The Community Innovation Survey 2008 (CIS 2008)

THE HARMONISED SURVEY QUESTIONNAIRE

The Community Innovation Survey 2008

FINAL November 28, 2008

This survey collects information on your enterprise's innovations and innovation activities between 2006 and 2008 inclusive.

An innovation is the introduction of a new or significantly improved product, process, organisational method, or marketing method by your enterprise. The innovation must be new to your enterprise, although it could have been originally developed by other enterprises.

The questions on innovation activities only refer to product and process innovations.

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

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

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

1. General information about the enterprise

Name of enterprise		<u>ID</u>
Address ¹		NUTS
Postal code	Main activity ²	NACE

1.1 In 2008, 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.) *GP*

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

If your enterprise is part of an enterprise group: Please answer all further questions <u>only</u> for the enterprise for which you are responsible in [your country]. Exclude all subsidiaries or parent enterprises.

1.2 In which geographic markets did your enterprise sell goods and/or services during the three years 2006 to 2008?

	Yes	No	
A. Local / regional within [your country]			MARLOC
B. National (other regions of [your country])			MARNAT
C . Other European Union (EU), EFTA, or EU candidate countries*			MAREUR
D. All other countries			MAROTH
Which of these geographic areas was your largest market in terms of turnover between 2006 and 2008? (Give corresponding letter)			LARMAR

*: Include the following countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Ireland, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Slovakia, Switzerland, Turkey, Spain, Sweden and the United Kingdom.

² NACE Rev.2 (4 digit code)

³Country code according to ISO standard

2. Product (good or service) innovation

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. •

2.1 During the three years 2006 to 2008, did your enterprise introduce:

	res	NO	
New or significantly improved goods. (Exclude the simple resale of new goods purchased from other enterprises and changes of a solely aesthetic nature.)			INPDGD
New or significantly improved services.			INPDSV

If no to both options, go to section 3, otherwise:

2.2 Who developed these product innovations?

Select the most appropriate option only	INPDTW
Mainly your enterprise or enterprise group	
Mainly your enterprise together with other enterprises or institutions	
Mainly other enterprises or institutions	

2.3 Were any of your product innovations during the three years 2006 to 2008:

		Yes	No	
New to your market?	Your enterprise introduced a new or significantly improved good or service onto your market before your competitors (it may have already been available in other markets)			NEWMKT
Only new to your firm?	Your enterprise introduced a new or significantly improved good or service that was already available from your competitors in your market			NEWFRM

Using the definitions above, please give the percentage of your total turnover⁴ in 2008 from:

New or significantly improved goods and services introduced during 2006 to 2008 that were new to your market	TURNMAR
New or significantly improved goods and services introduced during 2006 to 2008 that were only new to your firm	TURNIN
Goods and services that were unchanged or only marginally modified during 2006 to 2008 (include the resale of new goods or services purchased from other enterprises)	TURNUNG

Total turnover in 2008

• •

...

^{100%}

⁴ For Credit institutions: Interests receivable and similar income, for insurance services: Gross premiums written

3. Process innovation

A process innovation is the implementation of a **new** or **significantly** improved production process, distribution method, or support activity for your goods or services.

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

3.1 During the three years 2006 to 2008, did your enterprise introduce:

	Yes	No	
New or significantly improved methods of manufacturing or producing goods or services			INPSPD
New or significantly improved logistics, delivery or distribution methods for your inputs, goods or services			INPSLG
New or significantly improved supporting activities for your processes, such as maintenance systems or operations for purchasing, accounting, or computing			INPSSU

If no to all options, go to section 4, otherwise:

3.2 Who developed these process innovations?

Select the most appropriate option only	INPCSW
Mainly your enterprise or enterprise group	
Mainly your enterprise together with other enterprises or institutions	
Mainly other enterprises or institutions	

3.3 Were any of your process innovations introduced between 2006 and 2008 new to your market?

	INPSNM
Yes	
No	
Do not know	

4. Ongoing or abandoned innovation activities for process and product innovations

Innovation activities include the acquisition of machinery, equipment, software, and licenses; engineering and development work, industrial design, training, marketing and R&D when they are *specifically* undertaken to develop and/or implement a product or process innovation. Also include basic R&D as an innovation activity even when not related to a product and/or process innovation.

