

Continuing training in enterprises in Europe
- Results of the second European Continuing Vocational Training Survey in enterprises

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Preface

The Lisbon European Council in March 2000 set a strategic goal for Europe to become the most competitive and dynamic knowledge-based economy in the world. The Lisbon conclusions stressed the central role of education and training as the main instruments to increase human capital and make real the strategic objective within ten years, in terms of its impact on growth, productivity and employment. Since Lisbon, the European Union has been concentrating its efforts in improving investment in Human resources. The Commission Communication « Making a European Area of Lifelong Learning a Reality” (COM (2001) 678 final) stresses the importance of investment in education and training throughout working life, as an efficient means to make the European and candidate countries more prosperous, inclusive, tolerant and democratic.

In this European area of lifelong learning, continuing training provided by enterprises is one of the main means to ensure the continuous adaptation of skills to the requirements of the economy. The Continuing Vocational Training Surveys (CVTS1 and CVTS2), carried out respectively in 1994 and 2000/2001, provided for the first time comparable data at European level on continuing training in enterprises and are one of the major tools of the EU for the setting up of indicators in this area.

Up-to-date and comparable data on continuing training in enterprises is a central dimension for all the different stakeholders involved - individuals, employers, governments and social partners. To implement a coherent strategy at European level, it is essential that comparable information and statistical measures are available to monitor progress on investment in human capital in companies.

For the future, the Commission intends to develop the instrument further. This will be achieved by improving the conceptual and methodological framework of future surveys of continuing vocational training in enterprises. The main objective being to complete information on training by basic data on initial training, to further develop indicators providing insights into more qualitative aspects of CVT in enterprises, and to improve the concepts of collecting data on the other forms of training beyond courses and on training costs.

The present report is the outcome of close cooperation between the Bundesinstitut für Berufsbildung (BIBB), co-ordinating the Leonardo da Vinci project on the evaluation of CVTS2, and Eurostat, the Statistical Office of the European Union.

With this publication, the European Commission wishes to provide policy makers and all those involved in the education and training world with a valuable contribution in relation to lifelong learning.

Nikolaus G. van der Pas

Director General

Summary of the most important results of the second European Continuing Vocational Training Survey for the fifteen EU Member States involved

The results of CVTS 2 supply important information regarding the level of investment by European enterprises in human capital and the differences that still exist in the structure of this investment. The essential findings relating to 1999 were as follows:

- 62% of enterprises offer continuing vocational training measures. Internal or external training courses in the form of courses and seminars are to be found in 54% of European enterprises. The number of enterprises offering more innovative forms of continuing training is noticeably lower. 29% of enterprises in the fifteen EU Member States that offer 'other' forms of continuing training mentioned that they offered, for example, 'self-directed learning'; the proportion of these enterprises that referred to this form of continuing training was highest in Denmark, at 75%, while in Italy only 6% of enterprises named this form of learning.
- The proportion of employees who participated in internal or external training courses in the enterprises surveyed is 47% in the European Union. The Scandinavian countries are the leaders in this continuing training indicator (the figures were 63% for Sweden, 55% for Denmark and 54% for Finland). The opportunities for employees to participate in a training course are particularly low in Greece (34%), Austria (35%) and Germany (36%).
- The European average for hours in courses per participant is 31 hours. Spain (42 hours) and Denmark (41 hours) recorded the highest number of hours, while the number of hours in courses was especially low in the United Kingdom (26 hours), Germany (27 hours) and Austria (29 hours). A comparison between individual branches of the economy also reveals considerable differences. Thus, the average number of hours per participant in the branch of 'Real estate activities, renting of movable property, provision of services predominantly for enterprises' (K) is 41 hours, while the figure for the field of 'Trade in and maintenance/repair of motor vehicles and consumer goods' (G) is only 21 hours and that for the branch of 'Provision of other public and personal services' (O) is 22 hours.
- The average total costs (sum of the direct costs and the personnel absence costs for the participants) per course hour for the fifteen EU Member States were 50 PPS in 1999. They are composed of 31 PPS for direct costs and 19 PPS for personnel absence costs. The countries with the highest total costs were Italy with 68 PPS and Germany with 59 PPS. Spain, Portugal and Ireland had total costs of only 36 PPS.
- In most EU Member States, transfers of workers for the purpose of continuing vocational training are viewed as being of secondary importance by enterprises. In relation to the direct costs per participant, payments to funds or other industry-wide or public institutions were under 10% in nine countries while receipts from national or other (e.g. public) organisations were less than 10% of direct costs in eight countries. Transfer payments from and to enterprises for the purpose of continuing vocational training are of quantitative relevance in

