Construction Production Index (COPI)

Main methodological developments

March 2026

Contents

INE. National Statistics Institute

1 Introduction

The aim of the Construction Production Index (CoPI) is to measure the monthly change in the activity of the companies that form part of the construction industry in Spain, based on the value added. It replaces the Construction Industry Production Index Survey (CoIPIS), which had been produced monthly by the Ministry of Transport and Sustainable Mobility (MTSM) until December 2025.

The transfer of this statistical operation from the MTSM to the INE is the result of an accord between both parties included in an Agreement signed on 21 May 2025, whereby both the Construction Industry Structure Survey (CoISS) and the CoIPIS become the responsibility of the INE in all of its production phases. In the case of CoIPI, it is renamed CoPI.

In said agreement it was agreed that ..."*from 1 January 2026 and on a monthly basis, the INE will be responsible for the collection of information and the compilation of all phases of the CoPI corresponding to the editions of the January 2026 reference month and subsequent months*".

The INE conducted a methodological analysis of the former CoIPIS in order to identify those elements that differed most from the usual methods of production of short-term statistics in the institute. As a result of this analysis, a work plan was established to introduce the necessary changes to achieve an indicator compatible with the other short-term indicators.

The work plan for the definitive implementation of the CoPI has been structured in two phases: in the first phase, changes in different methodological aspects have been incorporated in order to take the first steps towards a methodology similar to those of the other short-term indicators. In this phase, the aim was to avoid a complete break with the processes of the CoIPIS, but at the same time introduce relevant changes in aspects such as the questionnaires used, the treatment of information, the sample design, or the calculation of the index. All of this, taken together, implies structural changes to the CoIPIS, pending the change of base, which is due to enter into force in 2028.

In the second phase, the remaining elements defining the new indicator will be introduced. Therefore, the final implementation of the CoPI will take place when the base change takes place, which is set to enter into force in January 2028, with base 2025.

This document details the main methodological and procedural changes introduced for the production of the new CoPI for January 2026, corresponding to the first phase of implementation.

2 Methodological changes in the CoPI

The methodological changes to the CoPI as of the reference month January 2026 are shown below.

2.1 QUESTIONNAIRE

The INE has made numerous efforts in recent decades in the field in terms of the management and quality control of its products in order to maintain the high degree of confidence that official statistical information enjoys. In this respect, one of the principles of the European Statistics Code of Practice, which INE has adopted, refers to not overburdening respondents. Although the ultimate objective of this principle is the use of administrative registers, or the use of existing databases, the complexity of these new statistics does not currently allow this approach.

However, as far as possible, INE has tried to reduce the burden on respondents by simplifying the questionnaires compared to those used in the CoIPIS. Thus, work has been carried out along two lines:

– **Collecting the essential variables**. The CoPI questionnaire will only collect information for the three variables that are essential for the calculation of production: turnover, stock variations in work in progress and completed works, and subcontracting.

  For these variables, respondent are asked to provide the breakdowns by activity and geographical destination necessary for the calculation of production, as well as to meet the information demands of the National Accounts, taking into account the information available in the General Accounting Plan for Construction.

– **Disregarding labour market variables.** The variables related to the labour market (personnel, hours worked and wages) are required by Regulation (EU) 2019/2152 of the European Parliament and of the Council concerning European business statistics and Commission Implementing Regulation (EU) 2020/1197, which laid down technical specifications and modalities under Regulation (EU) 2019/2152, and until now were obtained from the CoIPIS. With the implementation of the CoPI, these variables will be obtained from the statistical operations produced by the INE that are specific to this market: the Labour Force Survey (LFS) and the Quarterly Labour Cost Survey (QLCS). This avoids the duplication of information that has occurred up to now, thus reducing the burden on respondents by not having to request information from them.

Another change introduced in the questionnaire is related to the **disaggregation of the information requested from companies**. Until now, the CoIPIS had asked companies for turnover data for three aggregations: Building and Specialised Construction activities jointly (Divisions 41 and 43 of the CNAE), Civil Engineering (Division 42), and Other activities (those carried out by construction companies that are not related to Construction, such as waste recovery activities, waste collection, rail freight transport, etc.). All of them were taken into account in the calculation of the index.

