

METHODOLOGICAL NOTE

1. The data source is the "Integrated statistical survey on the research & development and innovation of business enterprises" – CDI-BES, questionnaire available at the address <http://www.insse.ro/cms/>, through which data on human resources and research & development expenses as well as data on innovation in enterprises are collected according to 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 concerning the production and development of Community statistics on science and technology.

The questionnaire is divided into four parts. Part I and Part IV of the questionnaire are related to innovation in enterprises and are based on the European questionnaire "**Community Innovation Survey**" (CIS), which is used in all the Member States of the European Union, with the collection taking place every two years. At European level, the CIS data are the main source of information for the study of the behaviour of enterprises in terms of innovation.

The results of the statistical survey comply with the guiding principles proposed by OECD/Eurostat and included in the Guidelines for collecting and interpreting innovation data – the OSLO Manual, the 2005 edition.

2. The statistical survey is a sample survey. The type of sampling used/the procedure for drawing the sample is the stratified sampling with simple random selection without replacement within each stratum, where the stratification variables are the following: the economic activity, the enterprise size class according to the number of employees and the development region.

The statistical survey concerns all enterprises, regardless of size class and/or economic activity. The enterprises with 100 employees and over are exhaustively surveyed. Depending on the number of employees, the size classes are: 0-9 (micro), 10-49 (small), 50-249 (medium), and 250 and over (large).

The total population of enterprises covered by the survey was 28562, out of which the units studied in the statistical survey **CDI-BES 2016** were 11388. Out of them, a number of **7177 enterprises with more than 9 employees** from the whole industry and part of services were selected (wholesale, transport and storage, information and communication, financial and insurance activities, architecture and engineering activities, technical testing and analysis, scientific research and development, advertising and market research), which **represented the coverage of enterprises for innovation statistics**, divided into the following enterprise size classes according to the number of employees: 10-49 (small), 50-249 (medium), 250 and over (large).

The sampling frame ensures a representativeness (calculated according to the turnover) of 95% of the total active units. The maximum admitted error of estimations is $\pm 3\%$. The **un-weighted response rate was 90.0% for the coverage of innovation statistics**.

3. Concepts and definitions

Innovation is the introduction of a **new or significantly improved product, process** or of a **new organisational or marketing method** in the enterprise.

The innovation should have new characteristics or intentions of use or which provide a significant improvement over what was previously used or sold by the enterprise. Nevertheless, an innovation may fail or may take time to be established.

An innovation needs to be new or significantly improved only for the enterprise. It may be initially developed or used by other enterprises.

The **innovative enterprises** are the active enterprises that launched new or significantly improved products (goods or services) on the market or introduced new or significantly improved processes or new organisational or marketing methods.

The term applies to all types of innovators: innovators of products, of processes, of organisational or marketing methods, as well as the **enterprises with on-going or abandoned innovations**.

The **non-innovative enterprises** are the enterprises that did not have an innovative activity during the period under study. These enterprises answered to a limited set of questions of the statistical survey, questions regarding the lack of innovative activity.

The **expenditure on innovative activities** is the expenditure incurred by enterprises for performing the following innovative activities: internal research and development, external research and development, the purchase of machinery, equipment and software, the purchase of other external knowledge (patents, licenses, know-how etc.), as well as other activities.

The **public financing of innovation** includes the financial support the enterprise receives from various authorities: local/regional, government (ministries, governmental institutions), the European Union.

Co-operation in the field of innovation means active participation in common research & development projects and in other projects related to innovation, carried out together with other enterprises or institutions. It is not necessary that both partners obtain common immediate commercial benefits from this co-operation. Contracting works without active collaboration does not mean co-operation.

The **obstacles** to innovation faced by enterprises: the lack of internal financing for innovation, the lack of credit or private capital, the notably high innovation costs, the lack of qualified personnel in enterprises, the lack of collaboration partners, difficulties in obtaining governmental or innovation grants, the uncertain market demand for innovative ideas, too much competition on the market, the legislation/regulations that generated an excessive burden, the legislation/regulations that created uncertainty, the incomplete harmonisation of the legislation/regulations with the EU legislation.

Innovation in logistics – logistics is a set of services that includes the planning, organisation, management, execution and monitoring of all the materials, goods and related information flows (flows on purchases, production and storage, value-added services, reverse distribution and logistics – operations relating to the re-use and return of products).