

METHODOLOGICAL EXPLANATIONS

1. The **data source** is the “Statistical Survey on Innovation in Business Enterprises” – INOV (2016-2018), questionnaire available at the address <http://www.insse.ro/cms/>, through which data on innovation in business enterprises are collected in accordance with Commission Implementing Regulation (EU) No 995/2012 of 26 October 2012 laying down detailed rules for the implementation of Decision No 1608/2003/EC of the European Parliament and of the Council of 22 July 2003 concerning the production and development of Community statistics in science and technology.

The **statistical survey on innovation** is based on the questionnaire “Community Innovation Survey” (CIS) (2016-2018), which is used in all EU Member States, with the collection taking place every two years. At European level, the CIS data are main source of information for the study of the behaviour of enterprises in terms of innovation.

The results of the statistical survey meet the guiding principles proposed by the OECD/Eurostat and included in the “Guidelines for Collecting, Reporting and Using Data on Innovation” – the OSLO Manual, the 2018 edition.

IMPORTANT! Considering the need to comply with the requirements of the new Oslo Manual and the methodological changes in the calculation of indicators on innovation, comparisons with the previous “waves” of the survey are no longer possible for some indicators, which will lead to a break in the data series.

2. The statistical survey is a sample survey.

The total population of enterprises covered by the survey amounted to 28141, out of which the number of units observed in the statistical survey **INOV 2016-2018** was 8911.

The coverage of the survey consisted of the enterprises **with more than 9 employees** from the whole industry and part of services (wholesale, transport and storage, information and communication, financial intermediation and insurance, architecture and engineering activities, technical testing and analysis, research & development and advertising and market research), divided into the following size classes according to the number of employees of the enterprise: 10-49, 50-99, 100 and over. The enterprises with 100 or more employees are exhaustively surveyed.

The sampling frame ensures a representativeness (calculated according to turnover) of 85.0% of the total number of active units.

The stratified sampling with simple random selection without replacement within each stratum, where the stratification variables are the economic activity, the size class of the enterprise according to the number of employees and the development region, is used as type of sampling and as procedure for drawing the sample. The maximum accepted estimation error is $\pm 3\%$.

The data were collected from the enterprises during the period 18.06.2019-16.08.2019.

The **non-weighted response rate** was **91.0%**.

3. Concepts and definitions

Innovation is a new or significantly improved product or process that is significantly different from the previous products or processes of the enterprises and which has been made available to potential users in the form of a product or has been used by the unit in the form of a process.

The survey on innovation is based on the 2016-2018 Community Innovation Survey questionnaire and on the methodology of the 2018 Oslo Manual.

Unlike the previous surveys, where the Community questionnaire was addressed to enterprises in a differentiated manner, based on the type of innovator, the new questionnaire of the 2018 CIS is addressed to all types of enterprises, both innovative and non-innovative.

As compared to the previous waves, the new Oslo Manual also brings a major methodological change, namely in the definition of the types of innovation. Until now, there were four types of innovation: product, process, organisational and marketing innovation; the new manual reduces their number to only two: product innovation and business process innovation.

The new concept of business process innovation includes process, organisational and marketing innovation, which were used in the old methodology.

The **innovative enterprises** are the enterprises that launched new or significantly improved products and business processes, the enterprises with on-going or abandoned innovations and the enterprises with internal or external research activities.

The **non-innovative enterprises** are the enterprises that had no innovative activities in the period analysed.

The **research and development activities** include creative activities that are systematically performed with a view to increasing the stock of knowledge – including new knowledge related to mankind, culture and society and which develop new applications of the available knowledge.

Product innovation is the introduction of a **new** or improved **good** or **service** on the market, which is significantly different from the previous goods or services of the enterprise and which has been introduced on the market.

Product innovation includes:

- significant changes in the design of a good or service;
- digital goods or services (these are called products that capture knowledge. These products may have the characteristics of a good or a service and are related to the provision, storage, keeping, communication and dissemination of digital information that can be repeatedly accessed by users).

The following are excluded: the simple resale of new commodities and strictly aesthetic changes.

Business process innovation is a new or improved business process for one or more business functions, which is significantly different from the previous business processes of the enterprise and which has been implemented within the enterprise.