three countries (France: 39% payments and 17% receipts, Spain: 36% payments and 21% receipts and Greece: 27% payments and 25% receipts).

- The proportion of enterprises which have an operational plan for their continuing training measures offers an insight into the qualitative arrangements for continuing training. With a European average of 30%, such enterprises make up just under a third of enterprises in the European Union. Enterprises with a written plan for vocational training within the enterprise are most numerous in the United Kingdom (64%) and Ireland (42%) and least numerous in Greece (11%) and Portugal (9%). Continuing training plans are considered most important in the 'Credit and insurance industry' (J), where the relevant figure is 65% of enterprises, while by way of comparison continuing training plans are considered much less important in the 'Processing industry' (D), where the figure is 28%.

1. The second European Continuing Vocational Training Survey

1.1. Introduction

Indicators relating to investment in human capital are increasing in importance at both European and national level. They reflect the economic and social framework conditions of society as a whole and are therefore playing an ever greater role in political decision making.

The development of competences and skills through continuing vocational training in enterprises is part of lifelong learning. Enterprises play an important role in solving labour market and employment problems.

At the end of the 1980s there was a growing need for data for a European labour market and vocational training policy. Thus, the Maastricht Treaty¹ agreed *inter alia* on the further development of the exchange of information, experience and data relating to issues that are common to the education and training systems².

The Continuing Vocational Training Survey (CVTS) was originally developed within the framework of the first action programme for the development of continuing vocational training in the EC (FORCE) pursuant to Council Decision 90/267/EEC of 29.5.1990. One of the numerous transnational measures that were contemplated within the scope of this programme was the exchange of comparable data on continuing training in enterprises.

Then, in 1994, the largest empirical survey to date (relating to 1993) on continuing vocational training in the history of the European Union was initiated and carried out in the industrial and commercial enterprises of the Member States of the European Union, which at that time were twelve in number (CVTS 1).

The contents of this survey were specified by the Council Decision. The data recorded were to provide information about the following aspects:

- the number of people participating in a training course,
- the number of participants subdivided according to type and scope of activity,
- the costs of the continuing training,
- continuing training outside enterprises according to the type of continuing training institution,
- continuing training within enterprises according to specialist areas,
- the time spent on continuing vocational training and
- participation according to sex.

At the end of the 1990s, the Statistical Programme Committee consented to the carrying out of a second survey on continuing training in enterprises (CVTS 2) in the year 2000. Pursuant to Council Decision 99/362/EC of 26.4.1999, the Leonardo da Vinci Programme financed a contract to support the Commission and the participating countries in preparing the survey. The project was carried out by a team, coordinated by the University of Sheffield, and a project steering group. A working party composed of representatives from the countries participating (the 15 EU

¹ Cf. Article 127 in *Vertrag über die Europäische Union mit sämtlichen Protokollen und Erklärungen. Vertrag zur Gründung der Europäischen Gemeinschaft (EG-Vertrag) in den Fassungen von Maastricht und Amsterdam*, Munich 1998.

² *ibid.* p. 125

Member States, Norway and some of the applicant countries participated in the preparatory work) met for the first time in 1998 and four times in 1999. CEDEFOP took part in the preparatory work.

The second European continuing training survey (CVTS 2), coordinated by the Statistical Office of the European Union (EUROSTAT), was then methodically prepared and implemented in 2000, relating to continuing training activities in 1999. This second continuing training survey was carried out in all the EU Member States, in Norway and in nine applicant countries, and was two-thirds financed by the European Commission.

