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### Contents

Environmental effects of innovation are not the most important......2

Highly important effects of organisational innovation ....... 5



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# Community Innovation Statistics

Innovation activities and their effects

According to the findings of the Fourth Community Innovation Survey (CIS 4) innovation does not always reduce environmental impacts or the use of raw materials. Indeed, these effects are only two among a number of other effects, and not necessarily the most important. The survey found that the positive environmental effects of innovation actually ranked last, behind the effects on the quality and diversity of goods and services.

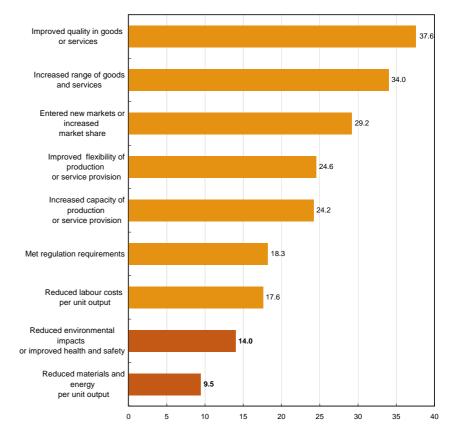
This issue of "Statistics in Focus" takes a closer look at the 'green' aspects of innovation and at the supporting measures put in place by the European Union.

The last part of the publication deals with the highly important impacts of organisational innovation on both innovative and non-innovative enterprises. It shows that organisational innovation seems to have a lesser impact.

# Improving the quality of goods and services is the priority of innovative enterprises

Figure 1 clearly shows that the quality aspects of innovation are most important at EU-27 level. More than one in three innovative enterprises identified 'improved quality of goods and services' as a highly important effect of innovation. Nearly the same proportion identified the 'increased range of goods and services' as a highly important effect of innovation, whereas only 9.5 % considered 'reduced consumption of materials and energy as the most important

Figure 1: Effects of innovation identified by enterprises as highly important for their innovation activities, as a percentage of innovative enterprises, EU-27 average



Source: Eurostat - Community Innovation Statistics, 2004

#### Environmental effects of innovation are not the most important

Table 2: Effects of innovation identified by enterprises as highly important for their innovation activities, by country, as a percentage of innovative enterprises, EU-27 and selected countries

	Increased range of goods and services	Entered new markets or increased market share	Improved quality in goods or services	Improved flexibility of production or service provision	Increased capacity of production or service provision	Reduced labour costs per unit output	Reduced materials and energy per unit output	Reduced environmental impacts or improved health and safety	Met regulation requirements
EU-27	34.0	29.2	37.6	24.6	24.2	17.6	9.5	14.0	18.3
BE	34.8	33.3	46.6	24.7	25.8	16.6	8.8	13.3	14.4
BG	42.8	32.9	45.6	22.8	23.4	18.9	17.0	20.7	26.7
CZ	40.6	25.7	40.0	26.8	25.3	16.9	13.7	15.5	8.0
DK	25.2	19.8	26.7	21.9	18.4	14.5	6.7	8.7	12.6
DE	38.0	31.7	37.7	27.5	20.0	15.1	9.5	10.3	10.4
EE	35.2	33.2	34.2	22.2	22.9	15.2	12.2	9.1	15.6
ΙE	40.7	32.8	32.7	22.1	23.5	19.3	10.2	11.1	13.8
EL	36.6	29.7	58.8	43.0	40.0	13.7	9.3	21.2	18.6
ES	28.1	19.6	35.2	25.2	32.5	12.7	7.1	16.2	23.0
FR	52.6	58.6	49.5	30.9	32.3	34.9	15.9	19.1	29.1
IT	25.4	15.2	34.1	18.7	23.2	18.1	4.4	14.7	19.5
CY	26.6	17.1	29.7	64.7	56.8	27.0	8.2	29.8	46.8
LV	10.5	17.7	7.1	15.5	13.6	18.5	19.4	14.9	14.3
LT	24.1	20.8	27.9	19.6	21.1	9.3	5.9	8.8	20.8
LU	48.2	34.5	53.2	37.6	30.3	16.2	7.6	15.3	37.6
HU	31.5	19.6	35.2	20.9	21.9	4.1	6.3	13.2	19.4
MT	21.5	19.4	21.5	17.4	15.3	6.9	4.9	11.8	18.8
NL	38.8	33.2	46.9	34.0	30.5	20.9	12.8	12.3	14.3
AT	25.4	20.8	35.3	23.1	19.0	7.0	4.9	8.2	13.5
PL	33.4	26.7	35.1	21.1	23.2	15.0	12.0	19.2	25.4
PT	9.7	15.4	9.5	8.8	6.1	18.0	25.8	12.7	12.5
RO	17.1	29.1	37.1	28.6	32.3	15.5	0.0	17.7	14.9
SI	38.1	32.2	49.6	30.8	31.0	28.4	17.2	18.6	15.5
SK	34.1	25.3	34.8	27.1	24.5	6.8	8.8	12.2	13.7
FI	25.3	21.7	24.2	15.9	17.1	13.0	5.9	7.2	9.8
SE	31.2	19.8	29.3	16.3	21.6	17.9	7.1	9.7	12.9
UK	37.1	36.5	40.9	23.7	23.2	<u>:</u>	:	15.5	25.7
IS	30.6	19.3	23.4	16.0	15.3	13.8	5.7	2.9	7.2
NO	23.1	16.2	23.6	13.6	13.4	10.0	4.3	8.1	12.4

