# PRODUCTION INDEX IN CONSTRUCTION

Reference Metadata in Euro SDMX Metadata Structure

(ESMS)

INSTAT

## Reference Metadata

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| **1. Contact** | |
| 1.1. Contact organisation | INSTAT, Institute of Statistics |
| 1.2. Contact organisation unit | Short-term Statistics Unit, Directory of Economic Statistics |
| 1.3. Contact name | Klodiana Gurra |
| 1.4. Contact person function | Specialist, Short-Term Statistics Unit |
| 1.5. Contact mail address | Rr. Vllazën Huta, Ndërtesa 35, Hyrja 1, Tiranë, Shqipëri, ZIP Code 1017 |
| 1.6. Contact email address | kgurra@instat.gov.al |
| 1.7. Contact phone number | +(355) 4 2222411 / +(355) 4 2233356 |
| 1.8. Contact fax number | +(355) 4 228300 |
| **2. Metadata update** | |
| 2.1. Metadata last certified | 18.03.2025 |
| 2.2. Metadata last posted | 18.03.2025 |
| 2.3. Metadata last update | 18.03.2025 |
| **3. Statistical presentation** | |
| 3.1. Data description | Construction Production Index is an important short-term economic indicator of business, which purpose is to measure the quarterly changes of the construction production between two comparable periods. This information can be used to analyse the current state of the construction activity in the country, as well as short-term forecast for its future development. The main source is the Quarterly Survey of Short-term Statistics, Questionnaire for Construction (Module 122), combined with administrative data. Data collected with that enquiry are real hours worked from persons employed who are directly engaged in the production process in construction - total and separately by type (building construction and civil engineering). |

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| 3.2. Classification system | Statistical classification of economic activities used is NACE Rev. 2. |
| 3.3. Sector coverage | The survey (for this indicator) covers enterprises classified in Section F of NACE Rev. 2. The survey covers all large and medium-sized enterprises as well as a representative number of small enterprises. A stratum is determined according to classes and is based on number of employed. |
| 3.4. Statistical concepts and definitons | The objective of the Construction Production Index is to measure changes in the volume of output at close and regular intervals, mainly quarterly and annually. It provides a measure of the volume trend in value added over a given reference period. The production index is a theoretical measure that must be approximated by practical measures.<br><br>Value added at basic prices can be calculated from turnover (excluding VAT and other similar deductible taxes directly linked to turnover):<br><br>• + capitalized production;<br>• + other operating income;<br>• +/- the changes in stocks;<br>• - the purchases of goods and services;<br>• - taxes on products which are linked to turnover but not deductible;<br>• + any subsidies on products received. |
| 3.5. Statistical unit | The observation unit is the enterprise. |
| 3.6. Statistical population | Statistical population includes statistical units, in this case enterprises, which operate in economic activities according to NACE Rev. 2, Construction (section F, respectively divisions 41-43). The enterprises with 1-9 employed are surveyed by sample survey, whereas the enterprises with 10 and more employed are surveyed exhaustively. |
| 3.7. Reference area | Construction Production Index covers the whole territory of Albanian Republic. |
| 3.8. Time coverage | Quarterly Short-term Statistics Survey referred to Construction Production Index is available from 2005 onwards. |
| 3.9. Base period | Starting from the first quarter of 2024, the base year 2021 (2021 = 100) is in use. |

