

The Community Innovation Survey 2016

The Community Innovation Survey 2016

Version CY of 12 July 2017

This survey collects information on your enterprise's **innovations and innovation activities** during the three years 2014 to 2016 inclusive.

An **innovation** is the introduction of a new or significantly improved product, process, organisational method, or marketing method by your enterprise.

An innovation must have characteristics or intended uses that are new or which provide a significant improvement over what was previously used or sold by your enterprise. However, an innovation can fail or take time to prove itself.

An innovation need only be new or significantly improved for your enterprise. It could have been originally developed or used by other enterprises or organisations.

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.

Sections 2 to 7 cover product and process innovations. Organisational and marketing innovations are covered in sections 8 and 9.

Please complete **all** questions, unless otherwise instructed.

Person we should contact if there are any queries regarding the form:

Name: _____
Job title: _____
Organisation: _____
Phone: _____
E-mail: _____

1. General information about the enterprise

Name of enterprise _____

Address¹ _____

Postal code _____ Main activity² _____

1.1 In 2016, was your enterprise part of an enterprise group? (A group consists of two or more legally defined enterprises under common ownership. Each enterprise in the group can serve different markets, as with national or regional subsidiaries, or serve different product markets. The head office is also part of an enterprise group.)

Yes ☐ In which country is the head office of your group located? ³ _____
No ☐

If your enterprise is part of an enterprise group: Please answer all further questions about your enterprise only for its own activities in [your country]. Exclude all subsidiaries or parent enterprises.

1.2 During the three years 2014 to 2016, did your enterprise:

	Yes	No
Merge with or take over another enterprise or a part of another enterprise	<input type="checkbox"/>	<input type="checkbox"/>
Sell, close or contract out some of the tasks or functions of your enterprise	<input type="checkbox"/>	<input type="checkbox"/>

1.3 In which geographic markets did your enterprise sell goods and/or services during the three years 2014 to 2016?

	Yes	No
A. Local / regional within Cyprus	<input type="checkbox"/>	<input type="checkbox"/>
B. National (other regions of Cyprus)	<input type="checkbox"/>	<input type="checkbox"/>
C. Other European Union or associated countries* ⁴	<input type="checkbox"/>	<input type="checkbox"/>
D. All other countries	<input type="checkbox"/>	<input type="checkbox"/>

1.4 Which of these geographic areas was your largest market in terms of turnover during the three years 2014 to 2016? _____

(Give corresponding letter)

*: Include the following European Union (EU) and associated countries: Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Ireland, Kosovo, Latvia, Liechtenstein, Lithuania, Luxembourg, FYR Macedonia, Malta, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Slovakia, Switzerland, Spain, Sweden, Turkey and the United Kingdom.

¹ NUTS 2 code

² NACE 4 digit code

³ Country code according to ISO standard

⁴ Each NSO needs to remove their own country from the list of European countries.

2. Product innovation (good or service)

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.

- 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 organisations.

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.

2.1 During the three years 2014 to 2016, did your enterprise introduce:

	Yes	No
Goods innovations: New or significantly improved goods (<i>exclude the simple resale of new goods and changes of a solely aesthetic nature</i>)	<input type="checkbox"/>	<input type="checkbox"/>
Service innovations: New or significantly improved services	<input type="checkbox"/>	<input type="checkbox"/>

If no to all options, go to section 3

Otherwise go to question 2.2

2.2 Who developed these product innovations?

Tick all that apply

	Goods innovations	Service innovations
Your enterprise by itself	<input type="checkbox"/>	<input type="checkbox"/>
Your enterprise together with other enterprises or organisations*	<input type="checkbox"/>	<input type="checkbox"/>
Your enterprise by adapting or modifying goods or services originally developed by other enterprises or organisations*	<input type="checkbox"/>	<input type="checkbox"/>
Other enterprises or organisations*	<input type="checkbox"/>	<input type="checkbox"/>

**: Include independent enterprises plus other parts of your enterprise group (subsidiaries, sister enterprises, head office, etc). Organisations include universities, research institutes, non-profits, etc.*