Source: Eurostat - Community Innovation Statistics, 2004

The picture at national level is a multi-faceted one. Indeed, for innovative enterprises in 17 of the 27 EU Member States, the innovation effect of improved quality in goods and services recorded the highest share. Greece was in the lead with close to 60 % of innovative enterprises, while Latvia was at the other end of the scale with only 7 %.

As for the highly important effects of innovation in terms of the increased range of goods and services, it was the innovative enterprises in six countries – Czech Republic (41 %), Germany (38 %), Estonia (35 %), Ireland (41 %), Finland (25 %) and Sweden (31 %) that recorded the highest share relative to the other effects.

Portugal and Latvia had- the highest shares - 26 % and 19 % respectively - of innovative enterprises that identified the effect of reducing consumption of material and energy per unit of output as highly important. Romanian innovative enterprises, on the other hand, did not feel in the least concerned, recording 0 % for this indicator.

For French innovative enterprises the most important effects of innovation were the entry into new markets or increased market share. In comparison to the other countries, France was leading in terms of its share of innovative enterprises, with 53 % considering 'Increased range of goods and services' as a highly important factor, with 59 % for the item 'Entered new markets or increased market share' and with 35 % for the item 'Reduced labour costs per unit output'.

Nearly 65 % of the innovative enterprises in Cyprus chose the innovation effect of improved flexibility of production or service provision as the most important effect. At the same time, close to 30 % of enterprises in Cyprus also identified 'Reduced environmental impacts or improved health and safety' as a highly important effect; this was by far the highest percentage of all the countries. In terms of innovation effect, the category 'Met regulation requirements' was ranked highest by innovative enterprises in Cyprus, with 47 %.

Table 3: Two environmental effects of innovation identified by enterprises as highly important for their innovation activities, by country and by size-class, as a percentage of innovative enterprises, EU-27 and selected countries

