

Quality declaration **Innovation Statistics**

| 0.General Information on Statistical Products | | |
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| 0.1 | Title | Innovation Statistics |
| 0.2 | Subject Area | Science and Research |
| 0.3 | Responsible Authority, Office, Person, etc. | <p>Ms. Alina Grigoryan Head Social Sphere Statistics Division Armstat 3 Government House, Republic Avenue, Yerevan, 0010 Phone: +374 11 524 514 Email: alina_grigoryan@armstat.am, info@armstat.am</p> |
| 0.4 | Purpose and History | <p>Innovation activities include the acquisition of machinery, equipment, buildings, software, and licenses; engineering and development work, feasibility studies, design, training, R&D and marketing when they are specifically undertaken to develop and/or implement a product or process innovation. This includes also all types of R&D consisting of research and development activities to create new knowledge or solve scientific or technical problems.</p> <p>The main objective of the innovation survey is to collect data and publish information about innovation activity and innovative enterprises in Republic Armenia. Statistical information on innovation activities is also essential to advice national policy making, for example how to target innovation funding and other supporting measures.</p> <p>The purpose of “Innovation Statistics” component was:</p> <ul style="list-style-type: none"> -Assessment of current situation, studying of production methods applied in the Armstat, -Presentation of international and European standards, including definition of innovation, - Overview of Science, Technologies and Innovation statistics currently produced by the Armstat - Identifying of user needs, -Development of plan for how to develop innovation statistics. |

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| 0.5 | Users and Application | The main users of statistical information are the state government and local self-government bodies, public, scientific-educational, financial organizations, business society, mass media, international organizations, etc. |
| 0.6 | Information Sources | The target population of the survey is market active enterprises in Armenia. |
| 0.7 | Legal Authority to Collect Data | <p>In August 2015 two-year EU Twinning program in statistics was launched. The beneficiary of the program was the Statistical Committee of the Republic of Armenia (Armstat) and the implementing partner was Statistics Denmark. The objective of the program was to support the modernization of official statistics of Armenia, introducing new statistical methodologies aligned with EU standards and strengthening dissemination of official statistics within public. The program consisted of six components, the fifth of which was Innovation statistics.</p> <p>The Armstat conducted "Pilot Survey of Innovation Activity of Legal Entities and Individual Entrepreneurs" within the framework of fifth component. The survey methodology and development of tools were implemented with the practical support of Ms. Mervi Niemi, Expert from Statistics Finland and Mr. Gediminas Samuolis, Expert from Statistics Lithuania. In order to have a general overview of the entire survey process, by the proposal of the Armstat, experts from Finland and Lithuania developed the current "Methodological Notes for Innovation Statistics", which is a brief description of innovation survey and its procedure for Armstat experts, and clear definition of innovations and innovation activity for respondents.</p> |
| 0.8 | Response Burden | Response burden is not measured. |
| Content | | |
| 1.1 | Description of the Content | <p>A product innovation is the market introduction of a new or significantly improved good or service with respect to its capabilities, user friendliness, components or sub-systems.</p> <ul style="list-style-type: none"> • product innovations (new or improved) must be new to your enterprise, but they do not need to be new to your market, • product innovations could have been originally developed by your enterprise or by other enterprises or organizations. |
| 1.2 | Statistical Concepts | Innovation |

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| | | <p>According to Oslo Manual, an innovation is the implementation (introduction) of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method.</p> <ul style="list-style-type: none">- minimum requirement for an innovation is that product, process, marketing method or organizational method is new (or significantly improved) to the enterprise. This includes 8 products, processes and methods that enterprises are first to develop, but also those that have been adopted from other enterprises or organizations,- a common feature of an innovation is that it must have been implemented. For new or improved product implementation means introducing it on to the market. For processes, and marketing or organizational methods implementation means bringing them into actual use in enterprise's operations. <p>Product innovation (good or service)</p> <p>A product innovation is the market introduction of a new or significantly improved good or service with respect to its capabilities, user friendliness, components or sub-systems.</p> <ul style="list-style-type: none">• product innovations (new or improved) must be new to your enterprise, but they do not need to be new to your market,• product innovations could have been originally developed by your enterprise or by other enterprises or organizations. <p>A good is usually a tangible object such as a smartphone, furniture, or packaged software, but downloadable software, music and film are also goods. A service is usually intangible, such as retailing, insurance, educational courses, air travel, consulting, etc.</p> <p>Process innovation</p> <p>A process innovation is the implementation of a new or significantly improved production process, distribution method, or supporting activity.</p> <ul style="list-style-type: none">• process innovations must be new to your enterprise, but they do not need to be new to your market,• the innovation could have been originally developed by your enterprise or by other enterprises or organizations, |
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- exclude purely organizational innovations.

