Quality Report for the Annual report on industry (PRODCOM), 2022

Republika Srpska Institute of Statistics,
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The report prepared by: Jelena Komljenović
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1 INTRODUCTION TO THE STATISTICAL PROCESS AND PRODUCT

1.1 Purpose of the survey

The Annual report on industry (IND-21) is a specific annual statistical activity focused exclusively on industrial products (PRODCOM).

The goal of this statistical activity is to collect annual data on industrial production and sale of industrial production for each individual product according to the Nomenclature of Industrial Products - NIP BiH/PRODCOM 2022, which is based on NIP BiH 2010 updated in accordance with the changes in the EU PRODCOM List.

1.2 Legal basis and responsibility of statistical institutions

The Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska", No. 85/03), the Statistical Programme of Republika Srpska for the period 2022-2025, the current annual Work Plan of the Republika Srpska Institute of Statistics (RSIS).

1.3 Relevant classifications

Filling in the Annual Industry Report (IND-21) is done according to the valid Nomenclature of Industrial Products NIP BiH/PRODCOM 2022, which is basically NIP BiH 2010 updated in accordance with the changes in the EU PRODCOM list.

1.4 Reporting unit

Reporting units are enterprises operating under state, cooperative, mixed and private ownership, classified according to the KD BiH 2010 into sections: B - Mining and quarrying; C - Manufacturing and D - Electricity, gas, steam and air-conditioning supply; E – Water supply; sewerage, waste management and remediation activities (division 36 - Water collection, treatment and supply and group 38.3 - Materials recovery). Data also refer to units that are engaged with industrial production and are part of non-industrial enterprises. Only the production of units which carry out production at the territory of Republika Srpska is observed.

1.5 Statistical observation unit

Units of observation, which are most often also reporting units, for the Annual report on industry are enterprises operating under state, cooperative, mixed and private ownership, classified according to the KD BiH 2010 which in its content and structure fully complies with the EU Statistical Classification of Economic Activities NACE Rev 2. Observation units are also reporting units that are engaged with industrial production and are part of non-industrial enterprises.

1.6 Scope and coverage

Annual report on industry covers all active enterprises from the Statistical Business Register (SBR) that have industry as their primary or secondary activity, with 10 or more employed persons. In determining the coverage, the basic condition must be met: covering 90% of total production at the level of the class of economic activity.

Out of a total of 2,193 active industrial enterprises from the SBR, the Annual report on industry for 2022 covers 1,052 industrial enterprises and 135 industrial units within non-industrial enterprises, which makes a total of 1,187 observation units.

1.7 Statistical concepts and definitions

Industrial production covers finished production in natural form, regardless whether the product is further manufactured in total or partially in the enterprise or it is provided as a commodity outside the enterprise. Unfinished production is not included in finished production until it reaches a certain phase in the production process. This phase is defined in the NIP BiH/PRODCOM 2021 as a specific product which has its given code and name.

Annual data on industrial production cover aggregated realised annual production, sale and value of sale for each particular product, based on codes from the NIP BiH/PRODCOM 2021.

Value of sale is calculated on the basis of sale prices given in invoices, with prices including packaging costs and excluding transportation costs, discounts and value added tax (VAT).

2 RELEVANCE, ASSESSMENT OF USERS' NEEDS AND PERCEPTIONS

2.1 Users of statistical survey data

2.1.1 Key users of statistical survey data

The key users of annual data on industrial production are the Republika Srpska Government, Ministry of Energy and Mining of Republika of Srpska, the Ministry of Finance of Republika Srpska, the Ministry of Economy and Entrepreneurship of Republika Srpska, the Ministry of Agriculture, Forestry and Water Management of Republika Srpska, local self-government bodies, the Agency for Statistics of BiH, the Central Bank of BiH , the Chamber of Commerce of Republika Srpska, the IMF, the media, the Economic Institute and other educational and research institutions, natural persons, etc.

Internal users of annual data on industrial production are statistics: national accounts, industrial producer prices, economic accounts in agriculture and structural business statistics.

2.1.2 Assessment of users' needs

The annual survey of industrial production provides data on annual production, sale and value of sales. The published data, to the greatest extent, satisfy the needs of the users.

2.1.3 Measuring users' perceptions and user satisfaction

In 2020, RSIS conducted a User Satisfaction Survey and the results are available on the RSIS official website. There is no special survey on user satisfaction with industry statistics.

2.2 Data completeness

2.2.1 Quality and performance indicator – Data completeness - rate (R1)

The rate of available statistics is 100%, because the EU regulations for the Annual report on industry (PRODCOM) have been fully implemented.