2.3 Were any of your product innovations (goods or services) during the three years 2014 to 2016:

		Yes	No
New to your market?	Your enterprise introduced a new or significantly improved product onto your market before your competitors (it may have already been available in other markets)	<input type="checkbox"/>	<input type="checkbox"/>
Only new to your enterprise?	Your enterprise introduced a new or significantly improved product that was already available from your competitors in your market	<input type="checkbox"/>	<input type="checkbox"/>

2.4 Using the definitions above, please give the percent of your total turnover¹ in 2016 from:

New or significantly improved products introduced during the three years 2014 to 2016 that were **new to your market** %

New or significantly improved products introduced during the three years 2014 to 2016 that were **only new to your enterprise** %

Products that were **unchanged or only marginally modified** during the three years 2014 to 2016 (include the resale of new products purchased from other enterprises) %

Total turnover in 2016 %

2.5 To the best of your knowledge, were any of your product innovations during the three years 2014 to 2016:

Please tick one option in every row

	Yes	No	Don't know
A first in [your country]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A first in Europe*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A world first	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*: Include the following European Union (EU) and associated countries: Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Ireland, Kosovo, Latvia, Liechtenstein, Lithuania, Luxembourg, FYR Macedonia, Malta, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Slovakia, Switzerland, Spain, Sweden, Turkey and the United Kingdom.⁵

3. Process innovation

A process innovation is the implementation of a **new** or **significantly** improved production process, distribution method, or supporting activity.

- 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 organisations.
- Exclude purely organisational innovations – these are covered in section 8.

3.1 During the three years 2014 to 2016, did your enterprise introduce:

	Yes	No
New or significantly improved methods of manufacturing for producing goods or services	<input type="checkbox"/>	<input type="checkbox"/>
New or significantly improved logistics, delivery or distribution methods for your inputs, goods or services	<input type="checkbox"/>	<input type="checkbox"/>
New or significantly improved supporting activities for your processes, such as maintenance systems or operations for purchasing, accounting, or computing	<input type="checkbox"/>	<input type="checkbox"/>

If no to all options, go to section 4

Otherwise go to question 3.2

3.2 Who developed these process innovations?

Tick all that apply

Your enterprise by itself	<input type="checkbox"/>
Your enterprise together with other enterprises or organisations*	<input type="checkbox"/>
Your enterprise by adapting or modifying processes originally developed by other enterprises or organisations*	<input type="checkbox"/>
Other enterprises or organisations*	<input type="checkbox"/>

*: Include independent enterprises plus other parts of your enterprise group (subsidiaries, sister enterprises, head office, etc). Organisations include universities, research institutes, non-profits, etc.

⁵ Each NSO needs to remove their own country from the list of European countries.

4. 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.

4.1 During the three years 2014 to 2016, did your enterprise have any innovation activities that did not result in a product or process innovation because the activities were:

	Yes	No
Abandoned or suspended before completion	<input type="checkbox"/>	<input type="checkbox"/>
Still ongoing at the end of the 2016	<input type="checkbox"/>	<input type="checkbox"/>

If no to all options in questions 2.1, 3.1 and 4.1, go to section 8

Otherwise go to section 5

5. Innovation activities and expenditures for product and process innovations

5.1 During the three years 2014 to 2016, did your enterprise engage in the following innovation activities?:

		Yes	No
In-house R&D	Research and development activities undertaken by your enterprise to create new knowledge or solve scientific or technical problems (include software development that meets this requirement)	<input type="checkbox"/>	<input type="checkbox"/>
	If yes, did your enterprise perform R&D during the three years 2014 to 2016:		
	Continuously (your enterprise had permanent R&D staff in-house)	<input type="checkbox"/>	
	Occasionally (as needed only)	<input type="checkbox"/>	
External R&D	Your enterprise contracted-out R&D to other enterprises (include enterprises in your own group) or to public or private research organisations	<input type="checkbox"/>	<input type="checkbox"/>
Acquisition of machinery, equipment, software & buildings	Acquisition of advanced machinery, equipment, software and buildings to be used for new or significantly improved products or processes	<input type="checkbox"/>	<input type="checkbox"/>
Acquisition of existing knowledge from other enterprises or organisations	Acquisition of existing know-how, copyrighted works, patented and non-patented inventions, etc. from other enterprises or organisations for the development of new or significantly improved products and processes	<input type="checkbox"/>	<input type="checkbox"/>
Training for innovative activities	In-house or contracted out training for your personnel specifically for the development and/or introduction of new or significantly improved products and processes	<input type="checkbox"/>	<input type="checkbox"/>
Market introduction of innovations	In-house or contracted out activities for the market introduction of your new or significantly improved goods or services, including market research and launch advertising	<input type="checkbox"/>	<input type="checkbox"/>
Design	In-house or contracted out activities to alter the shape, appearance or usability of goods or services	<input type="checkbox"/>	<input type="checkbox"/>
Other	Other in-house or contracted out activities to implement new or significantly improved products or processes such as feasibility studies, testing, tooling up, industrial engineering, etc	<input type="checkbox"/>	<input type="checkbox"/>