The CoPI questionnaire asks for turnover information for each of the divisions separately (divisions 41, 42, 43), and Other activities. However, the turnover of the latter will not be taken into account when calculating the index as it concerns activities outside the sector.

2.2 SAMPLE DESIGN

Another notable change in the CoPI is the sample design. The final objective when base 2025 comes into force, in the year 2028, will be to carry out the design in a similar way to the other short-term statistics in the INE, using the Central Business Directory (CBD) as a framework, and stratifying and selecting the companies in accordance with the characteristics of the construction sector.

However, as indicated above, the first implementation phase for the CoPI is about introducing the necessary changes without making too abrupt a break with CoIPIS. This is why the sample design of the CoPI has been based on the CoIPIS sample, the framework of which is the Construction Industry Structure Survey, conducted by the MTSM until 2025.

Based on the CoIPIS sample, the following modifications have been made:

– **Company registrations, deregistrations and changes of activity.** Over the course of 2025, the CoIPIS sample should be adjusted due to the disappearance of companies or a change of activity in some of them.

– **Introduction of new companies from the exhaustive stratum.** Based on the CBD 2023, 602 companies were detected that should be included in the sample's exhaustive stratum, either because of their size (100 or more employees) or because they have large turnover figures.

– **Redefinition of uplift factors.** A common element in all short-term statistics produced by INE is the calculation of uplift factors. For each stratum h it is obtained as the ratio between the total number of units existing in that stratum and the number of units selected from it.

The introduction of new companies from applying the first two criteria necessitated a readjustment of the sample in order not to exceed the established sample size of 2,600 sample units.

Clearly, the changes to the sample introduced in the CoPI from 2026 onwards are in many cases a break with what had been done in CoIPIS until December 2025. Therefore, to ensure comparability between the two samples, any active sample unit according to the CBD that lacks sales data in 2025 was imputed using procedures based on Machine Learning techniques.

In addition to the sample design adjustments noted above, there are other sample-related elements that differentiate the CoPI from the CoIPIS:

– **Values of the uplift factors**. The uplift factors for CoPI units will be around 140 at best, compared to values of up to 1300 in some cases for CoIPIS factors.

– **Annual rotation of companies.** On the other hand, around 80% of the sample rotates each year in the CoPI sample. This is not a standard practice in INE short-term statistics, so in the CoPI the units of the sample strata will rotate after 4 years in the sample, which means a rotation of approximately 25% per year.

– **Strata and factor changes.** In the CoIPIS there are 8 strata, depending on the size of the company and according to the number of employees (considered exhaustive from 100 employees onwards):

  - 1-19 employees

- 20-49 employees

- 50-99 employees

- 100-199 employees

- 200-499 employees

- 500-999 employees

- 1000-2499 employees

- 2500 employees and more

In the CoIPIS, when either the frame size or the size of one of the strata changes, this directly affects the value of the factor of the sample units. In addition, each sample unit can change stratum (and thus the uplift factor) in any given month, if its size (number of employees) changes. However, this is not the usual practice in INE short-term statistics, since the objective of this type of statistics is to measure the evolution of production (or turnover) over time, without this measurement being affected by changes in unrelated values.

Therefore, in the CoPI, companies will only be able to change strata at the beginning of each year. The same applies to the modification of the uplift factors.

2.3 RE-WEIGHTING AND IMPUTATION METHOD

There are two techniques for dealing with non-response: re-weighting and imputation. While re-weighting is the technique used in social surveys, imputation is used in economic surveys, as statistical units may behave very differently from each other, especially in the case of larger companies.

The CoPI will use the imputation technique, based on estimating the value of turnover from the rates of change from other units of the same size and activity. This implies that the company whose turnover has been estimated maintains its uplift factor in two consecutive months, thus avoiding biases from occurring due to changes in turnover.

