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Harmonised Data Collection for the CIS 2018

Final Version (as of 26 April 2018)

Prepared by the CIS 2018 Task Force

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Introduction

This document specifies the information (variables and categories) to be collected with the Community Innovation Survey (CIS) 2018 at the enterprise level.

National Statistical Institutes (NSIs) are not required to

- *collect all variables (or all particular items of variables) with an enterprise survey using this data collection form, as some (items of) variables can originate from other sources, such as the Statistical Business Register or other business surveys.*
- *design the questionnaire for the national enterprise survey exactly as it is presented in this document. However, in order to produce internationally comparable statistics and indicators, the NSIs should ensure that the information that would become available with this data collection form will become available at the enterprise level for their country. For the same reason, questions 3.1 to 3.10 and 3.15 to 3.16 have to be presented in a questionnaire in the order as presented in this data collection form.*

There are two types of footnotes in this data collection form. Footnotes that are denoted with

- *asterisks are proposed to appear in the questionnaire*
- *numbers are for information purpose for NSIs*

The questions are marked in three categories:

• *Questions marked in **violet** are **obligatory** under Regulation (EU) 995/2012*

• *Questions marked in **blue** are not obligatory under Regulation (EU) 995/2012, but **VERY important***

• *Questions marked in **yellow** are not obligatory under Regulation (EU) 995/2012, but **important***

1 Enterprise identification

The enterprise identification should be extracted from the Business Register. Whenever possible, this information should be used, and consistency with the Business Register should be assured.

Name of enterprise	
Address*	
Postal code	
Main activity**	
If available: BR number	

* NUTS basic regions (2 digit code)

** NACE rev. 2 classes (4 digit code)

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 the activities of all subsidiaries or parent enterprises

2 Strategies and Knowledge Flows

2.1 During the three years 2016 to 2018, how important were the following strategies to the economic performance of your enterprise?

	Degree of importance			
	High	Medium	Low	Not important
Focus on improving your <u>existing goods or services</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Focus on introducing <u>new goods or services</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Focus on <u>low-price</u> (price leadership)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Focus on <u>high-quality</u> (quality leadership)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Focus on a <u>broad range of goods or services</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Focus on one or a small number of <u>key goods or services</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Focus on satisfying <u>established customer groups</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Focus on reaching out to <u>new customer groups</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Focus on <u>standardised goods or services</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Focus on <u>customer-specific solutions</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.2 During the three years from 2016 to 2018, did your enterprise offer any of the following types of goods or services to meet user requirements?

A user can be an end customer or an enterprise which uses a product as an intermediate product.

	Yes	No
Goods or services <u>co-created* with users</u> , i.e. <u>the user had an active role in the creation of the idea, design and development of the product (co-creation)</u>	<input type="checkbox"/>	<input type="checkbox"/>
Goods or services <u>designed and developed* specifically to meet the needs of particular users (customisation)</u> . This excludes mass customisation, i.e. customised versions of standard products.	<input type="checkbox"/>	<input type="checkbox"/>
<u>Standardised goods or services offered to different users in the same way</u> . This includes mass customisation.	<input type="checkbox"/>	<input type="checkbox"/>

* A difference between customisation and co-creation is that for 'customisation' the enterprise designed and developed the product alone, whereas for 'co-creation' the enterprise designed and developed the product together with the user**.

If 'yes' to at least one of the options 'co-creation' or 'customisation', go to question 2.3

Otherwise go to question 2.5

2.3 For the products resulting from 'customisation'* or 'co-creation', the users included**

	Yes	No
Private business enterprises	<input type="checkbox"/>	<input type="checkbox"/>
Public sector organisations***	<input type="checkbox"/>	<input type="checkbox"/>
Individuals or households	<input type="checkbox"/>	<input type="checkbox"/>
Non-profit organisations	<input type="checkbox"/>	<input type="checkbox"/>

* This excludes mass customisation, i.e. customised versions of standard products.