The Annual report of the industry is harmonised with international standards and regulations of the European Union ((Regulation (EU) 2019/2152 of the European Parliament and of the Council of 27 November 2019 on European business statistics). NIP BiH/PRODCOM 2022, which was used to collect data for 2022, is fully harmonized with the EU PRODCOM list (Commission Implementing Regulation (EU) 2022/2552 of 12 December 2022. pursuant to Regulation (EU) 2019/2152 of the European Parliament and of the Council and amending Commission Implementing Regulation (EU) 2020/1197, as regards the coverage of the product classification).

3 ACCURACY AND RELIABILITY

3.1 Sampling error

3.1.1 Quality and performance indicator – Sampling error (A1)

Annual report on industry covers all active enterprises from the Statistical Business Register (SBR) that have industry as their primary or secondary activity, with 10 or more employed persons. In determining the coverage, the basic condition must be met: covering 90% of total production at the level of the class of economic activity.

Given that the scope for collecting annual data on industrial production was obtained using the cut-off method, i.e. it is targeted coverage, the calculation of sampling errors according to the sampling error calculation methodology is not applicable

3.1.2 Activities to reduce sampling errors

Given that the scope for collecting annual data on industrial production was obtained using the cut-off method, i.e. it is targeted coverage, the calculation of sampling errors according to the sampling error calculation methodology is not applicable

3.2 Non-sampling errors

3.2.1 Non-sampling errors – Coverage errors

Coverage errors represent differences between the target population and the population selected in the sample.

3.2.1.1 Quality and performance indicator – Over-coverage rate (A2)

Coverage errors are mainly related to over-coverage due to the inactivity of observation units (they did not start or stopped working during the reference period) or changes in their main (prevailing) activity.

The total number of observation units for 2022 was 1,187, and the number of observation units that were inactive (did not start or stopped working during the reference period) and engaged in non-industrial activity was 19.

Ocrw = 19/1,187= 0.016 = 1.6%
Over-coverage rate for PRODCOM survey in 2022 was 1.6%.

3.2.1.2 *Quality and performance indicator – Common units - proportion (A3)*

PRODCOM survey does not use multiple sources, the data is obtained only from the survey conducted by RSIS.

3.2.1.3 Undercoverage error

There are possible cases where some reporting units perform some of the industrial activities, but do not have that activity registered and are therefore not included in the sample. The number of such cases is not analyzed, but with the regular updating of the SBR, their number decreases from year to year.

3.2.1.4 Measures to reduce coverage errors

Measures to reduce coverage errors are the inclusion of all newly established industrial enterprises and the exclusion of those that stopped working in the previous year. By regularly updating the SBR based on information from various statistical surveys, it is possible to exclude from the address list enterprises that represented over-coverage and add enterprises that were part of under-coverage.

3.2.2 Non-sampling errors – Measurement errors

3.2.2.1 Reasons behind measurement errors

The most common measurement errors occur in cases where the person filling out the questionairre is not sufficiently qualified to fill it in, has not carefully read the instructions or lacks the attention when entering the data into tables, then, in cases of the lack of records at the reporting units that are in line with the product codes and units of measure prescribed by NIP.

3.2.2.2 *Measurements to reduce the number of measurement errors*

Direct contact is established with the reporting unit. The reason for the errors is being investigated. It is checked whether the instructions for filling out the form are clear enough, additional methodological explanations are given. Letters are sent to reporting units that are not interested or refuse to fill out the form, reminding them of the obligation to submit accurate data, which is established by the Law on statistics ("Official Gazette of Republika Srpska" No. 85/03).

3.2.3 Non-sampling errors – Non-response errors

Reports that are not submitted by reporting units or are submitted with inadequate answers are treated as non-response.

3.2.3.1 Quality and performance indicator – Unit non-response rate (A4)

***Table 1**: Unit non-response rate in 2022*

Total number of (relevant) observation units	Number of observation units for which the response was not obtained (non-response)	Unit non-response rate (%)
1,187	13	1.1%

3.2.3.2 Quality and performance indicator – Item non-response rate (A5)

Item non-response occurs very rarely and often is not possible to be detected. Mostly, these are cases when the reporting unit does not fill in the report all the products produced by the observation unit.

Currently, there is no precise record of the number of non-responses for individual variables.

3.2.3.3 Procedures in the event of non-response

In case the complete report or only some data is missing, contact is established with the reporting unit with the aim of completing the report in the manner required by the methodology.