2.4 CALCULATION OF PRODUCTION

Turnover in the CoIPIS was calculated according to the following formula:

Sales ± Stock variation + Fixed assets + Other income - Subsidies - Subcontracts

It was then deflated using the construction cost index calculated by the MTSM.

According to Eurostat manuals[1] the CoPI (both the overall index and the divisional indices) the deflated turnover is calculated using the following formula:

Production = Deflated TRN = TRN*/Cost Index

where CN* = CN ± Stock variation during works - Subcontracts, and Turnover (TRN) is Sales and Services, excluding taxes and subsidies.

2.5 CALCULATION OF THE OVERALL INDEX

There are two ways of calculating the overall index: as an aggregation of the turnover of the activities that make up the sector (41, 42 and 43), and the subsequent calculation of the index; or as a calculation of the indices of the individual sectors, and their weighted aggregation.

The overall CoIPIS index was derived according to the first criterion. However, in order to standardise the calculation with that used in the other short-term indicators, the CoPI will be calculated as a weighted sum of the indices of the divisions that comprise it:

$$I_{Secc\ F} = \sum_{i\epsilon\ (41,42,43)} I_i \times w_i$$

where w_i are the weightings in Base-2021 for the divisions composing section F and I_i is the production index for the divisions composing section F.

3 Results

All short-term statistics produced by the INE are based on the calculation of index numbers, in order to obtain the variation rates that represent the evolution of the variables considered (turnover, production, prices, employment). The CoPI is no exception.

However, during the year 2026, the first year of its implementation, the calculation of the annual rates cannot be carried out homogeneously due to the fact that the indices for the year 2025 available are those of the CoIPIS, with the methodological differences described in this document. Therefore, an estimate of the back series of the CoPI from January to December 2025 has been made on the basis of the following elements:

– Sample. Part of the CoIPIS sample common with the CoPI has been used, adding the new units specific to the CoPI, as described in the sample section.

– The indices of this part of the new sample of the CoPI have been estimated from January to September 2025, which is when the INE started collecting the information for the CoPI.

– The strata and uplift factors have been used in accordance with the sample design adapted by the INE.

The CoPI rates thus estimated for the year 2025 are those used as a reference for calculating the annual rates throughout the year 2026. These rates are therefore estimates based on information from the CoIPIS and the CoPI. In 2027 the annual rates will be completely homogeneous, as they will be calculated with indices calculated following the same methodology and processes.

4   Pending methodological changes

As indicated above, the implementation of the CoPI is conducted in two phases. The first comes into force in March 2026, with the data from January of this year, and the second will be implemented in 2028, when the new 2025 base will come into force.

The changes pending implementation that will be undertaken with the change of base refer fundamentally to the survey's sample design, adapting it to INE standards.

4.1   COMPREHENSIVE SAMPLE DESIGN

With the implementation of the CoPI in 2026, the sample design consisted of revising the sample used in CoIPIS and adapting it by introducing exhaustive stratum units, and other minor adjustments. Likewise, new uplift factors were calculated according to the INE's own criteria for short-term statistics.

With the change of base, a sample is going to be designed according to the standard INE criteria for this type of statistics, based on the CBD framework. This includes criteria for the formation of strata, and uplift factors. It will be at that point when the selected sample can said to fully conform to the INE standards.

4.2   INTRODUCTION OF THE KAU STATISTICAL UNIT CONCEPT

According to European regulations the statistical unit used must be the Key-Activity Unit (KAU). This means that for those companies which, due to their size, conduct activities other than their principal one that imply a significant amount of turnover, both turnover figures must be located in their respective activity codes of the National Classification of Economic Activities, which will have an influence on the calculation of the indicator.

In order to be able to calculate the indices using the KAU as indicated in Regulation 2019/2152, the information per KAU must be available in the base year (year 2025). However, as the CoIPIS data encompasses the values of divisions 41 and 43, a calculation on a KAU basis is not possible in the current base.

Therefore, in order to incorporate the information per KAU for base year 2025, it will be necessary to establish certain assumptions that allow the indices to be estimated in terms of these units. This will require using the information collected during the year 2026 as a starting point.