			rials and energy t output	Reduced environmental impacts or improved health and safety						
	Total	Between 10 and 49 employees	Between 50 and 249 employees	250 employees or more	Total	Between 10 and 49 employees	Between 50 and 249 employees	250 employees or more		
EU-27	9.5	8.7	10.6	13.4	14.0	13.4	14.7	17.8		
BE	8.8	9.0	7.5	11.7	13.3	13.2	11.4	20.9		
BG	17.0	16.1	18.3	20.4	20.7	19.5	21.8	26.2		
CZ	13.7	12.5	13.0	23.5	15.5	13.9	16.8	21.6		
DK	6.7	4.4	11.6	14.0	8.7	8.0	10.8	8.7		
DE	9.5	9.1	9.7	11.1	10.3	9.6	11.8	10.6		
EE	12.2	12.4	10.8	17.0	9.1	8.9	9.4	12.1		
ΙE	10.2	7.3	17.4	11.1	11.1	6.8	23.9	8.0		
EL	9.3	9.0	12.0	3.5	21.2	18.4	32.7	28.3		
ES	7.1	6.6	8.3	10.4	16.2	15.8	17.0	20.1		
FR	15.9	14.4	17.2	22.8	19.1	17.1	20.6	29.7		
ΙΤ	4.4	4.0	5.5	7.1	14.7	15.1	13.2	12.4		
CY	8.2	6.9	12.2	13.6	29.8	30.2	30.4	18.2		
LV	19.4	10.5	6.6	2.4	14.9	8.6	4.6	1.8		
LT	5.9	4.1	7.3	12.4	8.8	7.0	9.9	16.8		
LU	7.6	6.4	5.7	24.6	15.3	13.5	15.1	30.8		
HU	6.3	5.6	6.2	10.3	13.2	12.2	12.8	19.8		
MT	4.9	: c	: c	25.0	11.8	10.4	: c	30.0		
NL	12.8	12.6	13.0	14.1	12.3	12.9	10.3	13.3		
AT	4.9	4.8	4.3	7.6	8.2	8.6	6.4	10.1		
PL	12.0	10.0	13.5	17.9	19.2	18.9	17.8	24.7		
PT	25.8	26.4	25.1	18.6	12.7	11.6	15.0	15.9		
RO	0.0	0.0	0.0	0.0	17.7	14.0	21.3	24.7		
SI	17.2	13.2	19.1	25.6	18.6	: c	24.8	: c		
SK	8.8	5.3	9.3	17.2	12.2	9.6	11.7	20.9		
FI	5.9	6.5	4.1	6.9	7.2	7.8	5.7	7.9		
SE	7.1	6.5	8.1	9.7	9.7	9.6	9.7	10.5		
UK	:	:	:	:	15.5	14.6	16.6	22.7		
IS	5.7	6.9	: c	: c	2.9	2.0	6.4	0.0		
NO	4.3	3.6	5.2	7.9	8.1	7.5	8.9	12.1		

Source: Eurostat - Community Innovation Statistics, 2004

The Environmental Technologies Action Plan (ETAP) is composed of a spectrum of actions, within three main axes:

#### **Getting from Research to Markets**

- 1/ Increase and Focus Research, Demonstration and Dissemination
- 2/ Technology Platforms
- 3/ Environmental Technology Verification

#### **Improving Markets Conditions**

- 4/ Performance Targets
- 5/ Mobilisation of Financing (grants and loans)
- 6/ Market Instruments
- 7/ Green Public Procurement
- 8/ Awareness Raising and Training

#### **Acting Globally**

9/ Supporting Eco-technologies in Developing Countries, and Promoting Foreign Investment

Source: http://ec.europa.eu/environment/etap/

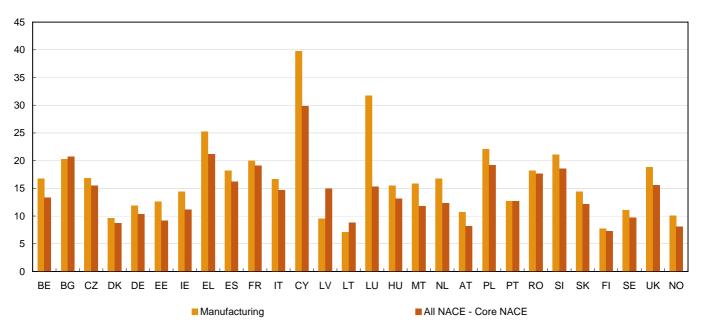
Table 3 takes a closer look at two of the nine indicators from among which the innovative enterprises chose one or more innovation effects as being highly important. Both indicators particularly concern environmental aspects.