4.1 During 2006 to 2008, 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			INABA
Still ongoing at the end of the 2008			INONG

If your enterprise had no product or process innovations or innovation activity during 2006 to 2008 (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 process and product innovations

5.1 During the three years 2006 to 2008, did your enterprise engage in the following innovation activities:

		Yes	No	
In-house R&D	Creative work undertaken within your enterprise to increase the stock of knowledge for developing new and improved products and processes (include software development in-house that meets this requirement)			RRDIN
External R&D	If yes, did your enterprise perform R&D during 2006 to 2008: Continuously (your enterprise has permanent R&D staff in-house) Occasionallv (as needed only) Same activities as above, but performed by other enterprises (including other enterprises or subsidiaries within your group) or by public or private research organisations and purchased by your enterprise			RDENG RRDEX
Acquisition of machinery, equipment and software	Acquisition of advanced machinery, equipment and computer hardware or software to produce new or significantly improved products and processes			RMAC
Acquisition of external knowledge	Purchase or licensing of patents and non-patented inventions, know- how, and other types of knowledge from other enterprises or organisations for the development of new or significantly improved products and processes			ROEK
Training for innovative activities	Internal or external training for your personnel specifically for the development and/or introduction of new or significantly improved products and processes			RTR
Market introduction of innovations	Activities for the market introduction of your new or significantly improved goods and services, including market research and launch advertising			RMAR
Other	Other activities to implement new or significantly improved products and processes such as feasibility studies, testing, routine software development, tooling up, industrial engineering, etc.			RPRE

5.2 Please estimate the amount of expenditure for each of the following four innovation activities in 2008 only. (Include personnel and related costs)⁵

If your enterprise had no expenditures in 2008, please fill in '0'

In-house R&D (Include capital expenditures on buildings and equipment specifically for R&D)		RRDINX
Purchase of external R&D		RRDEXX
Acquisition of machinery, equipment and software (Exclude expenditures on equipment for R&D)	3	RMACX
Acquisition of external knowledge		ROEKX
Total of these four innovation expenditure categories		RTOT

 $^{^{5}}$ Give expenditure data in 000's of national currency units to eight digits.

5.3 During the three years 2006 to 2008, 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 research and other innovation activities conducted entirely for the public sector under contract.

	Yes	No	
Local or regional authorities			FUNLOC
Central government (including central government agencies or ministries)			FUNGMT
The European Union (EU)			FUNEU
If yes, did your enterprise participate in the EU 6 th or 7 th Framework Programme for Research and Technical Development?			FUNRTD

6. Sources of information and co-operation for innovation activities

6.1 During the three years 2006 to 2008, how important to your enterprise's innovation activities were each of the following information sources? Please identify information sources that provided information for new innovation projects or contributed to the completion of existing innovation projects.

Degree of importance

	Tick 'not use	Tick 'not used' if no information was obtained from a source.				
	Information source	High	Medium	Low	Not used	
Internal	Within your enterprise or enterprise group					SENTG
Market	Suppliers of equipment, materials, components, or software					SSUP
sources	Clients or customers					SCLI
	Competitors or other enterprises in your sector					SCOM
	Consultants, commercial labs, or private R&D institutes					SINS
Institutional	Universities or other higher education institutions					SUNI
sources	Government or public research institutes					SGMT
Other	Conferences, trade fairs, exhibitions					SCON
sources	Scientific journals and trade/technical publications					SJOU
	Professional and industry associations					SPRO

6.2 During the three years 2006 to 2008, did your enterprise co-operate on any of your innovation activities with other enterprises or institutions? Innovation co-operation is active participation with other enterprises or non-commercial institutions on innovation activities. Both partners do not need to commercially benefit. Exclude pure contracting out of work with no active co-operation.

Yes

No 🛛 (Please go to question 7.1) CO

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

(Tick all that apply)

Type of co-operation partner	[Your country]	Other Europe*	United States	China or India	All other countries
A. Other enterprises within your enterprise group	□ Co11	□ Co12	□ Co13	□ Co14	□ Co15
B. Suppliers of equipment, materials, components, or software	□ Co21	□ Co22	□ Co23	□ Co24	□ Co25
C. Clients or customers	□ Co31	□ Co32	□ Co33	□ Co34	□ Co35
D. Competitors or other enterprises in your sector	□ Co41	□ Co42	□ Co43	□ Co44	□ Co45
E. Consultants, commercial labs, or private R&D institutes	□ Co51	□ Co52	□ Co53	□ Co54	□ Co55
F. Universities or other higher education institutions	🗆 Co61	□ Co62	□ Co63	□ Co64	□ Co65
G. Government or public research institutes	□ Co71	□ Co72	□ Co73	□ Co74	□ Co75

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

6.4 Which type of co-operation partner did you find the most valuable for your enterprise's innovation activities? (Give corresponding letter) _____ PMOS

7. Innovation objectives during 2006-2008

7.1 How important were each of the following objectives for your activities to develop product (good or service) or process innovations between 2006 and 2008?

