official Statistics Act (NN, Nos 25/20, 155/23 and 124/25 – corr.).

- Classification system

The survey includes service activities classified in sections H – N of the National Classification of Activities 2007.

Activities in Section H:

H 491 Passenger rail transport, interurban

H 492 Freight rail transport

H 493 Other passenger land transport

H 494 Freight transport by road

H 495 Transport via pipeline

H 501 Sea and coastal passenger water transport

H 502 Sea and coastal freight water transport

H 51 Air transport

H 521 Warehousing and storage

H 5221 Service activities incidental to land transportation

H 5222 Service activities incidental to water transportation

H 5223 Service activities incidental to air transportation

H 5224 Cargo handling

H 5229 Other transportation support activities

H 531 Postal activities under universal service obligation

H 532 Other postal and courier activities

Activities in Section I:

I 55 Accommodation

I 56 Food and beverage service activities

Activities in Section J:

J 58 Publishing activities

J 59 Motion picture, video and television programme production, sound recording and music publishing activities

J 60 Radio broadcasting

J 61 Telecommunications

J 62 Computer programming, consultancy and related activities

J 63 Information service activities

Activities in Section L:

L 68 Real estate activities

Activities in Section M:

M 691 Legal activities

M 692 Accounting, bookkeeping and auditing activities; tax consultancy

M 702 Management consultancy activities

M 711 Architectural and engineering activities and related technical consultancy

M 712 Technical testing and analysis

M 731 Advertising

M 732 Market research and public opinion polling

M 74 Other professional, scientific and technical activities

Activities in Section N:

N 77 Rental and leasing activities

N 78 Employment activities

N 79 Travel agency, tour operator and other reservation service and related activities

N 80 Security and investigation activities

N 811 Combined facilities support activities

N 812 Cleaning activities

N 813 Landscape service activities

N 82 Office administrative, office support and other business support activities

- Statistical concepts and definitions

Variables for which data are collected are prices (excluding VAT), expressed in euro, and turnover (excluding VAT), expressed in euro. Data collected in the survey are used for the calculation of price indices, whereas price levels are not published.

- **Statistical unit**

Since January 2024, the observation unit for all surveys is a kind-of-activity unit (KAU). The reporting unit for telecommunication activities is HAKOM, the regulatory body for this kind of services. The reporting unit for air transport of passengers services is the largest enterprise. The enterprise substitutes the KAU.

- **Statistical population**

Target population comprises business entities (legal entities, traders and freelancers) engaged in service activities (sections H – N of NKD 2007). The framework for population unit identification is the Statistical Business Register. In the J 61 activity, the national regulatory body is the Croatian Regulatory Authority for Network Industries (HAKOM). The sample frame includes approximately 110 000 units. The sample includes approximately 2 200 units.

1. Relevance

1.1. Data users

The main users are ministries and state administration bodies (the Ministry of Economy, the Croatian Chamber of Economy), financial institutions (Croatian National Bank), economic analysts, the media, researchers, students, enterprises and users within the Croatian Bureau of Statistics (National Accounts Department).

1.1.1. User needs

The main users are ministries and state administration bodies, financial institutions, economic analysts, the media, researchers and students, enterprises and users within the Croatian Bureau of Statistics who mostly use data series on service producer price indices.

1.1.2. User satisfaction

The first user satisfaction survey of the Croatian Bureau of Statistics was conducted in 2013, then in 2015 and 2022, and the last one at the end of 2024. The results can be checked out on the website of the Croatian Bureau of Statistics <https://dzs.gov.hr/highlighted-themes/quality/user-satisfaction-surveys/686>.

There is a good cooperation with the main users such as the Croatian National Bank, the Croatian Chamber of Economy and the Ministry of Economy.

The Croatian Bureau of Statistics replies on time to users' inquiries.

1.2. Completeness

The indicators are fully in line with the concepts and definitions given in the methodology based on the Regulation (EU) 2019/2152 of the European Parliament and of the Council on European business statistics. The series of indices, published at the national level and submitted to Eurostat, are complete, without gaps or missing data.

1.2.1. Data completeness rate

The indicator is not computed.

2. Accuracy and reliability

2.1. Sampling error

Most SPPI surveys are based on the cut-off method of sample selection, which accounts for 60% to 70% of the total turnover of a particular service activity. A PPS sample is used only in a few SPPI

surveys, primarily in service activities that contain a lot of small units. Sampling error is not calculated due to the lack of resources.

2.1.1. Sampling error indicators

The indicator is not computed.

2.2. Non-sampling error

The main sources of errors are the degree of accuracy of the sampling frame and non-responses. The non-response rate is 10% on average. Fixed quantity indices may be subject to bias as a result of the addition of new services or the occurrence of significant changes in service structures and weights by service groups. The bias caused by new services is minimised by adding new services to those tracked by the index. The aim of this survey is to measure price movements, therefore changes in quality must be taken into account when calculating the index. This is the main challenge in calculating the index and, therefore, changes in quality are monitored and treated very carefully. Two methods are often applied: the overlapping method and the carrying forward method, in order to find the difference in price equal to the difference in service quality. If data is missing in the current period, a new service is selected.

The reporting unit sometimes considers the data collected on prices confidential, which affects the non-response rate. During the survey, a large number of units were found that were not in the scope of the survey.