** A user can be an end customer or an enterprise which uses a product as an intermediate product.

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

2.4 Please provide an estimate for the percentage of turnover in 2018 from

Products resulting from ' <u>customisation</u> ' or ' <u>co-creation</u> '	___ %
<u>Standardised products</u>	___ %
Total turnover	100 %

2.5 During the three years 2016 to 2018, did your enterprise:¹

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

2.6 During the three years 2016 to 2018, did your enterprise:

	Yes	No
<u>License out its own</u> intellectual property rights (<u>IPRs</u>) to others	<input type="checkbox"/>	<input type="checkbox"/>
<u>Sell its own IPRs</u> (or assign IP rights) to others	<input type="checkbox"/>	<input type="checkbox"/>
<u>Exchange IPRs</u> (pooling, cross-licensing, etc.)	<input type="checkbox"/>	<input type="checkbox"/>

2.7 During the three years 2016 to 2018*, did your enterprise purchase or license-in patents or other IPRs?

<p><u>Yes</u> <input type="checkbox"/> <u>if yes:</u></p> <p style="padding-left: 40px;"><u>from private business enterprises or individuals</u></p> <p style="padding-left: 40px;"><u>from public research organisations, universities or other higher education institutions</u></p> <p><u>No</u> <input type="checkbox"/></p>	<p>tick all that apply</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
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* The time of the licensing-in or purchase is relevant, not the use of patents or IPRs during the three years 2016 to 2018 or at the time when this survey is filled in.

2.8 During the three years 2016 to 2018, did your enterprise purchase technical services? *Technical service' includes any consulting activity that involves any kind of technical, scientific or engineering information, e.g. engineering services, measurement and testing services, industrial design services, R&D services, certification services, installation, refitting and retrofitting services.*

<p><u>Yes</u> <input type="checkbox"/> <u>if yes:</u></p> <p style="padding-left: 40px;"><u>from private business enterprises</u></p> <p style="padding-left: 40px;"><u>from public research organisation, universities or other higher education institutions</u></p> <p><u>No</u> <input type="checkbox"/></p>	<p>tick all that apply</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
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¹ Those countries where 'utility models' are relevant can include a respective category.

2.9 During the three years 2016 to 2018, did your enterprise purchase machinery, equipment or software based on

	Yes	No
The <u>same</u> or improved technology used in your enterprise before	<input type="checkbox"/>	<input type="checkbox"/>
<u>New</u> technology that was not used in your enterprise before	<input type="checkbox"/>	<input type="checkbox"/>

2.10 During the three years 2016 to 2018, did your enterprise use any of the following channels to acquire knowledge ?

	Yes	No
Conferences, trade fairs or exhibitions	<input type="checkbox"/>	<input type="checkbox"/>
Scientific/technical journals or trade publications	<input type="checkbox"/>	<input type="checkbox"/>
Information from professional or industry associations	<input type="checkbox"/>	<input type="checkbox"/>
Information from published patents	<input type="checkbox"/>	<input type="checkbox"/>
Information from standardisation documents or committees	<input type="checkbox"/>	<input type="checkbox"/>
Social web-based networks or crowd-sourcing	<input type="checkbox"/>	<input type="checkbox"/>
Open business-to-business platforms or open-source software	<input type="checkbox"/>	<input type="checkbox"/>
Extracting knowledge or design information from goods or services (reverse engineering)	<input type="checkbox"/>	<input type="checkbox"/>

2.11 During the three years 2016 to 2018, how important to the management of your business were the following methods of organising work ?

	Degree of importance			
	High	Medium	Low	Not important
Planned <u>job rotation</u> of staff across different functional areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regular <u>brainstorming sessions</u> for staff to think about improvements that could be made within the business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Cross-functional work groups or teams</u> (combined across different working areas or functions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3 Innovation

A **product innovation** is a new or improved good or service that differs significantly from the firm's previous goods or services and which has been implemented on the market.

Include:

- ✓ significant changes to the design of a good
- ✓ digital goods or services

Exclude:

- the simple re-sale of new goods and changes of a solely aesthetic nature

3.1 During the three years 2016 to 2018, did your enterprise introduce any:

	Yes	No
<u>New or improved goods</u>	<input type="checkbox"/>	<input type="checkbox"/>
<u>New or improved services</u>	<input type="checkbox"/>	<input type="checkbox"/>

1: For NSIs: Digital goods and services, see OM4 Chapter 3, paragraph 32 where they are referred to as knowledge-capturing products. These products can have the characteristics of either a good or service and concern the provision, storage, safekeeping, communication and dissemination of digital information that users can access repeatedly.