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| **4. Unit of measure** | Measurement unit are Indices, percentage changes (%). |
| **5. Reference period** | The information collected refers to quarterly periods. This report is based on reference year 2024. |
| **6. Institutional mandate** | |
| 6.1. Legal acts and other agreements | The legal basis on which STS indicators are based consist on:<br>• National Statistical Law;<br>• Official Statistics Programme 2022-2026.<br><br>Classifications and definitions according to relevant EU regulations:<br>• Regulation (EU) 2019/2152 introducing Short-Term statistics at European level;<br>Commission Implementing Regulation (EU) 2020/1197 defining variables and frequency of data compilation, repealing new orders received for building construction and new orders received for civil engineering. |
| 6.2. Data sharing | Short-term Statistics data exchange has started in the third quarter of 2017 at the European level. Since first quarter of 2018 the data for Construction Production Index are transmitted regularly to Eurostat. |
| **7. Confidentiality** | |
| 7.1. Confidentiality - policy | Data are considered strictly confidential and are used only for statistical and research purposes based on national Statistical Law No.17/2018 "On Official Statistics", date 10.03.2018 and on Law No.9887, date 10.03.2008 "Personal Data Protection". Article 31 on Statistics Law reads as follows: Data collected for the production of official statistics shall be treated by INSTAT as confidential and shall be used only in aggregated tables that will not identify the source information unit. Direct identification means when a statistical unit is directly identified from its name or address or any officially allocated and commonly known identification number. When data processing is made in a manner that allows the identification of the data subject, the data should immediately be encrypted in order for the subjects to be no longer identifiable. |
| 7.2. Confidentiality - data treatment | Albanian Institute of Statistics protects and does not disseminate data it has obtained or it has access to, which enable the direct or indirect identification of the statistical units. Albania Institute of Statistics takes all appropriate preventive measures so as to render impossible the identification of individual statistical units by technical or other means that might reasonably be used by a third party. |

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| | Statistical data that could potentially enable the identification of the statistical unit are disseminated by Albania Institute of Statistics if and only if:<br><br>a) these data have been treated, as it is specifically set out in the Regulation, in such a way that their dissemination does not prejudice statistical confidentiality or<br><br>b) the statistical unit has given its consent, without any reservations, for the disclosure of data.<br><br>The confidential data that are transmitted to Albania Institute of Statistics are used exclusively for statistical purposes and the only persons who have the right to have access to these data are the personnel engaged in this task. Issues referring to the observance of statistical confidentiality are examined by the staff working in Albania Institute of Statistics. The responsibilities of this staff are to recommend on: which detailed level the statistical data can be disseminated, so as the identification, either directly or indirectly, of the surveyed statistical unit is not possible; the anonymization criteria for the microdata provided to users; the access granting to researchers on confidential data for scientific purposes. |
| **8. Release policy** | |
| 8.1. Release calendar | Notifications about the dissemination of statistics are published in the release calendar, which is available on the website. The announcements and delays are pre-announced in this calendar. In the case of delays, the date of the next publication and the explanation of the reasons for the delays are specified. |
| 8.2. Release calendar access | The calendar of publications is available on the INSTAT website. |
| 8.3. User access | In line with the article 34 of Law No.17/2018 "On Official Statistics", dated in 17.04.2018, disseminates statistics on INSTAT website and other media for simultaneous access, respecting professional independence and in an objective, professional and transparent manner in which all users are treated equitably. The following dissemination channels are used to release the results:<br><br>1. Website – online release;<br>2. Written request;<br>3. Publication;<br>4. Data Request, dedicated section. |
| **9. Frequency of dissemination** | The Production Index in Construction is disseminated on quarterly basis. |
| **10. Accessibility and clarity** | |
| 10.1. News release | According to the calendar of publications, press release regarding Short-term Statistics is published quarterly. The format of press release has not been changed; it is defined by publication sector as well as the date of 6 release. Press releases of STS are published online at INSTATs website. |