However, the question arises as to whether there is a correlation between size category and the appreciation of innovation effects on environment? A detailed analysis reveals that the link is not straightforward. In 15 Member States the shares of innovative enterprises that identified the effect 'Reduced materials and energy per unit output' as highly important increased with the size-class. For the second indicator, 'Reduced environmental impacts or improved health and safety', there was a correlation between shares and size-class for 13 Member States. In the case of France, for example, this correlation is very clear.

The exceptions include Latvia and Ireland. In Latvia, for both indicators, the shares of innovative enterprises decreased in inverse proportion to the size class. In Ireland the share of medium-sized innovative enterprises is higher than that of small and large enterprises for both indicators.



Figure 4: The innovation effect 'Reduced environmental impacts or improved health and safety' identified by enterprises as highly important for their innovation activities, by country, manufacturing sector and all NACE – Core NACE, as a percentage of innovative enterprises in the sector, EU-27 and Norway



## Report on the Environmental Technologies Action Plan (2005-2006)

Although a great deal of progress has been made, even more remains to be done: to respond to our global environmental challenges; to make eco-innovation yield large-scale environmental and economic benefits; and to enable Europe to seize the opportunities. All activities have be stepped up and carried out on a new scale, with much more emphasis on demand. In summary, the focus is on five actions that increase demand and three support measures:

#### Increase demand:

- Step up Green Procurement
- Mobilise greater financial investments
- Establish technology verification and performance targets systems
- Build on promising practice of Member States
- Focus on sectors with high gains

#### Support measures:

- Ensure a strategic knowledge resource on ecoinnovation
- Promote awareness and active participation
- Harness research results

Source: Brussels, 2.5.2007 COM(2007) 162 final, Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions [SEC(2007) 413]

Figure 4 focuses on only one of the nine effects of innovation, namely 'Reduced environmental impacts or improved health and safety', which was selected by innovative enterprises as highly important. The breakdown

Source: Eurostat - Community Innovation Statistics, 2004

into manufacturing and all NACE demonstrates a general rule. In nearly all countries the share of innovative enterprises in the manufacturing sector that identified this effect as highly important was higher than the share for all NACE sectors together. The only exceptions to this rule are Bulgaria, Latvia and Lithuania.

In general, the share of innovative enterprises in the manufacturing sector is between one and four percentage points higher than the share of all NACE. Only for Cyprus and Luxembourg is there a much bigger difference, at 10 and 16 percentage points respectively. This may be explained by the relatively small manufacturing sector in these countries.

A careful look at Figure 4 raises the following question: why did such a relatively low percentage of innovative enterprises identify one or both of the 'green' effects of innovation as "highly important"? It seems plausible that, for the firms responding to the survey, the decision as to which innovation effects are of high importance is strongly linked to the objectives of their particular enterprise. Most enterprises innovate in order to improve the quality of their goods and services (see table 2, page 2), to extend the range of their goods and services and to enter new markets or increase market share. Innovation is a means to survive, to stay in the market and to ensure the future of the enterprise.

Greater flexibility of production and increased production capacity are not always the main objectives of inhouse innovation. To achieve these goals the enterprise needs to innovate; but can the acquisition of new machinery or software be sufficient? A similar situation often arises when the firm has to comply with regulations. Sometimes the purchasing of filters, for example, to avoid air pollution is enough to satisfy the regulatory requirements.



Reducing the consumption of materials and energy per unit of output can become the main driver for an enterprise to innovate, because if production becomes less expensive the enterprise can make more profit and/or sell the products at a lower price and, as a consequence, increase its market share. In that case, innovation would have a positive collateral effect on the environment.

It is possible to imagine different scenarios where an enterprise decides to innovate in order to achieve priority commercial or other business-related goals and where, ultimately, the resulting innovations also have a positive impact on the environment. In these cases, the enterprises may not identify these innovation effects as highly important, but rather as collateral effects.

#### Community eco-management and audit scheme and eco-innovations

The Community eco-management and audit scheme (EMAS) is the EU voluntary instrument which acknowledges organisations that improve their environmental performance on a continuous basis. EMAS-registered organisations are legally compliant, operate an environment management system and report on their environmental performance by publishing an independently verified environmental statement. They are recognised by the EMAS logo, which guarantees the reliability of the information provided.