The description of the following results of this survey contains key information on continuing training in enterprises in 25 countries³ (Belgium, Denmark, Germany, Finland, France, Greece, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal, Sweden, Spain, the United Kingdom and Norway, and in the following applicant countries: Bulgaria, Estonia, Latvia, Lithuania, Poland⁴, Romania, Slovenia, the Czech Republic and Hungary). The applicant countries have thus participated for the first time in the European survey on continuing training in enterprises. It is of particular interest for these countries because fundamental changes in the production and service structures, as well as in the technological development of the various branches of the economy, have taken place there in the past ten years. In all, significantly more than 76 000 enterprises participated in the survey and provided comparable statistical data on supply and demand regarding vocational capabilities and skills, on continuing training essentials on the one hand and on the forms, contents and scope of the continuing training on the other hand, on their own continuing training resources and on the utilisation of external continuing training providers and on continuing training costs.

1.2 Methods and definitions

In accordance with the definition for the purposes of the CVTS, continuing training in enterprises comprises all continuing training measures in enterprises for employees, with the exception of measures for training apprentices and trainees with a special training contract.

The continuing training activities must be planned in advance and financed by the enterprises (whether directly, e.g. costs for external lecturers or tutors, or indirectly, e.g. costs for continuing training in enterprises that takes place during paid working hours).

The survey recorded the following continuing training measures in enterprises:

- a) Training programmes in the form of courses and seminars: This is a form of continuing training that exclusively serves the purpose of continuing vocational training and that takes place in a location spatially separate from the workplace, for example in a classroom or training centre, in which a group of people receives instruction from trainers/tutors/lecturers for a period of time specified in advance by the course organisers. There are external courses and internal courses:

³ Abbreviations: **A** – Austria, **B** - Belgium, **DK** - Denmark, **D** - Germany, **E** - Spain, **EL** – Greece, **F** – France, **FIN** – Finland, **I** – Italy, **IRL** - Ireland, **L** - Luxembourg, **NL** - Netherlands; **P** - Portugal, **S** – Sweden, **UK** – United Kingdom, **NO** – Norway, **BG** – Bulgaria, **CZ** - Czech Republic, **EE** - Estonia; **HU** - Hungary; **LV** – Latvia, **LT** – Lithuania, **PL** – Poland, **RO** – Romania, **SI** - Slovenia

⁴ The results for Poland relate to the Pomorskie region only.

- External training courses are designed and carried out by organisations external to the enterprise.
 - Internal training courses are designed and carried out by the enterprises themselves.
- b) Continuing vocational training in the workplace:
- Employees participate in systematic training over a period of time specified in advance in order to acquire new knowledge and to collect practical experience with normal working materials in the workplace or working environment.
- c) 'Other' forms of continuing training in enterprises
- Participation in conferences, workshops, seminars etc. (information courses). The primary purpose of participation is continuing training.
 - Job rotation and exchange programmes with other enterprises
 - Learning circles/quality circles
 - Self-directed learning through open and distance learning, video/audio material, correspondence courses, computer-based learning or the use of learning resources centres.

The unit of the survey was the enterprise. The term 'enterprise' was defined in accordance with the rules laid down in the Community's Regulation on enterprise statistics.⁵

It was decided to record the enterprise and not the local unit as the unit of the survey. A decision to use the local unit would have carried the risk of losing information on continuing vocational training measures that are offered centrally, since these are only known at enterprise level.

The enterprises surveyed were classified into six main categories in accordance with their principal economic activity in compliance with the NACE Rev. 1 nomenclature:

NACE D	Processing industry
NACE G	Trade; maintenance and repair of motor vehicles and consumer goods
NACE J	Credit and insurance industry
NACE K	Real estate activities, renting of movable property, provision of services predominantly for enterprises
NACE O	Provision of other public and personal services
Other	Mining and extraction of stone and earth, supply of energy and water, construction trade, hotel and restaurant trade, transport and communication (NACE C, E, F, H, I)

The following NACE Rev. 1 activities were excluded from the CVTS:

- Categories A and B: Agriculture and forestry, fishing
- Categories L, M and N: Public administration, health and education
- Category P: Private households with employed persons
- Category Q: Extra-territorial organisations and bodies

In order to satisfy the Community's information-gathering requirements, it is possible to carry out analyses of the enterprises in accordance with a total of 20 NACE categories.