For the observation units that could not be contacted, because the available phone numbers are not active or correct, they are not located at the registered addresses and they did not submit the final financial statement, it is assumed that they are not active, so no data estimation was performed for them.

3.2.3.4 Procedures to reduce non-response rates

In order to reduce the non-response rate, taking into account the capabilities of the reporting units, the following procedures are most often used:

- multiple contacting of the reporting unit;
- flexibility of deadlines for report submission (possibility of postponing data submission deadlines);
- combining several different methods of data collection (telephone, e-mail, fax).

3.2.4 Revision

3.2.4.1 Quality and performance indicator – Data revision – average size (A6)

No revision was planned or conducted.

3.2.5 Imputation

3.2.5.1 Quality and performance indicator – Imputation - rate (A7)

Data are not imputed in this survey.

4 TIMELINESS AND PUNCTUALITY

4.1 Timeliness of publication

The timeliness of data publication is the interval between the observed period to which the data refer and the publication date.

4.1.1 Quality and performance indicator – Time lag – first results (TP1)

Preliminary results of the Annual report on industry for 2022 were published on 1 July 2023 in the form of an annual release.

***Table 2**: Timeliness of the preliminary results of PRODCOM survey*

Reference period	01.01. - 31.12.2022.
Date of publication of preliminary results	01.07.2023.
Time lag (in months)	T+ 6

Timeliness of the preliminary results was T+6 months.

4.1.2 Quality and performance indicator – Time lag – final results (TP2)

Final results of the Annual report on industry for 2022 were published on 1 October 2023 in the online database.

***Table 3**: Timeliness of the final results of PRODCOM survey*

Reference period	01.01.-31.12.2022.
Date of publication of final results	01.10.2023.
Time lag (in months)	T+ 9

Timeliness of the final results was T+9 months.

4.2 Punctuality of publication

4.2.1 Quality and performance indicator – Punctuality – delivery and publication (TP3)

Actual publication dates of the preliminary and final data of the Annual report on industry (PRODCOM) did not differ from the planned dates in the Release calendar.

Indicator for producers of statistics

***Table 4**: Punctuality of the results of PRODCOM survey:*

Reference period	01.01.-31.12.2022.
Announced publication date (according to the Release calendar)	01.10.2023.
Actual publication date	01.10.2023.
Time lag (in days)	T+ 0

Punctuality was T+ 0 days.

Indicator for users of statistics:

Punctuality of release of PRODCOM data for 2022 was 100%.

4.3 Reasons for major delays and measures to improve timeliness and punctuality

There were no delays, data were published according to dates announced in the Release calendar.

5 COHERENCE AND COMPARABILITY

5.1 Coherence

5.1.1 Quality and performance indicator – Coherence between different data sources (CH1)

The annual PRODCOM survey provides data on the volume of production, volume and sales value of industrial production. There is no other research with which the data can be compared and matched.

5.1.2 Reasons for major discrepancies

There were no major discrepancies.

5.2 Comparability

5.2.1 Quality and performance indicator – Asymmetry for mirror flows statistics (CC1)

Not applicable.

5.2.2 Quality and performance indicator – Length of comparable time series (CC2)

Annual data on industrial production have been collected since 1996.
A comparable series of annual data on industrial production exists since 2005.
CC2 = (year 2022– year 2005) + 1
CC2 = 18 years

5.2.3 Breaks in time series

Annual data on industrial production until 2001 are presented according to the NIP of the former SFRY, while data for 2002 are not available.
The data for 2003 and 2004 are presented according to the Classification of Activities of Republika Srpska, which for the first time is harmonized with the original EU statistical classification of activities NACE Rev.1.
The data for the period from 2010 to 2021 were collected according to KD BiH 2010, which in terms of content and structure fully corresponds to the EU classification NACE Rev.2, and according to which the presentation of data for the period from 2005 to 2009 was adjusted.

5.3 Geographical comparability

5.3.1 Comparability with the European Statistical System members

Available data from the Annual report on industry (IND-21) for 2022 are fully comparable with the data of members of the European Statistical System because the survey is carried out in accordance with the standards and regulations of the European Union (Regulation (EU) 2019/2152 of the European Parliament and of the Council of 27 November 2019 on European business statistics). NIP BiH/PRODCOM 2022 which was used to collect data for 2022, is fully harmonised with the PRODCOM List (Commission Implementing Regulation (EU) 2022/2552 of 12 December 2022. pursuant to Regulation (EU) 2019/2152 of the European Parliament and of the Council and amending Commission Implementing Regulation (EU) 2020/1197, as regards the coverage of the product classification).