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| 10.2. Publications | Press release is published in INSTAT's website, under sub-theme: Short-Term Statistics. |
| 10.3. On-line database | All the information is available in both Albanian and English language. Since 2011, the information is provided to external users in web through the Pc-Axis system. A short methodological explanation exists also in the web page. You can access the database on the section Statistical Database. |
| 10.4. Micro – data access | Databases at micro level are not published due to confidentiality reasons. Aggregated data is the only type of data that is provided to external users. Even the micro data are not published they can be accessed based on the article 31, point 7 of the low No. 17/2018, dated 17.04.2018 "On official statistics". |
| 10.5. Other | Users can send other specific requests through a dedicated section for Contacts. |
| 10.6. Documentation on methodology | A short explanation related to the definitions of the main concepts and methodological explanations are provided to users in the end of press releases and publications. Additional support information is given to internal users when needed or required. Also the Methodological notes are published at INSTAT's website. |
| 10.7. Quality documentation | The short-term Statistics unit document all the STS work processes and procedures only for internal purposes. |
| **11. Quality managment** | |
| 11.1. Quality assurance | INSTAT is committed to ensure the highest quality with respect to the compilation of statistical information. In accordance with the Statistics Law, INSTAT use statistical methods and processes in compliance with internationally recognized scientific principles and standards conduct ongoing analyses of the statistics with a view to quality improvements and ensure that statistics are as up to-date. In performing its tasks it follows the general principles of quality management from the European Statistics Code of Practice. INSTAT declares that it takes into account the following principles: impartiality, quality of processes and products, user orientation, employee orientation, effectiveness of statistical processes, reducing the workload for respondents. |
| 11.2. Quality assessments | Quality controls and validation of data are actions carried out throughout the process. The staff is involved in different stages of index calculation, 7 such as the data collection, data control, data input and other necessary control are all well trained. This helps the staff to know the enterprises and their responsibilities and keep an updated collaboration. |

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| | A comparison is made with data of previous year to see if there is any data coherence or if there were major changes. |
| **12. Relevance** | |
| 12.1. User needs | Users are classified as external and internal.<br>External users are:<br>• Ministries and public administrations that use these data for economic and social policy planning purposes;<br>• Universities (professors/graduated and post graduate students), research organizations;<br>• National and international NGOs;<br>• Enterprises;<br>• General public which gets the information via mass media through publications made by Statistical Office.<br><br>Internal users are those within the institution of INSTAT:<br>• National Account Directory;<br>• Statistical Business Register;<br>• Employment and wages Sector. |
| 12.2. User satisfaction | INSTAT conducts an annual survey to measure User Satisfaction.<br><br>The 2024 survey results show that the overall quality of the topic "Shor-term Statistics" was rated 3.83 (76.6 %) on a scale of 1 (very poor) to 5 (very good). |
| 12.3. Completeness | Short-term Statistics on their completeness are built in accordance with Eurostat regulations. The degree of completeness of the data, for the survey of STS 2024 is 62.0 %. This calculation took into account the European regulation. As result the compilation of Construction Production Index and the data provided are in line with the relevant EU Regulations. |
| **13. Accuracy and reliability** | |
| 13.1. Overall accuracy | Overall, the data are checked with previous years and previous quarter to identify any significant changes.<br><br>The sampled population of Short-term Statistics 2024 includes approximately 11,000 enterprises that are surveyed each quarter, from these around 1,100 are in the Construction activity. Sampling design is stratified simple random sampling. Criteria for stratification: the characteristics used for stratification are the NACE Rev.2 3-digit level and the number of persons employed.<br><br>Calculation of statistical data estimates and analysis of outlier units is performed regularly. The overall accuracy rate is high, considering the high response rate. To calculate the estimates, Horvitz-Thompson estimator is used, that is unbiased. |