⁵ Definition pursuant to Council Regulation (EEC) No 696/93 of 15.3.1993 on the statistical units for the observation and analysis of the production system in the Community: "The enterprise is the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources. An enterprise carries out one or more activities at one or more locations. An enterprise may be a sole legal unit."

The survey records figures for all enterprises with more than 10 employees. The enterprises were chosen in such a way that the survey enabled analyses to be undertaken in the following classes of enterprise size:

- 10 to 19 employees
- 20 to 49 employees
- 50 to 249 employees
- 250 to 499 employees
- 500 to 999 employees
- 1000 or more employees.

The size of the enterprise was determined by the number of employees working in the enterprise in the respective participating country.

The 1999 calendar year was fixed as the reference period. If data were to be given as at a specific reporting date, the date in question was 31.12.1999. In the course of high seasonal fluctuations, it was also possible to state annual average figures.

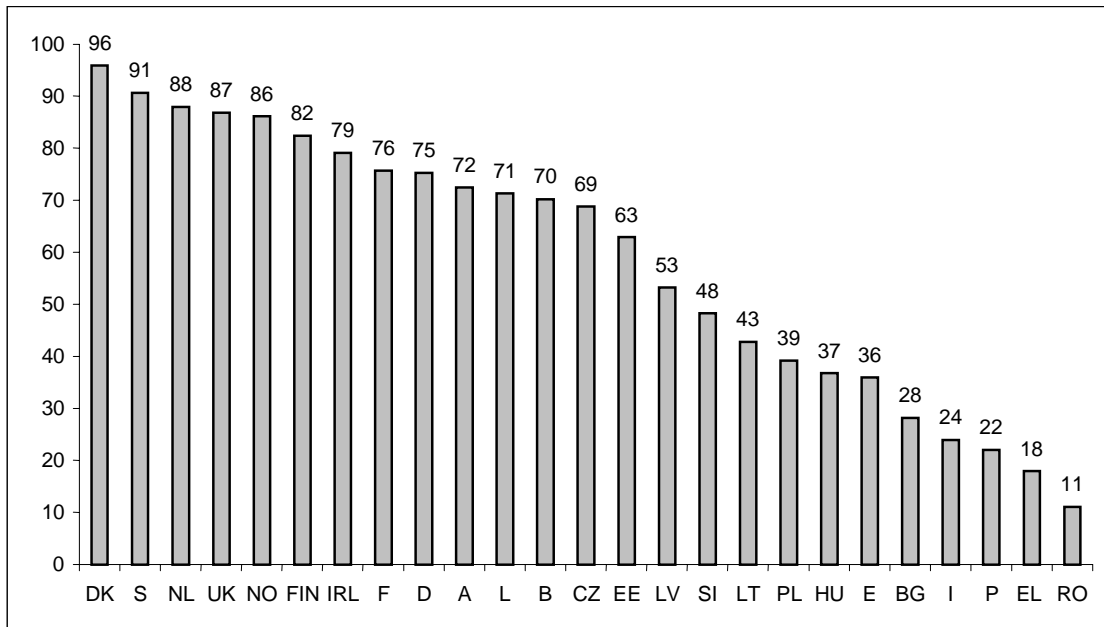
2. CONTINUING TRAINING OFFERED BY THE ENTERPRISES

2.1. Continuing training offered by the enterprises (all forms)

In 1999, the proportion of enterprises offering continuing training out of all enterprises with 10 or more employees in the EU Member States, Norway and the applicant countries ranged from 11% in Romania to 96% in Denmark (Figure 2.1). In the Scandinavian countries, the Netherlands and the United Kingdom, more than 80% of enterprises provide continuing training (Denmark 96%, Sweden 91%, the Netherlands 88%, the United Kingdom 87%, Norway 86% and Finland 82%). In contrast, in Bulgaria only 28%, in Italy 24%, in Portugal 22%, in Greece 18% and in Romania 11% of all enterprises implement continuing vocational training measures.

