METHODOLOGICAL NOTES

1. Data source is chapter VAL (Value of construction works on contract, in the country, by structural element and by construction object) from the monthly statistical survey on short-term indicators in constructions (CON TS), in compliance with Council Regulation no. 1165/1998, the Regulation of the European Parliament and of the Council no. 1158/2005 and European Commission Regulation no. 1503/2006 on short-term statistics.

2. Concepts and definitions

The value of construction works carried out comprises new construction works, capital repairs and maintenance and current repair works carried out by economic operators with their main activity in this field (section F of CANE rev. 2). This indicator refers to finished construction works by physical stages (to be not confounded with the construction object or with the part of the construction object finished).

New constructions represent the results of those activities directly determining the creation of new areas (for housing or with other destination) or the creation of new structures to existing civil constructions.

Capital repairs works on existing construction represent all the works carried out on existing buildings and constructions after the end of each functioning cycle provided for in technical norms and whose purpose is to preserve the technical and economic characteristics of constructions during the normal lifetime.

Maintenance and current repairs works on existing buildings and constructions represent all the works (painting, dyeing and repairing insignificant parts) carried out on an existing construction in order to ensure the continuity of its use, to prevent fast depreciation and to achieve longer operational duration.
Construction works could be carried out on the following construction objects:

- Residential buildings – exclusively or mainly intended for housing purposes (over 50% of living floor area or of the built up volume is used for housing). The buildings for collectivities (elderly people houses, orphanages, hostels) are considered as residential buildings.

- Non-residential buildings – exclusively or mainly intended for other purposes than residential ones (industrial halls, shops, cinemas, offices, administrative spaces etc.)

- Engineering works – construction objects that are not meeting the characteristics of buildings and whose purposes are to create the conditions for carrying out production activities or social and cultural activities (roads, railways, bridges, airports, stadiums etc.).

3. The statistical survey is based on sampling. The sampling type in use and the way of sample taking over is the one of stratified sampling, with simple random selection, without recurrence within each stratum, where the stratification variables are the economic activity and the size class of the enterprise, depending on the employees' number. Due to the need of results comparability by group of homogeneous activities and at enterprise level from one period to another, the category of economic operators with high economic potential (50 employees or more) is exhaustively surveyed. The basis of sample selection ensures representativeness calculated based on turnover of 94.55% of total number of active units. Data are collected from about 2000 economic operators with construction as main activity. The maximum admissible error of estimations is ± 3%.

4. Computation algorithm

The construction volume indices are determined by deflating value data with construction cost indices by structural element and by construction object. Construction volume indices are compiled for total construction branch (section F of CANE Rev.2), by structural element (new construction works, capital repairs and maintenance and current repair works) and by construction object (residential buildings, non-residential buildings and engineering works).

Construction works indices per total are compiled as weighted arithmetic mean of indices by structural element or of indices by construction object. The weights used for aggregation are compiled based on turnover in accordance with the results of Business Structural Survey from reference year (2010).

Construction cost indices, used for deflating value data, are compiled as weighted mean of price indices for construction materials, construction outfits, transport expenses and indirect expenses and of gross nominal earnings index. The weights used for aggregation represent the structure of construction expenditure resulting from specific statistical surveys carried out each five years (the latest being carried out for the base year 2010).

The construction cost indices are compiled for total construction branch (section F of CANE Rev.2), by structural element (new construction works, capital repairs and maintenance and current repair works) and by construction object (residential buildings, non-residential buildings and engineering works).

5. Besides the construction volume indices (gross series), **indices adjusted according to the number of working days and to seasonality** are also monthly compiled based on the **regressive method,** this method being recommended by European Regulations on short-term indicators (Council Regulation 1165/1998).

Starting with 2016, the program package JDEMETRA+ v 2.0 (TRAMO/SEATS method) has been used for the series adjustment, which achieves the estimation of the effect entailed by the number of working days, different from one month to another and the calendar effect (orthodox Easter, leap even and other national holidays) as well as the identification and correction of odd values (occasional, transitional or permanent changes in level) and the interpolation of missing values.

The adjusted series according to the number of working days was obtained by removing these effects from the gross series, with the use of correction coefficients, established depending on the regression model used (additive or multiplicative).

The setting up of regression models used for each series is done at the beginning of each year and involves the re-calculation of adjusted series in relation with previous year (recalculation due to the change in adopted models, in the number of regressing variables used and in the number of available observations).

The adjustment of aggregated levels was done through the **direct method** which implies direct adjustment of aggregated series. The use of direct method could lead to certain inconsistencies in data series (respectively, that the aggregates are not always framed within the value of original components).

6. Data are provisional and could be periodically revised based on rectifications retroactively done by economic operators included in the sample.