<table>
<tr><td></td><td>The accuracy of the estimates is reached by eliminating non-sampling errors, such as coverage, non-response, response mistakes and processing errors, also by calculating sampling error.<br><br>Coverage errors reasons are: misclassification of units and changes in state of reporting units. It is compulsory to respond to the survey. In case of non-response, units are contacted by telephone and email. The sampling error in percent (CV) is calculated for main indicators of survey that are published every quarter.</td></tr>
<tr><td>13.2. Sampling error</td><td>Sampling error are treated in the internal technical reports, where, for main indicators in survey are calculated the total variance, which is estimated such as the sum of the variance of all total strata and relative standard errors, to eliminate the negative effect of NACE activity changed in STS time series. All indicator values are weighted to represent the population.</td></tr>
<tr><td>13.3. Non - sampling error</td><td>Unit non-response takes in consideration enterprises that are unable or unwilling to give the answers or when interviewers are unable to find the enterprises address, or when other barriers exist to complete the interview.<br><br>The unit non-response rate in average for STS 2024 is 3.41%.</td></tr>
<tr><td colspan="2">14. Timeliness and punctuality</td></tr>
<tr><td>14.1. Timeliness</td><td>Results of Construction Production Index are published on INSTAT website 77 days after the end of the reference period (Q+ 77 days). The reference period of these results is December 31st, 2024.<br><br><table><tr><td>Reference period</td><td>12/31/2024</td></tr><tr><td>Date of publication</td><td>3/18/2025</td></tr><tr><td>Timeliness</td><td>77</td></tr></table></td></tr>
<tr><td>14.2. Punctuality</td><td>The data of Construction Production Index are disseminated according to the publication calendar. The publication of Construction Production Index has been punctuality in time to 100% of publications carried out over the years.<table><tr><td>Reference period</td><td>12/31/2024</td></tr><tr><td>Date of announcement</td><td>3/18/2025</td></tr><tr><td>Date of publication</td><td>3/18/2025</td></tr><tr><td>Time lag</td><td>0</td></tr></table></td></tr>
<tr><td colspan="2">15. Coherence and comparability</td></tr>
<tr><td>15.1. Comparability - geographical</td><td>The data related to Construction Production Index (CPI) are prepared in accordance with Eurostat methodology and are comparable at international level. These data are comprehensive and produced at the country level.</td></tr>
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| 15.2. Comparability - over time | Over the years Construction Production Index has undergone changes in coverage and in the method of selection. Quarterly Survey of Enterprises has started for the first time in 2005. Enterprises with 1-9 employed are sampled with selection, while enterprises with over than 10 employed are taken exhaustively, without changing the scope of coverage. In 2012, the population of the CPI is changed as a result of updating the Register of Enterprises with the results of the Economic Enterprises Census 2010. All changes are backcasted and reported in the methodological explanations of publications. In 2014 in CPI it was implemented the nomenclature of economic activities, NACE Rev. 2, the weights structure it is updated, and changing the base period of the indices from 2005 to 2010. In 2019 the structure of the base period of the indices changed from 2010 to 2015.In 2024, in Short-Term Statistics the weights structure is updated and the basic index period has changed from 2015 to 2021. All these changes in the indices' series are not disconnected, but the indices are back casted. These changes are reported in the methodological explanations that go together with respective publications.<br><br>Short-term Statistics data by quarters according to NACE Rev. 2 Economic Activity Classification date back to 2006 referring to the statistical database providing a time comparability of 19 years (CC2 = Jlast-Jfirst + 1 = 19).<br><br>The data are constantly checked to ensure their comparability over time. |
| 15.3. Coherence - cross domain | Short-term Statistics production in construction for the greater part is measured by using VAT data. For the enterprise that VAT data are not available data are collected through sample survey. There is no other statistical product that could be used for cross checking instead of the current indicators. |
| 15.4. Coherence - internal | The internal consistency of the data is checked before it is finalized. The links between variables are checked and coherence between different data series confirmed. Short-term Statistic specialists work together with relevant departments to ensure consistency and coherence of statistical indicators. |