5.2 How much did your enterprise spend on each of the following innovation activities in 2016 only? Innovation activities are defined in question 5.1 above.

Include current expenditures (including labour costs, contracted-out activities, and other related costs) as well as capital expenditures on buildings and equipment.¹

Please fill in '0' if your enterprise had no expenditures for an activity in 2016

Please estimate if you lack precise accounting data

In-house R&D (Include current expenditures including labour costs and capital expenditures on buildings and equipment specifically for R&D)

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External R&D

--	--	--	--	--	--	--	--	--	--

Acquisition of machinery, equipment, software & buildings

(Exclude expenditures on these items that are for R&D)

--	--	--	--	--	--	--	--	--	--

Acquisition of existing knowledge from other enterprises or organisations

--	--	--	--	--	--	--	--	--	--

All other innovation activities including design, training, marketing, and other relevant activities

--	--	--	--	--	--	--	--	--	--

Total of the above innovation activities

--	--	--	--	--	--	--	--	--	--

5.3 How much do you expect your enterprise's total innovation expenditures to change in 2017 compared to 2016?

☐ Increase

☐ Stay about the same (+/- 5%)

☐ Decrease

☐ No innovation expenditures expected

☐ Don't know (yet)

6. Public financial support for product and process innovation activities

6.1 During the three years 2014 to 2016, did your enterprise receive any public financial support for innovation activities from the following levels of government?

Include financial support via tax credits or deductions, grants, subsidised loans, and loan guarantees. Exclude R&D and other innovation activities conducted entirely for the public sector* under contract.

	Yes	No
Local or regional authorities	<input type="checkbox"/>	<input type="checkbox"/>
Central government (including central government agencies or ministries)	<input type="checkbox"/>	<input type="checkbox"/>
The European Union (EU)	<input type="checkbox"/>	<input type="checkbox"/>
If yes, did your enterprise participate in the EU 7 th Framework Programme for Research and Technical Development or in the Horizon 2020 Programme for Research and Innovation?	<input type="checkbox"/>	<input type="checkbox"/>

*The public sector includes government owned organisations such as local, regional and national administrations and agencies, schools, hospitals, and government providers of services such as security, transport, housing, energy, etc.

7. Sources of information and co-operation for product and process innovations

7.1 During the three years 2014 to 2016, did your enterprise co-operate on any of your innovation activities with other enterprises or organisations?

Innovation co-operation is active participation with other enterprises or organisations on innovation activities. Both partners do not need to commercially benefit. Exclude pure contracting out of work with no active co-operation.

- No ☐ (Go to section 8)
 Yes ☐ (Go to question 7.2)

7.2 Please indicate the type of innovation co-operation partner by location

Type of co-operation partner	Tick all that apply		
	[Your country]	Other Europe**	All other countries
A. Other enterprises within your enterprise group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Suppliers of equipment, materials, components, or software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Clients or customers from the private sector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Clients or customers from the public sector*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Competitors or other enterprises in your sector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. Consultants or commercial labs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G. Universities or other higher education institutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. Government or public research institutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I. Private research institutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*The public sector includes government owned organisations such as local, regional and national administrations and agencies, schools, hospitals, and government providers of services such as security, transport, housing, energy, etc.

** Include the following European Union (EU) and associated countries: Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Ireland, Kosovo, Latvia, Liechtenstein, Lithuania, Luxembourg, FYR Macedonia, Malta, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Slovakia, Switzerland, Spain, Sweden, Turkey and the United Kingdom.