If 'no' to all options go to question 3.6
Otherwise go to question 3.2

3.2 In the three years 2016 to 2018, did your enterprise introduce any new or improved products (goods or services) that were:

	Yes	No
Not previously offered by any of your competitors ? ²	<input type="checkbox"/>	<input type="checkbox"/>
Identical or very similar to products already offered by your competitors ? ³	<input type="checkbox"/>	<input type="checkbox"/>

3.3 Please estimate the percentage of your enterprise's total turnover⁴ in 2018 from products (goods or services) that were, in the three years 2016 to 2018:⁵

<u>New or improved products</u>	<u>Unchanged products</u> (or with only minor changes)*	<u>Total turnover</u> <i>in 2018</i>
-- %	+	-- %
	=	100 %

<i>If possible, separate turnover from new or improved products into products that were:</i>	=	
Not previously offered by any of your competitors⁶	-- %	
	+	
Identical or very similar to products already offered by your competitors	-- %	

* Includes the resale of new products purchased from other enterprises.

² Not previously available on the market. (Wording can be adapted to national circumstances, e.g. to 'New to the market').

³ Already previously available on the market. (Wording can be adapted to national circumstances, e.g. to 'New to the enterprise').

⁴ Turnover is defined as the market sales of goods and services (Include all taxes except VAT). For Credit institutions: Interests receivable and similar income, for insurance services: Gross premiums written.

⁵ This question can be designed according to national needs provided it delivers the described information, in particular the percentages for 'new or improved products' and 'unchanged products'.

3.4 Who developed these product innovations?

Tick all that apply

- Your enterprise by itself
- Your enterprise together with other enterprises or organisations*
- Your enterprise by adapting or modifying products originally developed by other enterprises or organisations*
- Other enterprises or organisations*

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

3.5 How did the new or improved product(s), introduced during 2016 to 2018, meet your enterprise's expectations by the end of 2018:

Tick only one

- Expectations were exceeded
- Expectations were adequately met
- Expectations were met only to some extent
- Expectations were not met at all
- Too early to assess

A **business process innovation** is a new or improved business process for one or more business functions that differs significantly from the firm's previous business processes and which has been implemented within the firm.

3.6 During the three years 2016 to 2018, did your enterprise introduce any of the following types of new or improved processes that differ significantly from your previous processes?

	Yes	No
Methods for producing goods or providing services (including methods for developing goods or services)	<input type="checkbox"/>	<input type="checkbox"/>
Logistics, delivery or distribution methods	<input type="checkbox"/>	<input type="checkbox"/>
Methods for information processing or communication	<input type="checkbox"/>	<input type="checkbox"/>
Methods for accounting or other administrative operations	<input type="checkbox"/>	<input type="checkbox"/>
Business practices for organising procedures or external relations	<input type="checkbox"/>	<input type="checkbox"/>
Methods of organising work responsibility, decision making or human resource management	<input type="checkbox"/>	<input type="checkbox"/>
Marketing methods for promotion, packaging, pricing, product placement or after sales services	<input type="checkbox"/>	<input type="checkbox"/>

If 'no' to all options go to question 3.9

Otherwise go to question 3.7

3.7 Who developed these process innovations?

Tick all that apply

- Your enterprise by itself
- Your enterprise together with other enterprises or organisations*
- Your enterprise by adapting or modifying processes originally developed by other enterprises or organisations*
- Other enterprises or organisations*

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

3.8 How did the new or improved processes introduced during 2016 to 2018 meet your enterprise's expectations by the end of 2018:

Tick only one

- Expectations were exceeded
- Expectations were adequately met
- Expectations were met only to some extent
- Expectations were not met at all
- Too early to assess

'Innovation activity' includes all developmental, financial and commercial activities, undertaken by a firm, which are intended to or result in an innovation.

Research and Development (R&D) comprises creative and systematic work undertaken in order to increase the stock of knowledge – including knowledge of humankind, culture and society – and to devise new applications of available knowledge.