In 2006, EMAS grew substantially, registering a 12.8 % increase in the number of sites. A total of 5 380 companies, institutions and public authorities live and work under the management of EMAS. This is equivalent to more than 1.6 million people in 3 568 organisations.

Table 5: EMAS registered organisations and sites, by country, 2006

	BE	ВG	CZ	DK	DE	EE	ΙE	EL	ES	FR	ΙΤ	CY	LV	LT	LU	HU	МТ	NL	АТ	PL	РТ	RO	SI	SK	FI	SE	UK	NO	Total
EMAS																													
registered																													
organisations	39	0	26	112	1 489	2	8	51	676	17	586	0	0	0	1	8	1	13	258	6	54	•	1	3	42	84	64	27	3 568
Sites	334	0	27	278	1 979	2	8	54	843	17	761	0	0	0	1	11	1	17	451	7	59	:	1	3	50	85	364	27	5 380

Source: http://ec.europa.eu/environment/emas

In past years, the European Union has tried to convince enterprises to make more room for environmental aspects in their management and production decisions. European legislation requires enterprises to take account of at least some of the environmental impacts of their business. As a result, enterprises are sometimes forced to innovate in this direction in order to comply with regulations. Legal instruments are one way to alleviate the negative effects on the environment. However, there are also other ways to encourage enterprises to include environmental aspects in their decision-making process. An example is the Environmental Technologies Action Plan (see box – page 4); another example is the Eco-Management and Audit Scheme (EMAS).

Progress is being made in finding production solutions that are less harmful for the environment and which use less energy and more renewable materials. However, it should be noted that this goal is difficult to reach and there are many changes that need to be made. More than ever, innovations are necessary as a way to find alternatives to polluting production processes, to goods made of non-renewable materials, etc.

The Competitiveness and Innovation Programme (CIP), and the Seventh Framework Programme (FP7) both address eco-innovation. While FP7 is already well under

way, the allocation of resources under the CIP has only just started. In March 2007, the first work programme under the Entrepreneurship and Innovation Programme - which is a key component of the CIP - was adopted. This ensures that new activities can get under way in the same year.

In particular, EUR 142 million has been allocated to the financial instruments managed by the European Investment Fund in 2007. These will contribute to venture capital funds and loan guarantee schemes, enabling the initial amount to be leveraged several times over. Some EUR 23 million of this total will be specifically targeted at investment in the field of eco-innovation.

#### **Definition of eco-innovation**

Eco-innovation is the production, application or exploitation of a good, service, production process, organisational structure, or management or business method that is novel to the firm or user and which results, throughout its life cycle, in a reduction of environmental risk, pollution and their negative impacts on resources use (including energy use) compared to relevant alternatives.

Source: Eco-innovation from an innovation dynamics perspective, René Kemp and Tim Foxon, UNU-MERIT, 13 April 2007

#### Highly important effects of organisational innovation

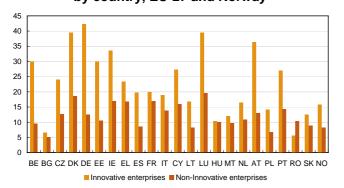
In this part of the publication the survey population is no longer restricted to innovative enterprises but all enterprises are taken into account. The current definition of an innovative enterprise (see Oslo Manual, 1997, page 31 et seg.) limits it to product and process innovations, so it is necessary to take all enterprises to analyse organisational innovation and the effects of it.

Figure 6 shows all enterprises that have introduced organisational innovations broken down in enterprises with innovation activities and non-innovative enterprises. In a large majority of countries the share of innovative enterprises that introduced organisational innovations was higher - mostly significantly higher - than the one of non-innovative enterprises. The only exception



was Romania. In Hungary both shares were nearly equal.