Ongoing or abandoned innovation activities for product or process innovations

Innovation activities include the acquisition of machinery, equipment, buildings, software, and licenses; engineering and development work, feasibility studies, design, training, R&D and marketing when they are specifically undertaken to develop and/or implement a product or process innovation. This includes also all types of R&D consisting of research and development activities to create new knowledge or solve scientific or technical problems.

Organizational Innovation

An organizational innovation is a new organizational method in your enterprise's business practices (including knowledge management), workplace organization or external relations that has not been previously used by your enterprise.

- it must be the result of strategic decisions taken by management,
- exclude mergers or acquisitions, even if for the first time.

Marketing innovation

A marketing innovation is the implementation of a new marketing concept or strategy that differs significantly from your enterprise's existing marketing methods and which has not been used before.

- it requires significant changes in product design or packaging, product placement, product promotion or pricing,
- exclude seasonal, regular and other routine changes in marketing methods. EU survey, CIS, has also defined some specific definitions for survey purposes, like:

Innovations with environmental benefits

An innovation with environmental benefits is a new or significantly improved product (good or service), process, organizational method or marketing method that creates environmental benefits compared to alternatives.

- the environmental benefits can be the primary objective of the

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| | | <p>innovation or a by-product of other objectives,</p> <ul style="list-style-type: none"> • the environmental benefits of an innovation can occur during the production of a good or service, or during its consumption or use by the end user of a product. The end user can be an individual, another enterprise, the Government, etc. |
| 2.Time | | |
| 2.1 | Reference Period | - |
| 2.2 | Date of Publication | - |
| 2.3 | Punctuality | - |
| 2.4 | Frequency | - |
| 3.Accuracy | | |
| 3.1 | Overall Accuracy | <p>Survey results are representative at the country, village/town/marz levels (the survey data have minimum representativeness on the level of marzes and Yerevan city).</p> |
| 3.2 | Sources of Inaccuracy | <p>Throughout the processing cycle, there should be a systematic and sustained follow up with the responding enterprises to make sure that the data provided is of good quality and passes all edit checks. Data quality checks have to be done at the micro- and macro-level. Data processing should include editing for logical errors:</p> <ul style="list-style-type: none"> - the edited dataset should not have routing conflict between filter and underlying questions, - item-non response should be kept and recorded. No imputation should be made from other units (see EU model questionnaire), - 'illegal' data values should not enter the final dataset and rather be recorded as item nonresponse. <p>Filing also the raw data (it may be valuable for later use or checking the details from the data or when interpreting and analyzing the data). This means to keep (store) also the original data (without any editing) received from respondents.</p> <p>The data may cover many types of errors, like</p> <ul style="list-style-type: none"> - sampling errors, - coverage errors, - measurement errors, - nonresponse errors, - processing errors. <p>Basic check for incoming data:</p> <ul style="list-style-type: none"> - correct values, no wrong coding, - no duplicates. |

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| 3.3 | Measures on accuracy | - |
| 4.Comparability | | |
| 4.1 | Comparability over Time | - |
| 4.2 | Comparability with other Statistics | - |
| 4.3 | Coherence between Provisional and Final Statistics | - |
| 5.Accessibility | | |
| 5.1 | Forms of Dissemination | <p>Publications Methodological Notes for Innovation Statistics, Manual, Yerevan 2017, (Armenian, English)</p> <p>Electronic versions</p> <p>Internet Electronic publications are available in Armenian, and English at: http://armstat.am/am/?nid=81&id=1979</p> |
| 5.2 | Basic Material: Storage and Usability | Collected statistical data are kept both in paper and electronic forms. |
| 5.3 | Documentation | Publication of indicators is accompanied with description of methodology, which is presented in details in “Methodological Notes for Innovation Statistics, Manual, Yerevan 2017, (Armenian, English) http://armstat.am/am/?nid=81&id=1979 |
| 6.Supplementary Documentation | | |
| 6.1 | | No supplementary documentation is available. |