3.9 During the three years 2016 to 2018, did your enterprise have any of the following types of innovation activities? (Activities leading to expenditures)

	Yes	No
<u>Completed</u> activities on product or process innovation ¹	<input type="checkbox"/>	<input type="checkbox"/>
<u>Ongoing</u> innovation activities at the end of 2018	<input type="checkbox"/>	<input type="checkbox"/>
<u>Abandoned</u> innovation activities	<input type="checkbox"/>	<input type="checkbox"/>
<u>In-house</u> research and development (R&D) activities*?	<input type="checkbox"/>	<input type="checkbox"/>
if 'yes': did your enterprise perform in-house R&D during the three years 2016 to 2018:		
<u>Continuously</u> (your enterprise had permanent R&D staff)	<input type="checkbox"/>	
<u>Occasionally</u> (as needed only)	<input type="checkbox"/>	
<u>Contract-out R&D</u> to other enterprises (include enterprises in your own group) or to public or private research organisations)	<input type="checkbox"/>	<input type="checkbox"/>

1 For NSIs that use an online survey: For all enterprises: For all enterprises that reply 'yes' to any category in any of the questions 3.1 or 3.6, pre-set the answer to 'yes'.

* Please see the annex for definitions of internal and external R&D.

If 'no' to all options go to question 3.12
 Otherwise go to question 3.10

3.10 How much did your enterprise spend on innovation and research and development (R&D) in 2018?

- Please note that question 3.10 refers, exceptionally, **only to the year 2018**, not the three year period 2016 to 2018.
- Please tick 'none' for all categories if your enterprise **did not have any expenditure on innovation and/or R&D** in 2018.

	Please estimate if you lack precise accounting data	Please tick, if there were no such expenditures in 2018
Expenditures on innovation and R&D in 2018		
R&D performed in-house (Include current expenditures including labour costs and capital expenditures (buildings, machinery, equipment, software etc.) specifically for R&D)	_____,_____,000 €	<input type="checkbox"/> none
R&D contracted out to others (including enterprises in own enterprise group)	_____,_____,000 €	<input type="checkbox"/> none
All other innovation expenditures* (i.e. excluding R&D)	_____,_____,000 €	<input type="checkbox"/> none
<i>Of which:</i>		
Own personnel working on innovation	_____,_____,000 €	<input type="checkbox"/> none
Services, materials, supplies purchased from others for innovation	_____,_____,000 €	<input type="checkbox"/> none
Capital goods for innovation (acquisition of machinery, equipment, software, IPRs, buildings etc.)	_____,_____,000 €	<input type="checkbox"/> none

- * include:
- Acquisition of machinery equipment, software, IPRs or buildings for innovation activities other than R&D
 - Acquisition of external knowledge for innovation activities other than R&D (e.g. patents, licenses, trademarks)
 - Product design, service design, preparation of production / distribution for innovation activities other than R&D
 - Training and professional development for innovation activities other than R&D (e.g. employee training or continued education)
 - Marketing of innovations (marketing activities directly related to innovations, including market research)
- More notes can be found as an annex to this questionnaire.

3.11 How much do you expect your enterprise's total innovation expenditures* to change in 2019 and 2020 ?

2019 compared to 2018

- Increase *If yes, by approximately*** %
- Stay about the same (+/- 5%)**
- Decrease *If yes, by approximately*** %
- No innovation expenditures expected
- Don't know

2020 compared to 2019

- Increase
- Stay about the same (+/- 5%)
- Decrease
- No innovation expenditures expected
- Don't know

- * Total innovation expenditures include those for R&D and all other innovation activities.
- ** If there were no innovation expenditures in 2018 or 2019, please only indicate if these will increase in 2019 or 2020, respectively.

3.12 During the three years from 2016 to 2018, did your enterprise try to obtain the following types of funding? If funding was obtained successfully, was this funding used for R&D or other innovation activities?

	<u>Try to obtain funding</u>			<u>If your enterprise obtained funding, was this partly or fully used for R&D or other innovation activities?</u>	
	<i>Yes, successfully obtained some funding of this type</i>	<i>Tried, but not successfully</i>	<i>No</i>	<i>Yes</i>	<i>No</i>
Equity finance (finance provided in exchange for a share in the ownership of the enterprise)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Debt finance (finance that the enterprise must repay)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.13 During the three years from 2016 to 2018, did your enterprise receive any public financial support from the following levels of government?

Include financial support via grants, subsidised loans, and loan guarantees. Exclude revenues from public sector* procurement contracts.