8. Organisational innovation

An organisational innovation is a new organisational method in your enterprise's business practices (including knowledge management), workplace organisation 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.

8.1 During the three years 2014 to 2016, did your enterprise introduce:

	Yes	No
New business practices for organising procedures (i.e. first time use of supply chain management, business re-engineering, knowledge management, lean production, quality management, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
New methods of organising work responsibilities and decision making (i.e. first time use of a new system of employee responsibilities, team work, decentralisation, integration or de-integration of departments, education/training systems, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
New methods of organising external relations with other enterprises or public organisations (i.e. first time use of alliances, partnerships, outsourcing or sub-contracting, etc.)	<input type="checkbox"/>	<input type="checkbox"/>

9. 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.

9.1 During the three years 2014 to 2016, did your enterprise introduce:

	Yes	No
Significant changes to the aesthetic design or packaging of a good or service (<i>exclude changes that alter the product's functional or user characteristics – these are product innovations</i>)	<input type="checkbox"/>	<input type="checkbox"/>
New media or techniques for product promotion (i.e. first time use of a new advertising media, a new brand image, introduction of loyalty cards, etc)	<input type="checkbox"/>	<input type="checkbox"/>
New methods for product placement or sales channels (i.e. first time use of franchising or distribution licenses, direct selling, exclusive retailing, new concepts for product presentation, etc)	<input type="checkbox"/>	<input type="checkbox"/>
New methods of pricing goods or services (i.e. first time use of variable pricing by demand, discount systems, etc)	<input type="checkbox"/>	<input type="checkbox"/>

Go to section 11 if your enterprise did not introduce an innovation and did not have ongoing/abandoned innovation activities during the three years 2014 to 2016 ('no' to all options in questions 2.1, 3.1, 4.1, 8.1 and 9.1).

Otherwise go to section 10.

10. Factors hampering innovation activities

10.1 During the three years 2014 to 2016, how important were the following factors in hampering your innovation activities?

	Degree of importance			
	High	Medium	Low	Not important
Lack of internal finance for innovation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of credit or private equity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovation costs too high	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of skilled employees within your enterprise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of collaboration partners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Difficulties in obtaining government grants or subsidies for innovation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uncertain market demand for your ideas for innovations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Too much competition in your market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Go to section 12.

11. Non-innovators

Repeat: Only answer section 11 if your enterprise did not introduce an innovation and did not have ongoing/abandoned innovation activities during the three years 2014 to 2016 ('no' to all options in questions 2.1, 3.1, 4.1, 8.1 and 9.1).

Otherwise go to section 12.

11.1 Which of the following best describes why your enterprise had no innovation activities during the three years from 2014 to 2016:

Tick one only

- No compelling reason to innovate ☐ **Go to 11.2**
- Considered innovating, but factors preventing innovation were too large ☐ **Go to 11.3**

11.2 How important were the following reasons for your enterprise not to conduct innovation activities during 2014 to 2016?

Degree of importance

	High	Medium	Low	Not important
Low demand for innovations in your market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No need to innovate due to previous innovations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No need to innovate due to very little competition in your enterprise's market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of good ideas for innovations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Go to section 12.

11.3 During the three years 2014 to 2016, how important were the following factors in preventing your enterprise from innovating?

Degree of importance

	High	Medium	Low	Not important
Lack of internal finance for innovation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of credit or private equity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovation costs too high	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of skilled employees within your enterprise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of collaboration partners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Difficulties in obtaining government grants or subsidies for innovation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uncertain market demand for your ideas for innovations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Too much competition in your market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Legislation/regulation that generated excessive burden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Legislation/regulation that created uncertainty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Intellectual property rights

12.1 During the three years 2014 to 2016, did your enterprise:

	Yes	No
Apply for a patent	<input type="checkbox"/>	<input type="checkbox"/>
Register an industrial design right	<input type="checkbox"/>	<input type="checkbox"/>
Register a trademark	<input type="checkbox"/>	<input type="checkbox"/>
Use trade secrets	<input type="checkbox"/>	<input type="checkbox"/>
Claim copyright	<input type="checkbox"/>	<input type="checkbox"/>

13. Basic economic information on your enterprise⁶

13.1 What was your enterprise's total turnover for 2014 and 2016?¹

Turnover is defined as the market sales of goods and services (Include all taxes except VAT¹)

	2014		2016	
In Euro	<div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div>	.000	<div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div>	.000

13.2 Approximately what percent of your enterprise's total turnover in 2016 was from sales to clients outside your country?