6 ACCESSIBILITY AND CLARITY, DISSEMINATION FORMATS

6.1 Releases in which data are published

Annual data on industrial production are published for the level of Republika Srpska.

Users of statistical data can easily and simply access the data, as they are published on the RSIS website www.rzs.rs.ba and in printed publications.

6.2 Publications in which data are published

The preliminary results are published on 1 July in the annual release "Industrial production - PRODCOM", and the final results on 1 October in the online database.

Annual data on industrial production are also published in the publications Statistical Yearbook, "This is Republika Srpska" and the bulletin "Industria". The mentioned publications are available in printed form, as well as in electronic form on the RSIS official website.

Data on industrial production for the level of Republika Srpska are regularly submitted to the Agency for Statistics of Bosnia and Herzegovina (BHAS), which is responsible for aggregating data for the level of BiH and reporting to the Statistical Office of the EU, Eurostat.

6.3 Online database

Annual PRODCOM data for 2022 are available in the online database.

6.4 Access to microdata

Microdata are not available.

6.5 Accessibility of methodological documents

On the official RSIS website, basic concepts and definitions related to this survey are available as well as the methodology in the section related to the industry statistics. In addition, in a shorter form, metadata are also disseminated in printed and electronic publications – annual release Industrial production (PRODCOM), bulletin “Industry” and the Statistical yearbook.

6.6 Measures to improve clarity of disseminated results

Annual data on industrial production are clearly presented.

6.7 Quality and performance indicator – Data tables - consultations (AC1)

The software for tracking the number of data accesses and downloads is not available.

6.8 Quality and performance indicator – Metadata - consultations (AC2)

The software for tracking the number of data accesses and downloads is not available.

6.9 Quality and performance indicator – Metadata completeness - rate (AC3)

Metadata completeness rate for annual data on industrial production is 100%.

7 SURVEY COSTS AND BURDEN ON RESPONDENTS

7.1 Costs of survey implementation

Data on RSIS costs for the realization of the statistical activity related to industry statistics are not available.

7.2 Burden on respondents

Table 5: *Annual reporting burden for the Annual report on industry in 2022 (in hours)*

Number of data providers that filled in the questionnaire	1,155
Time required to fill in one questionnaire, average (hours)	0.8
Total time spent (hours)	912

7.3 Measures to reduce costs and burden

The introduction of a web application would be the most significant measure to reduce costs and burden on reporting units.

8 CONFIDENTIALITY

8.1 Confidentiality - policy

Data related to individual observation units are used exclusively for statistical purposes.

The confidentiality of data and protection of personal data are regulated by the Law on Statistics of Republika Srpska (“Official Gazette of Republika Srpska”, No. 85/03) and the “Rulebook on protection of confidential data” of the Republika Srpska Institute of Statistics. The confidentiality of statistical data is also ensured by the Law on protection of personal data (“Official Gazette of BiH”, No. 49/06).

8.2 Confidentiality – data handling

All collected data are treated as confidential and used exclusively for statistical purposes. The RSIS "Rulebook on protection of confidential data" states the principles of treating confidential data, procedures for ensuring confidentiality during data collection, processing and dissemination, as well as procedures for accessing microdata.

9 STATISTICAL PROCESSING

9.1 Source of data

Data collection in this statistical activity is done in a traditional way (via questionnaires). The questionnaire "Annual report on industry – IND-21" was used, as well as the manual and the NIP BiH/PRODCOM 2022.

Reporting units submit completed questionnaires to regional units of RSIS by 19 March for the previous year.

9.2 Frequency of data collection

PRODCOM data on industrial production is collected and published annualy.

9.3 Data collection

Before entering, the collected data is checked and corrected in the regional departments and the Department of Production Statistics of the RSIS. If necessary, subsequent contact with the reporting unit provides additional data on the basis of which corrections are made.

Data entry is done in the Department of Production Statistics of RSIS in the application - IST. For data entry and processing, mostly "hard" controls are installed, which prevent the entry of computationally and logically incorrect data.

9.4 Data validation

The most common measurement errors occur in cases where the person who fills in the form is not sufficiently qualified to fill it in, when he has not carefully read the instructions for filling in, or because of insufficient attention of the person who enters the data in the tables.

9.5 Data compilation

In case the complete report or only some data is missing, contact is established with the reporting unit with the aim of completing the report in the manner required by the methodology.

9.6 Adjustments

9.6.1 Seasonal adjustment

Seasonal adjustment is not made since this survey is conducted on an annual basis.