	<u>Yes</u>		<u>No</u>		<u>If your enterprise received financial support: was part of this used for R&D or other innovation activities?</u>	
	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
Local or regional authorities*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National government*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EU Horizon 2020 Programme for Research and Innovation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other financial support from a European Union institution*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Include financial support via grants, subsidised loans, and loan guarantees. Exclude financing of activities under contract by the public sector*. 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.

3.14 During the three years from 2016 to 2018, did your enterprise use tax incentives or allowances for the following purposes?

	<u>Yes</u>	<u>No</u>
Tax credits or allowances for R&D or other innovation activities [name of national scheme]	<input type="checkbox"/>	<input type="checkbox"/>
Tax credits or allowances for all other types of activities	<input type="checkbox"/>	<input type="checkbox"/>

3.15 During the three years 2016 to 2018, did your enterprise co-operate* with other enterprises or organisations ?

	Yes	No
a) On R&D	<input type="checkbox"/>	<input type="checkbox"/>
b) On other innovation activities (excluding R&D)	<input type="checkbox"/>	<input type="checkbox"/>
c) On any other business activities	<input type="checkbox"/>	<input type="checkbox"/>

* Co-operation is active participation with other enterprises or organisations. Partners do not need to commercially benefit. Exclude pure contracting out of work with no active co-operation.

If 'yes' to either option a) or b), go to question 3.16
Otherwise go to question 3.17

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

Tick all that apply

Type of co-operation partner	[Your country]	Other EU* or EFTA**	All other countries
Private business enterprises <u>outside your enterprise group</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Consultants</u> , commercial labs, or private research institutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Suppliers</u> of equipment, materials, components or software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enterprises that are your <u>clients or customers</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enterprises that are your <u>competitors</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Other enterprises</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enterprises <u>within your enterprise group</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Universities</u> or other higher education institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Government</u> or public <u>research institutes</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Clients or customers from the public sector</u> ***	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Non-profit organisations</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* The Member States of the European Union (EU) are: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Ireland, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovenia, Slovakia, Spain, Sweden, and the United Kingdom.

** Iceland, Liechtenstein, Norway, Switzerland.

*** 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.

3.17 During the three years 2016 to 2018, has legislation or regulation affected your enterprises' innovation activities in any of the ways shown in columns A to C ?

Type of legislation or regulation	Initiated or facilitated innovation activities	Prevented, hampered or increased costs of innovation activities	Had no effect / not relevant
	<i>Tick all that apply</i>		
	Column A	Column B	Column C
Product safety, consumer protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intellectual property	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tax	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employment, worker safety or social affairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.18 During the three years 2016 to 2018, how important were the following factors in hampering your enterprises' decision to start innovation activities*, or its execution of innovation activities* ?

	Degree of importance			
	High	Medium	Low	Not a constraint
<u>Lack of internal finance</u> for innovation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Lack of credit or private equity</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Difficulties in obtaining public grants or subsidies</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Costs too high</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Lack of skilled employees</u> within your enterprise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Lack of collaboration partners</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Lack of access to external knowledge</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Uncertain market demand</u> for your ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Too much competition</u> in your market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Different priorities</u> within your enterprise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Any activity on new or improved products or processes, including ongoing or abandoned activities.

4 Basic information on your enterprise

The variables collected as part of Section 4 should be extracted from the Business Register and other surveys within FRIBS. Whenever possible, this information should be used, and consistency with the Business Register and other surveys within FRIBS should be assured. Only if this is not possible, NSIs should collect this information as part of the survey, and Member States have to assure that the concepts and terminology used is compliant to the one used in the Business Register and/or defined in FRIBS.

4.1 What was the average number of persons employed* by your enterprise in 2016 and 2018 ?⁶

2016	2018
<input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/>

* Total number of persons (headcount) who work in the enterprise (inclusive of working proprietors, partners working regularly in the unit and unpaid family workers), as well as persons who work outside the enterprise's premises and are paid by it (e.g. sales representatives, delivery personnel, repair and maintenance teams). It excludes manpower supplied to the enterprise by other enterprises, persons carrying out repair and maintenance work in the enterprise on behalf of other enterprises, as well as those on compulsory military service.