Please insert '0' if your enterprise had no sales outside your country

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%

13.3 What was your enterprise's average number of employees in 2014 and 2016?¹

2014	2016
<div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div>

13.4 Approximately what percent of your enterprise's employees in 2016 had a tertiary degree?⁷

0%	<input type="checkbox"/>
1% to less than 5%	<input type="checkbox"/>
5% to less than 10%	<input type="checkbox"/>
10% to less than 25%	<input type="checkbox"/>
25% to less than 50%	<input type="checkbox"/>
50% to less than 75%	<input type="checkbox"/>
75% or more	<input type="checkbox"/>

⁶ Questions 13.1 is needed for calculating Regulation variables, 3, 4 and 6 and question 13.3 for calculating Regulation variables by enterprise's size classes (Commission Regulation (EC) No 995/2012 on innovation statistics).

⁷ ISCED 2011 levels 5 to 8.

Examples of Innovations

Introduction

This annex provides a list of examples for each type of innovation. These lists are intended as illustrations and should not by any means be considered exhaustive. They are intended to give survey practitioners a better understanding of each innovation type, but they are not designed to be shown to enterprises as examples of innovations. There are two reasons for this. First, their inclusion might bias firms into excluding innovations that are not on the list. Second, the list is dated, with many innovations impossible to foresee. It is also worthwhile emphasising that two central criteria for innovations are that they represent significant changes and that they are new to the firm. Thus, a change can be an innovation for one firm and not for another. Often, more detailed descriptions are needed to determine whether a change is to be classified as an innovation and of which type.

Examples of innovations

A product innovation is the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses. This includes significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics.

Product innovations exclude the following:

- Minor changes or improvements.
- Routine upgrades.
- Regular seasonal changes (such as for clothing lines).
- Customisation for a single client that does not include significantly different attributes compared to products made for other clients.

-
- Design changes that do not alter the function, intended use or technical characteristics of a good or service.
 - The simple resale of new goods and services purchased from other enterprises.

Examples of product innovations:

Goods

- Replacing inputs with materials with improved characteristics (breathable textiles, light but strong composites, environmentally friendly plastics, etc.).
- Global positioning systems (GPS) in transport equipment.
- Cameras in mobile telephones.
- Fastening systems in clothing.
- Household appliances that incorporate software that improves user friendliness or convenience, such as toasters that automatically shut off when the bread is toasted.
- Anti-fraud software that profiles and tracks individual financial transactions.
- Inbuilt wireless networking in laptops.
- Food products with new functional characteristics (margarine that reduces blood cholesterol levels, yoghurts produced using new types of cultures, etc.).
- Products with significantly reduced energy consumption (energy efficient refrigerators, etc.).
- Significant changes in products to meet environmental standards.
- Programmable radiators or thermostats.
- IP (Internet protocol) telephones.
- New medicine with significantly improved effects.

Services

- New services that significantly improve customers' access to goods or services, such as home pick-up and drop-off service for rental cars.
- DVD subscription service where for a monthly fee customers can order a predefined number of DVDs via the Internet with mail delivery to the home, with return via a pre-addressed envelope.
- Video on demand via broadband Internet.
- Internet services such as banking, or bill payment systems.

-
- New forms of warranty, such as an extended warranty on new or used goods, or bundling warranties with other services, such as with credit cards, bank accounts or customer loyalty cards.
 - New types of loans, for example variable rate loans with a fixed rate ceiling.
 - Creation of Web sites on the Internet, where new services such as product information and various support functions can be offered to clients free of charge.
 - The introduction of smart cards and multipurpose plastic cards.
 - A new, self-service bank office.
 - Offering customers a new “supply control system” which allows clients to check that deliveries from contractors meet specifications.

A **process innovation** is the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software.