Figure 6: Innovative and non-innovative enterprises that introduced organisational innovations, as a percentage of all enterprises, by country, EU-27 and Norway



Source: Eurostat – Community Innovation Statistics, 2004 Missing/confidential data: LV, SI, FI, SE, UK

A first glance at Table 7 reveals that, in general, more innovative than non-innovative enterprises have identified the highly important effects of organisational innovations. If the overall impact of organisational innovations seems to be less significant than that of process or product innovations (see Table 2, page 2) - the shares

of enterprises reach 20 % or more in only very few cases - these low percentages can be explained by the fact that the data shown in Table 7 are ratios based on all enterprises and not only on enterprises of the respective group.

For innovative enterprises these shares varied in most cases between five and ten percent. Having the same denominator – which means <u>all</u> enterprises – makes it possible to sum up the percentage shares of the same effect for each country. The example of Luxembourg, which recorded rather high percentage shares, shows that nearly one in three enterprises chose 'Reduced time to respond to customer or supplier needs' as a highly important effect of organisational innovation.

In general, the first two indicators 'Reduced time to respond to customer or supplier needs' and 'Improved quality of goods or services' were chosen more frequently as highly important effects of innovation than the two others, i.e. 'Reduced costs per unit output' and 'Improved employee satisfaction and/or reduced rates of employee turnover'.

Luxembourg, Malta and Germany recorded the highest shares for most of the indicators. By contrast, the shares for Portuguese, Bulgarian and Lithuanian enterprises were among the lowest.

Table 7: Effects of organisational innovation identified as highly important by all enterprises, by country and by innovative and non-innovative enterprises, as a percentage of all enterprises, EU-27 and Norway

		Innovati	ve enterprises		Non-innovative enterprises							
	Reduced time to respond to customer or supplier needs	Improved quality of goods or services	Reduced costs per unit output	Improved employee satisfaction and/or reduced rates of employee turnover	Reduced time to respond to customer or supplier needs	Improved quality of goods or services	Reduced costs per unit output	Improved employee satisfaction and/or reduced rates of employee turnover				
BE	15.5	16.8	6.9	5.5	3.8	4.4	2.5	1.6				
BG	2.2	3.8	1.6	1.6	1.2	2.8	0.7	0.7				
CZ	8.5	11.1	4.2	3.5	2.9	3.2	1.8	1.8				
DK	12.0	11.2	10.1	7.2	3.7	4.7	3.6	3.9				
DE	18.3	18.8	10.0	8.1	3.8	2.8	2.7	1.8				
EE	15.0	12.1	7.6	6.7	3.8	3.5	2.8	1.4				
EL	10.4	13.3	4.1	4.7	5.0	5.8	1.5	1.7				
ES	7.1	8.8	2.8	3.8	2.8	3.1	1.1	1.5				
FR	8.0	10.6	5.6	3.6	5.3	7.2	3.7	3.2				
ΙΤ	6.4	6.6	1.7	2.1	4.3	3.9	1.8	1.7				
CY	12.2	15.6	6.6	7.0	5.8	8.4	3.5	5.2				
LT	2.2	5.4	2.1	1.8	1.1	2.0	0.9	0.4				
LU	20.6	23.3	7.0	9.3	10.2	10.7	4.2	6.2				
HU	4.3	4.5	1.0	0.9	2.6	2.3	0.8	0.7				
MT	14.0	17.0	11.5	12.8	10.8	14.2	8.3	10.9				
NL	7.6	7.7	4.2	3.4	4.0	3.7	2.5	2.5				
PL	:	:	:	:	:	:	:	:				
PT	1.4	0.8	5.6	3.7	0.8	0.9	2.5	2.1				
RO	5.9	7.7	2.8	2.8	4.4	4.6	1.8	1.9				
SI	: c	: c	: c	: c	: c	: c	: c	: c				
SK	3.9	5.3	2.5	1.5	2.5	2.4	1.9	1.7				
NO	3.0	4.9	3.1	3.3	1.0	1.8	1.5	1.8				

Source: Eurostat - Community Innovation Statistics, 2004, Missing data: IE, LV, AT, FI, SE, UK



#### > ESSENTIAL INFORMATION - METHODOLOGICAL NOTES

The Community Innovation Survey (CIS) is a survey of innovation activity in enterprises covering EU Member States, candidate countries, Iceland and Norway.