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| **16. Cost and burden** | Short-term Statistics cost includes information on the permanent and temporary number of the staff.<br><br>STS number of staff are as following:<br>• Total staff in Central Office 1 employees;<br>• Logistics specialists 1 employees;<br>• Enumerators 144 employees;<br>• Controllers 9 employees.<br><br>Administrative data are transmitted to INSTAT without cost, based on Memorandum of Cooperation between INSTAT, DPT and QKR. Other sources are considered BR, previous STS, etc. STS staff manages the control and analysis of data, so these two processes have no additional cost. |
| **17. Data revision** | |
| 17.1. Data revision - policy | Revision policy is done in accordance with general revision policy and errors treatment policy introduced by INSTAT in the links below:<br><br>• Revision Policy;<br>• Errors Treatment Policy.<br><br>The same revision policy is applied to national releases and transmissions to Eurostat. |
| 17.2. Data revision - practise | Published data are not considered final; they may be revised. Data are revised in the whole range or for other reasons such as: Implementation of the new NACE classification, methodological changes, new information or data improvements and error correction. But the revisions are generally rather limited in scale. Revision of the previous quarter is possible during each quarter and adjustments can be made at the end of each year for the four quarters.<br><br>During 2024 the Construction Production Index has not been revised. No numeric information exists regarding the Mean Absolute Revision (MAR) and Mean Revision (MR). |
| 18. **Statistical processing** | |
| 18.1. Source data | Data are based on quarterly statistical surveys and administrative source. The basis of selection is the Register of active enterprises for the reference year. Classification of enterprises is done according to the Nomenclature of Economic Activities, NACE Rev. 2. Frame population is determined by two basic criteria: Size of enterprise (based on number of employed) and economic activity in scope, with cut-off. The method of selection used is Stratified Simple Random Sampling (SRS). Stratification is based on a combination of economic activity with size |

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| | group of the enterprise. Indicators are presented for economic activities according to the areas specified in the STS regulation and also based on user needs. |
| 18.2. Frequency of data collection | Quarterly. |
| 18.3. Data collection | During 2024, data were provided in a combined way through administrative sources and data collected directly from enterprises with face to face interviews. The duration of the data collection process was 15 days after the reference quarter and was conducted only for enterprises which were not subject of declaration in administrative sources.<br><br>During the reference year, there are no changes planned in the questionnaire. |
| 18.4. Data validation | Data received from survey and from VAT file are validated using logical validation rules.<br><br>At national level, editing involves studying data from respondents with the aim of identifying (and eventually correcting) errors. Not all errors can be identified and the aim is to detect the errors that have a significant influence on the results.<br><br>Rules to assist in identifying errors may flag possible errors that require further investigation to determine where there really is an error as opposed to an unusual result or they may identify definite errors. Editing involves checks for completeness, that values are within given ranges and that values for related variables are coherent. Data editing may take place during or after data entry.<br><br>Responses can be compared to the response of previous quarters. Inconsistency or large deviations (outside of a pre-established range) indicate that a closer look is desirable. This may result in data editing. In the context of timeliness, the editing process may be designed to give top priority to those outliers that are most in need of editing for the sake of reliable aggregates. By solving the worst cases, large improvements can be achieved. |
| 18.5. Data compilation | **National level**<br><br>First step is collecting information from administrative data and direct interviews in the entereprises. The purpose is to bring this information to the statistic level. This process follows:<br>• Logical control of information collected throught interviews (control of logical marked of responses indicators and control of accurate values);<br>• After data entry process, errors and inconsistencies are identified and corrected during editing process;<br>• Comparability phase (collected data with previous periods data or trends);<br>• Analysis of results for each domain of publication;<br>• Completed results are used for weight and re-weight phase;<br>• The aggregated data are compared to other data sources; |

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| | • The last two phases can be subject to other analysis used for publication domain.<br>When statistical analysis is finished, these data are determined as a group of non-public information. Before releasing the results, very important matter is the confidentiality of this information. |
| 18.6. Adjustment | Construction Production Index (CPI) is calculated both seasonally adjusted and unadjusted. Seasonal adjustment of quarterly time series of Construction is done by using JDemetra+ 2.2.4 version software. The chosen model for the decomposition of time series is X-12 ARIMA, under specification X13, the span of time series is from 2006 to 2024. X-12 ARIMA model is totally based in moving average. In all-time series is applied the multiplicative decomposition and the direct approach. During the process of seasonal adjustment are treated even the special case occurred during the time series span, identified by software as outlier. |
| **19. Comment** | |
| **Annex** | |
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