Process innovations exclude the following:

- Minor changes or improvements.
- An increase in production or service capabilities through the addition of manufacturing or logistical systems which are very similar to those already in use.

Examples of process innovations:

Production

- Installation of new or improved manufacturing technology, such as automation equipment or real-time sensors that can adjust processes.
- New equipment required for new or improved products.
- Laser cutting tools.
- Automated packaging.
- Computer-assisted product development.
- Digitisation of printing processes.
- Computerised equipment for quality control of production.
- Improved testing equipment for monitoring production.

Delivery and operations

- Portable scanners/computers for registering goods and inventory.
- Introduction of bar coding or passive radio frequency identification (RFID) chips to track materials through the supply chain.
- GPS tracking systems for transport equipment.
- Introduction of software to identify optimal delivery routes.

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- New or improved software or routines for purchasing, accounting or maintenance systems.
 - Introduction of electronic clearing systems.
 - Introduction of automated voice-response system.
 - Introduction of electronic ticketing system.
 - New software tools designed to improve supply flows.
 - New or significantly improved computer networks.

A **marketing innovation** is the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing.

Marketing innovations exclude the following:

- Changes in product design or packaging, product placement, product promotion or pricing that are based on marketing methods that have previously been used by the enterprise.
- Seasonal, regular and other routine changes in marketing instruments.
- The use of already applied marketing methods to target a new geographical market or a new market segment (*e.g.* socio-demographic group of clients).

Examples of marketing innovations:

- Marketing innovations can refer to any marketing method (product design/ packaging, placement, pricing, promotion) as long as it is used for the first time by the firm.

Design and packaging

- Implementation of a significant change in the design of a furniture line to give it a new look and widen its appeal.
- Implementation of a fundamentally new design of bottles for a body lotion intended to give the product a distinctively exclusive look.

Placement (sales channels)

- First-time introduction of product licensing.
- First-time introduction of direct selling or exclusive retailing.
- Implementation of a new concept for product presentation such as sales rooms for furniture that are designed according to themes, allowing customers to view products in fully decorated rooms.
- Implementation of a personalised information system, *e.g.* obtained from loyalty cards, to tailor the presentation of products to the specific needs of individual customers.

Pricing

- Introduction of a new method that allows customers to choose desired product specifications on the firm's Web site and then see the price for the specified product.
- First-time use of a method for varying the price of a good or service according to demand for it.
- First-time use of in-store special offers that are only accessible to holders of the store's credit card or reward card.

Promotion

- First-time use of trademarks.
- First-time use of product placement in movies or television programmes.
- Introduction of a fundamentally new brand symbol intended to position the firm's product on a new market.
- First-time use of product seeding through opinion leaders, celebrities or particular groups that are fashion or product trend setters.

An **organisational innovation** is the implementation of a new organisational method in the firm's business practices, workplace organisation or external relations.

Organisational innovations exclude the following:

- Changes in business practices, workplace organisation or external relations that are based on organisational methods already in use in the firm
- Changes in management strategy, unless accompanied by the introduction of a new organisational method
- Mergers with, and the acquisition of other firms

Examples of organisational innovations:

- Organisational innovations can refer to any organisational method in a firm's business practices, workplace organisation or external relations as long as it is used for the first time by the firm.

Business practices

- Establishing of a new database of best practices, lessons and other knowledge so that they are more easily accessible to others.
- First-time introduction of an integrated monitoring system for firm activities (production, finance, strategy, marketing).
- First-time introduction of management systems for general production or supply operations, such as supply chain management, business re-engineering, lean production, quality management system.

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- First-time introduction of training programmes to create efficient and functional teams that integrate staff from different backgrounds or areas of responsibility.

Workplace organisation

- First-time implementation of decentralised job responsibility for the firm's workers, such as giving substantially more control and responsibility over work processes to production, distribution or sales staff.
- First-time establishment of formal or informal work teams to improve the access and sharing of knowledge from different departments, such as marketing, research and production.
- First-time implementation of an anonymous incident reporting system to encourage the reporting of errors or hazards in order to identify their causes and reduce their frequency.

External relations

- First-time introduction of quality control standards for suppliers and subcontractors.
- First-time use of outsourcing of research or production.
- First-time entering into research collaboration with universities or other research organisations.