4.2 Approximately what percentage of the persons employed in your enterprise in 2018 had a tertiary degree⁷ ?

- | | Tick only one |
|----------------------|--------------------------|
| 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"/> |

4.3 What was your enterprise's total turnover⁸ in 2016 and 2018?

2016	2018
<input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/>

4.4 Approximately, what was the percentage of turnover in 2018 from

- | | |
|---|--------------|
| Customers located in your country | ___ % |
| Customers located in other EU* and EFTA** countries | ___ % |
| Customers located in countries not included above | ___ % |
| Total | 100 % |

* The Member States of the European Union (EU) are: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Ireland, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovenia, Slovakia, Spain, Sweden, and the United Kingdom.

** Iceland, Liechtenstein, Norway, Switzerland.

⁶ Please provide an integer number.

⁷ ISCED 2011 levels 5 to 8. Level 5: Short-cycle tertiary education, Level 6: Bachelor or equivalent, Level 7: Master or equivalent, Level 8: Doctoral or equivalent.

⁸ Turnover is defined as the market sales of goods and services (Include all taxes except VAT). For Credit institutions: Interests receivable and similar income; for Insurance services give gross premiums written.

4.5 Age of enterprise

The concepts used in this question will have to be compliant with the one used in the Business Register. Two versions could be used for this question (see below). Version **A1 is the preferred version**. Version A2 would be acceptable in cases where administrative data, e.g. form the Business Register, is not available.

When the age of the enterprise is obtained from business registers, the year of starting business activities should be used instead of the year the legal entity was established.

4.5.A1 In which year was your enterprise established?

Ask for the calendar date. If not possible:

4.5.A2 Was your enterprise established

Tick only one

- In 2016 or later
- In 2014 or 2015
- Between 2010 and 2013
- In 2009 or before

4.6 How much did your enterprise spend in 2018 on the following items ?

	Total expenditure in 2018	
	<i>Please estimate if you lack precise accounting data</i>	<i>Please tick, if there were no such expenditures in 2018</i>
Acquisition of machinery, equipment, buildings and other <u>tangible assets</u>	____'____'____ €	<input type="checkbox"/> none
<u>Marketing</u>, brand building, advertising (include in-house costs and purchased services)	____'____'____ €	<input type="checkbox"/> none
<u>Training own staff</u> (include all in-house costs including wages and salaries of staff while being trained, and costs of purchased services from others)	____'____'____ €	<input type="checkbox"/> none
Product <u>design</u> (include in-house costs and purchased services)	____'____'____ €	<input type="checkbox"/> none
<u>Software development, database work and data analysis</u> (include in-house costs and purchased services)	____'____'____ €	<input type="checkbox"/> none
Registering, filing and monitoring own <u>Intellectual Property Rights (IPRs)</u> and purchasing or licensing IPRs from others	____'____'____ €	<input type="checkbox"/> none

Notes for question 4.6 can be found as an annex to this questionnaire.

Answer questions 4.7 to 4.9 only if your enterprise is part of an enterprise group

4.7 In 2018, was your enterprise part of...

	Yes	No
(a) an enterprise group* with the head office ⁹ located in [your country] ¹⁰	<input type="checkbox"/>	<input type="checkbox"/>
<i>If yes:</i> Are all of the enterprises of that group located in your country	<input type="checkbox"/>	<input type="checkbox"/>
(b) an enterprise group* with the head office ⁸ located abroad	<input type="checkbox"/>	<input type="checkbox"/>
<i>If yes:</i> Country in which head office is located		**

* 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.

** Insert country code according to ISO standard.

4.8 During the three years from 2016 to 2018, did your enterprise engage in any of the following activities with one or more enterprises of your enterprise group ?

	Yes, other enterprise in your country	Yes, other enterprise abroad	No
<u>Inflows from other enterprises in your group:</u>	<i>Tick all that apply</i>		
Receiving technical knowledge*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Receiving financial resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Receiving personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In-sourcing of business activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Outflows to other enterprises in your group:</u>			
Transferring technical knowledge*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transferring financial resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transferring personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Out-sourcing of business activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Technical knowledge includes all knowledge needed to solve technical problems in the production process; it excludes all general knowledge not specifically needed to solve particular technical problems.

4.9 During the three years from 2016 to 2018, did your enterprise try to obtain funding in the form of intra-group loans? If funding was obtained successfully, was this funding used for R&D or other innovation activities?