If a comparison is made of the number of enterprises providing continuing training in 1999 in the countries which already participated in the first Continuing Vocational Training Survey (the twelve EU Member States), then in comparison with 1993 the number of enterprises providing continuing training rose in eleven countries. The rise was very marked in the Netherlands (32 percentage points) and in Belgium (24 percentage points), while in Ireland and Greece it was only very slight (2 percentage points in each case). In Germany the proportion of enterprises offering continuing training fell by 10 percentage points (however, the number of enterprises offering training courses rose by 7 percentage points in the same period).

Figure 2.1: Enterprises offering continuing training as a proportion of all enterprises (% - 1999)



In all countries that participated in the survey, the proportion of enterprises offering continuing training rises as the size of the enterprise increases and increases from small enterprises via medium-sized enterprises to large enterprises (Table 2.1).

In 16 countries, including four applicant countries, the proportion of enterprises offering continuing training is above 90% in large enterprises (those with 250 or more employees); it is only below two thirds in three countries (Poland with 63%, Bulgaria with 62% and Romania with 38%).

In fourteen countries, including only two applicant countries, more than half of small enterprises (those with 10 to 49 employees) also carry out continuing vocational training measures.

Table 2.1: Enterprises offering continuing training, as a proportion of all enterprises, according to class of enterprise size (% – 1999)

	10-49 employees	50-249 employees	250 or more employees
B	66	93	100
DK	95	98	100
D	71	87	98
EL	11	43	78
E	31	58	86
F	70	93	98
IRL	75	98	100
I	20	48	81
L	67	83	99
NL	85	96	98
A	68	91	96
P	17	46	78
FIN	78	97	99
S	88	99	99
UK	85	91	98
NO	84	97	100
BG	24	34	62
CZ	62	84	96
EE	58	85	96
HU	32	51	79
LT	37	60	80
LV	49	70	91
PL	36	52	63
RO	8	13	38
SI	35	72	96

With the exception of Slovenia, in all countries the highest proportion of enterprises offering continuing training was recorded in the branch of the ‘Credit and insurance industry’ (J) (Table 2.2). In Slovenia, the sector of ‘Provision of other public and personal services’ (O), with a figure of 69%, was 3 percentage points ahead of the sector of the ‘Credit and insurance industry’ (J).

Figures equalling those in the ‘Credit and insurance industry’ (J) were also found in Denmark in the branches of ‘Trade in and maintenance/repair of motor vehicles and consumer goods’ (G) and ‘Provision of other public and personal services’ (O), in Sweden likewise in ‘Provision of other public and personal services’ (O) and in Ireland in the branches of the ‘Processing industry’ (D) and ‘Real estate activities, renting of movable property, provision of services predominantly for enterprises’ (K).

If the sector of ‘Other’ branches of the economy is ignored, the sector of ‘Trade in and maintenance/repair of motor vehicles and consumer goods’ (G) is at the bottom of the range with regard to the proportion of enterprises offering continuing training in nine countries, and the sector of the ‘Processing industry’ (D) comes last in eight countries. In Luxembourg, these two sectors had equally low proportions. In Sweden, the proportion was lowest both in the

'Processing industry' (D) and in the branch of 'Real estate activities, renting of movable property, provision of services predominantly for enterprises' (K). In the latter sector, this was the only country in which it recorded the lowest proportion of enterprises offering continuing training. The proportion of enterprises offering continuing training is lowest in the branch of 'Provision of other public and personal services' (O) in only six countries (Greece 12%, Italy 14%, Bulgaria 24%, Spain 33%, Estonia 49% and Ireland 58%).