In order to update the sampling frame and provide feedback to the Statistical Business Register based on the information from the survey, the sample units are classified as:

- 0 – operates, refuses to report data
- 1 – operates, report submitted
- 2 – ceased operations
- 3 – does not perform any service activities
- 4 – inactive unit
- 5 – bankruptcy
- 6 – undeliverable
- 7 – does not perform a specific service activity, but some other service activity
- 8 – budgetary user, non-profit organisation
- 9 – organisational changes (mergers, separations, etc.).

To avoid processing errors, double checks are performed and input data error lists are used.

2.2.1. Coverage error

A gap between target population and the frame occurs mainly because the Statistical Business Register is not updated regularly. Eligibility of units can be determined only on the selected sample. Units not included in the sample are not contacted and it is impossible to determine the actual status of their business operations.

2.2.2. Overcoverage rate

The indicator is not computed.

2.2.3. Measurement error

Automatic control is performed when entering data into the SPPI online application. When entering data, significant errors are noticed and corrected by the reporting unit or administrator so that the data can be successfully sent to the database. The main checks include detecting, correcting or accepting large price fluctuations between the current and previous periods and the impact of quality changes on price movements.

2.2.4. Nonresponse error

In 2024, around 90.0% responses were recorded. Measures to reduce non-response include electronic messages and telephone contact with reporting units.

2.2.5. Unit nonresponse rate

The indicator is not computed.

2.2.6. Item nonresponse rate

The indicator is not computed.

2.2.7. Processing error

Data collected in the survey are checked by means of logical and calculation controls. Each entry is checked and, if an error occurs, data are either corrected or tolerated if found accurate. There are errors that can be approved and tolerated as well as those that cannot be tolerated so they have to be corrected.

2.2.8. Imputation rate

The indicator is not computed.

2.2.9. Model assumption error

Not available.

2.3. Data revision

2.3.1. Data revision – policy

The users of statistical data are informed about revisions on the website of the Croatian Bureau of Statistics, on the link – [https://dzs.gov.hr/General Revision Policy of the CBS](https://dzs.gov.hr/General%20Revision%20Policy%20of%20the%20CBS).

2.3.2. Data revision – practice

Provisional data are not published in this survey and, therefore, there are no data revisions.

2.3.3. Data revision – average size

The indicator is not applicable.

2.4. Seasonal adjustment

The indices are calculated and published in their gross, unadjusted form.

3. Timeliness and punctuality

3.1. Timeliness

The results are published at the national level approximately 75 days after the end of the reference period, quarterly in Excel tables in the STS database as well as in the First Releases.

Data are collected by using an online application (CAWI). The reporting units enter data directly into the form, which is available on the website of the Croatian Bureau of Statistics at [SPPI - Home](#).

The data collection period generally covers the days from the 1st to the 25th day of the month for data from the previous reference quarter.

The survey usually ends 60 days after the reference month.

3.1.1. Timeliness – first results

The indicator is not computed.

3.1.2. Timeliness – final results

The indicator is not computed.

3.2. Punctuality

Data are submitted in accordance with a previously published release calendar and there is no lag between the actual delivery of data and the target date when the data should have been delivered.

3.2.1. Punctuality – delivery and publication

The indicator is not computed.

4. Accessibility and clarity

Brief Notes on Methodology are given in the First Releases, which are available on the website of the Croatian Bureau of Statistics.

4.1. News release

[Services Producer Prices](#)

4.2. Online database

Since 2010, the time series of service producer price indices, base year 2021 = 100, have been published on the dissemination website of the Croatian Bureau of Statistics in the STS database (short-term business statistics database) in the domain of [Services](#) under the title Services Producer Price Indices – quarterly data.

4.3. Microdata access

The conditions under which certain users can access microdata are regulated by the [Ordinance on the Conditions and Terms of Access and Use of Confidential Statistical Data of the Croatian Bureau of Statistics for Scientific Purposes](#) (NN, No. 5/23).

4.4. Documentation on methodology

Brief notes on methodology are available in the First Releases that can be found on the website of the Croatian Bureau of Statistics under Services Producer Prices.

The data are presented as gross price indices: quarter compared to the same quarter of the previous year, quarter compared to the previous quarter, and quarter compared to the average of the base year (2021).

5. Coherence and comparability

5.1. Asymmetry for mirror flows statistics

Not applicable.

5.2. Comparability over time

The data series for seven SPPI surveys have been collected since 2006 and are comparable over time (H 51, H 521, H 501, H 502, H 5224, H 531, J 61 and N 80). The rest have been available since 2010, and some since 2015.

5.2.1. Length of comparable time series

The indicator is not computed.

5.2.2. Reasons for break in time series

Not applicable.

5.3. Coherence – short-term and structural data

The indicator is not computed.

5.4. Coherence – national accounts

The indicator is not computed.

5.5. Coherence – administrative sources

The indicator is not applicable.

6. Cost and burden

6.1. Cost

The costs of the Croatian Bureau of Statistics amount to approximately 2 500 hours a year. They include the work of eight employees on 32 regular surveys.

6.2. Burden

The data on the burden of the reporting units are available for 30 SPPI surveys conducted via an online form. Reporting units provide information on the time spent completing the form only in the first quarter of the year.