<u>Try to obtain intra-group loans</u>			<u>If your enterprise obtained funding in the form of intra-group loans, was this partly or fully used for R&D or other innovation activities?</u>	
<i>Yes, successfully obtained some funding of this type</i>	<i>Tried, but not successful</i>	No	Yes	No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

⁹ 'Head office' means the 'Ultimate controlling institutional unit of a foreign affiliate', i.e. the institutional unit, proceeding up a foreign affiliate's chain of control, which is not controlled by another institutional unit. Consistency with the Statistical Business Registers and Statistics on Foreign Affiliates (FATS) should be assured where possible.

¹⁰ For validation purposes, note that the 1st category (a) and 3rd category (b) of this question are mutually exclusive.

Part 2: Notes that can support Member States in implementing the expenditure questions 3.10, 3.11 and 4.6.

<p>The allocation of staff for each activity can be used as reference for providing expenditures.</p>
<p>Question 3.10 – 3.11</p> <p>Research and Development (R&D) R&D comprise creative and systematic work undertaken in order to increase the stock of knowledge – including knowledge of humankind, culture and society – and to devise new applications of available knowledge. Performed in-house: R&D undertaken by your enterprise to create new knowledge or solve scientific or technical problems. Include current expenditures including labour costs and capital expenditures on buildings and equipment specifically for R&D) R&D contracted out: Your enterprise contracted-out R&D to other enterprises (include enterprises in your own group) or to public or private research organisations. Other innovation expenditure All other activities related to the development of new or significantly improved products and processes.</p>
<p>Question 4.6</p> <p>Machinery, Equipment and Buildings Expenditures for purchasing physical capital goods (land and buildings, machinery and instruments, transport equipment and other equipment) and current costs for lease of tangible assets. Exclude leasing costs for other capital goods (not contributing to asset creation). Marketing and Branding Internal or external work intended to enhance reputation or brand values, either of the business as a whole or individual goods or service lines, as well as to support the market placement of new goods and services. For example: market research, market tests, development of marketing strategies and methods, product launches, promotional campaigns, ‘rebranding’ of business, development of promotional materials, etc.. Include: (a) staff costs of all staff involved (b) associated costs, including office facilities, overheads and materials but not capital items; (c) external costs of advertising and marketing campaigns to agencies, media organisations, trade fairs, suppliers of marketing databases, etc. Staff Training Activities to training the skills and teaching of knowledge related to the specific activities of the firm, including on-the-job training and job-related education at training and education institutions. For example, training on IT systems, new production equipment, ISO accreditation, skills development, etc.. Include: (a) staff costs of trainers, including development and delivery of training; (b) travel and subsistence payments; (c) associated costs, including providing facilities, overheads and materials but not capital items; (d) training provided by external suppliers, whether provided on-site or elsewhere; (e) levy payments for training organisations. Exclude: the cost of staff time whilst being trained and therefore absent from work and on-the-job training. Product design The design of goods or services to develop a new or modified form, appearance or function for goods or services. Design involves a series of iterative steps to create functional products. Product design activities may also include involving potential users in the design process, pilot testing, and post-implementation studies to identify or solve problems with a design. Include: (a) staff costs of all staff involved, e.g. graphic designers, product designers, architects, design engineers, etc.; (b) associated costs, including office facilities, overheads and materials used for these design activities but not capital goods. Estimates based on proportions of staff time are acceptable. Exclude (a) costs of design embedded in other items of current or capital expenditure (b) design of scientific prototypes (part of R&D), design of software and other engineering activities (civil engineering, chemical engineering, mechanical engineering, electrical engineering). Software and databases Purchase of external software and development of software in-house. For example, operating systems, general purpose office applications (e.g. word processing), special purpose applications (e.g. financial accounting systems, databases, production control systems), etc. Include: (a) staff costs of all staff involved, excluding contractors; (b) associated costs, including office facilities, overheads and materials used for but not capital items; (c) off-the-shelf software; software licenses and license renewals; generic and bespoke software. Exclude: (a) software embedded in other items of current or capital expenditure, e.g. software pre-installed on IT hardware; (b) software development conducted as part of R&D. Intellectual Property Rights (IPR) Administrative and legal costs incurring to apply or register, document, manage, monitor, trade and enforce own intellectual property rights (IPRs). And expenditures made to acquire others' intellectual property (patents, industrial designs, etc.) through purchase or licensing.</p>