The differences between the individual branches of the economy (including 'Other' branches of the economy) in the proportion of enterprises offering continuing training were particularly large (40 percentage points or more) or particularly small (less than 20 percentage points) in six countries in each case. The differences were particularly high in Italy, Greece, Hungary, Portugal, Spain and Estonia, with Italy having the greatest difference with 14% in the branch of 'Provision of other public and personal services' (O) and 71% in the 'Credit and insurance industry' (J). The smallest differences are to be found in Denmark, the Netherlands, the United Kingdom and Sweden; in Denmark in particular the proportion of enterprises offering continuing training did not fall below 90% in any sector.

Table 2.2: Enterprises offering continuing training, as a proportion of all enterprises, according to branches of the economy (% – 1999)

	NACE D	NACE G	NACE J	NACE K	NACE O	Other
B	68	72	100	86	75	63
DK	95	100	100	98	100	91
D	73	83	100	87	89	65
EL	17	18	66	39	12	15
E	38	41	74	41	33	29
F	77	76	88	81	80	69
IRL	90	77	90	90	58	72
I	23	25	71	27	14	23
L	75	75	89	80	80	59
NL	90	87	97	90	88	86
A	73	74	97	87	79	65
P	19	24	67	43	29	18
FIN	77	85	100	86	93	79
S	90	94	100	90	100	84
UK	86	83	94	92	89	86
NO	85	87	98	96	92	80
BG	29	25	47	36	24	29
CZ	70	63	89	77	70	67
EE	60	60	89	70	49	66
HU	34	39	79	48	35	31
LT	41	39	69	54	42	45
LV	53	51	84	60	60	51
PL	35	33	61	55	46	43
RO	12	9	27	21	12	11
SI	53	30	66	60	69	46

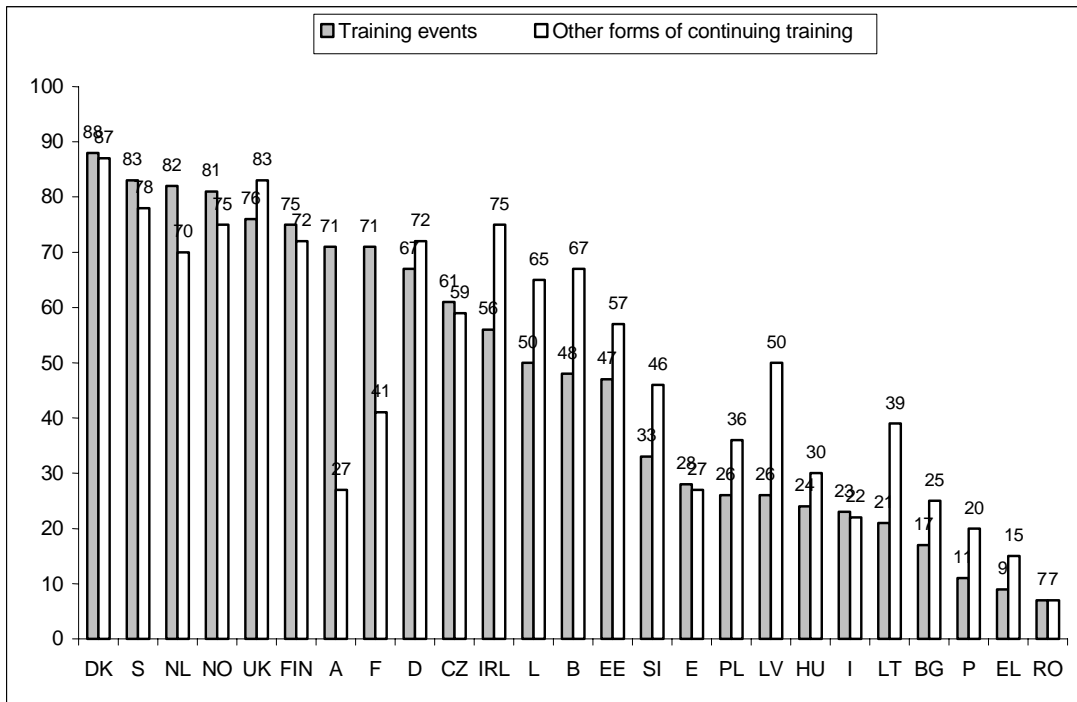
2.2. Continuing training offered according to form