If your enterprise had several projects for product and process innovations, make an overall evaluation

	High	Medium	Low	Not relevant	
Increase range of goods or services					ORANGE
Replace outdated products or processes					OREPL
Enter new markets					OENMK
Increase market share					OIMKS
Improve quality of goods or services					OQUA
Improve flexibility for producing goods or services					OFLEX
Increase capacity for producing goods or services					OCAP
Improve health and safety					OHES
Reduce labour costs per unit output					OLBR

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 2006 to 2008, did your enterprise introduce:

	Yes	No	
New business practices for organising procedures (i.e. supply chain management, business re-engineering, knowledge management, lean production, quality management, etc)			ORGBUP
New methods of organising work responsibilities and decision making (i.e. first use of a new system of employee responsibilities, team work, decentralisation, integration or de-integration of departments, education/training systems, etc)			ORGWKP
New methods of organising external relations with other firms or public institutions (i.e. first use of alliances, partnerships, outsourcing or sub-contracting, etc)			ORGEXR

If no to all options, go to section 9.

Otherwise, go to question 8.2

8.2 How important were each of the following objectives for your enterprise's organisational innovations introduced between 2006 and 2008 inclusive?

If your enterprise introduced several organisational innovations, make an overall evaluation

	High	Medium	Low	Not relevant	
Reduce time to respond to customer or supplier needs					ORORED
Improve ability to develop new products or processes					OROABL
Improve quality of your goods or services					OROQUA
Reduce costs per unit output					ORORCO
Improve communication or information sharing within your enterprise or with other enterprises or institutions					OROCIN

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 2006 to 2008, did your enterprise introduce:

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

If no to all options, go to section 10.

Otherwise, go to question 9.2

9.2 How important were each of the following objectives for your enterprise's marketing innovations introduced between 2006 and 2008 inclusive?

	High	Medium	Low	Not relevant	
Increase or maintain market share					OMKTS
Introduce products to new customer groups					OMKTCG
Introduce products to new geographic markets					OMKTGM

If your enterprise introduced several marketing innovations, make an overall evaluation

10. Innovations with environmental benefits

An environmental innovation 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 innovation or the result of other innovation objectives.
- The environmental benefits of an innovation can occur during the production of a good or service, or during the after sales use of a good or service by the end user.

10.1 During the three years 2006 to 2008, did your enterprise introduce a product (good or service), process, organisational or marketing innovation with any of the following environmental benefits?

	Yes	No	
Environmental benefits from the production of goods or services within your enterprise			
Reduced material use per unit of output			ECOMAT
Reduced energy use per unit of output			ECOEN
Reduced CO ₂ 'footprint' (total CO ₂ production) by your enterprise			ECOCO
Replaced materials with less polluting or hazardous substitutes			ECOSUB
Reduced soil, water, noise, or air pollution			ECOPOL
Recycled waste, water, or materials			ECOREC
Environmental benefits from the after sales use of a good or service by the end user			
Reduced energy use			ECOENU
Reduced air, water, soil or noise pollution			ECOPOS
Improved recycling of product after use			ECOREA

10.2 During 2006 to 2008, did your enterprise introduce an environmental innovation in response to:

	Yes	No	
Existing environmental regulations or taxes on pollution			ENREG
Environmental regulations or taxes that you expected to be introduced in the future			ENREGF
Availability of government grants, subsidies or other financial incentives for environmental innovation			ENGRA
Current or expected market demand from your customers for environmental innovations			ENDEM
Voluntary codes or agreements for environmental good practice within your sector			ENAGR

10.3 Does your enterprise have procedures in place to regularly identify and reduce your enterprise's environmental impacts? (For example preparing environmental audits, setting environmental performance goals, ISO 14001 certification, etc).

ENVID

□ Yes: implemented before January 2006

□ Yes: Implemented or significantly improved after January 2006

🗖 No

11. Basic economic information on your enterprise

11.1 What was your enterprise's total turnover for 2006 and 2008?⁶ Turnover is defined as the market sales of goods and services (Include all taxes except VAT⁷).



⁶ Give turnover in '000 of national currency units to nine digits.

⁷ For Credit institutions: Interests receivable and similar income; for Insurance services: Gross premiums written

⁸ Annual average. If not available, give the number of employees at the end of each year. Give figures to six digits.

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.

- 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.

• 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.