The data are collected on a two-yearly basis (from 2004 onwards). The latest survey (CIS 4) was carried out in 25 Member States, candidate countries, Iceland and Norway in 2005 based on the reference year 2004.

In order to ensure comparability across countries, Eurostat, in close cooperation with the EU Member States and other countries, developed standard core questionnaires for CIS 4, with an accompanying set of definitions and methodological recommendations.

CIS 4 is based on the *Oslo Manual* (2nd edition, 1997), which gives methodological guidelines and defines the concept of innovation, and on Commission Regulation No 1450/2004.

This Statistics in Focus compares data compiled on the basis of the CIS 4 survey.

#### STATISTICAL UNITS

The main statistical unit for CIS 4 was the enterprise, as defined in Council Regulation No 696/1993 on statistical units or as defined in the national statistical business register. EU Regulation No 2186/1993 requires Member States to set up and maintain a register of enterprises, as well as associated legal units and local units.

#### **TARGET POPULATION**

The population of CIS 4 is determined by the size of the enterprise and its principal activity. At least all enterprises with 10 or more employees in any of the specified sectors were included in the statistical population.

The target population of CIS 4 was the total population of enterprises with mostly the following market activities: mining and quarrying (NACE 10-14), manufacturing (NACE 15-37), electricity, gas and water supply (NACE 40-41), wholesale trade (NACE 51), transport, storage and communication (NACE 60-64), financial intermediation (NACE 65-67), computer and related activities (NACE 72), architectural and engineering activities (NACE 74.2) and technical testing and analysis (NACE 74.3)

#### **TYPE OF SURVEY**

Most Member States and other countries carried out CIS 4 by means of a stratified sample survey, while a number of countries used a census or a combination of both.

The CIS 4 data are organised in the Eurostat reference database following broadly the same structure as the harmonised survey questionnaire.

The enterprise size classes referred to in this publication are:

small: 10-49 employees;

medium-sized: 50-249 employees:

• large: 250+ employees.

The economic activities covered by this publication are based on the NACE Rev. 1.1 classification. The two sectors used are:

- All NACE Core NACE (NACE sections C, D, E, I and J and NACE divisions 51, 72, 74.2 and 74.3); and
- Manufacturing (NACE D).

#### **REFERENCE PERIOD**

For CIS 4 the observation period covered was 2002-2004 inclusive- i.e. the three-year period from the beginning of 2002 to the end of 2004. The reference period for CIS 4 was the year 2004.

All countries covered collected data for this observation period; only the Czech Republic took 2003-2005 as the observation period.

#### **DEFINITIONS** (Oslo Manual, 1997)

**Innovation:** a new or significantly improved product (good or service) introduced to the market or a new or significantly improved process introduced within an enterprise. Innovations are based on the results of new technological developments, new combinations of existing technology or the utilisation of other knowledge acquired by the enterprise.

Enterprises engaged in innovation activity (propensity to innovate): enterprises that introduce new or significantly improved products (goods or services) to the market or enterprises that implement new or significantly improved processes. Innovations are based on the results of new technological developments, new combinations of existing technology or the utilisation of other knowledge acquired by the enterprise. The term covers all types of innovator, i.e. product innovators, process innovators and enterprises with only ongoing and/or abandoned innovation activities.

An **organisational innovation** is the implementation of new or significant changes in firm structure or management methods that are intended to improve your firm's use of knowledge, the quality of your goods and services, or the efficiency of work flows.

#### SYMBOLS AND ABBREVIATIONS

c Confidential data

Not available

Data presented in this publication reflect the data available in Eurostat's reference database on 10 May 2007.



## Further information:

Data: EUROSTAT Website/Home page/Science and technology/Data

**≜** Science and technology

E Research and development

☐ Community innovation survey

Results of the second community innovation survey (CIS2)

Results of the third community innovation survey (CIS3)

Results of the fourth community innovation survey (CIS4)

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