Continuing training in enterprises can be in the form of training courses and ‘other’ forms, in particular forms of continuing training that are related to the workplace. In ten countries (Denmark, Sweden, the Netherlands, Norway, Finland, Austria, France, the Czech Republic, Spain and Italy) the proportion of enterprises that carried out training courses in 1999 was greater than the proportion of enterprises with ‘other’ forms of continuing training. In Romania the proportions of enterprises with training courses and with ‘other’ forms of training were equally high, but amounted to only 7%. In Austria, the difference between the proportion of enterprises with training courses (71%) and the proportion with ‘other’ forms of continuing training (27%) was particularly noticeable. The same applies to France, where 71% of enterprises offer training courses, but only 41% of enterprises offer ‘other’ forms of continuing training (Figure 2.2).

In the other countries, the proportion of enterprises that carried out ‘other’ forms of continuing training was higher than that for training courses. Particularly in Lithuania, Latvia, Belgium,

Ireland and Luxembourg, the ‘other’ forms of continuing training in enterprises clearly predominated over continuing training in the form of training courses.

Figure 2.2: Enterprises offering continuing training, as a proportion of all enterprises, according to forms of continuing training (% – 1999)

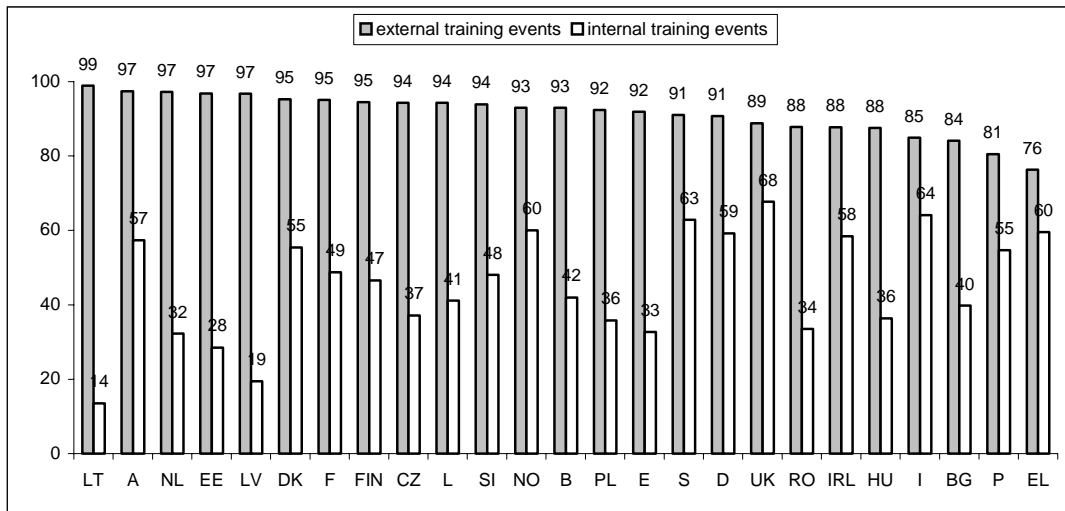


2.3. Training offered on internal and external training courses

In all European countries, in 1999 the enterprises providing continuing training organised considerably more external training courses than internal training courses (Figure 2.3). Thus, in Lithuania, with a figure of 99%, almost all enterprises carried out external training courses, but only 14% carried out internal training courses. A strikingly large difference between the proportion of enterprises with external training courses and those with internal training courses is also to be found in Latvia, Estonia and the Netherlands.

In ten countries (Denmark, Germany, Greece, Ireland, Italy, Austria, Portugal, Sweden, the United Kingdom, Norway), more than 50% of enterprises carried out internal training courses; the highest proportion recorded was in the United Kingdom with 68%. The applicant country with the highest proportion of internal training courses was Slovenia (48%), but there twice as many enterprises (94%) carried out external training courses.

Figure 2.3: Enterprises with external and internal training courses, as a proportion of all enterprises with training courses (% – 1999)



2.4. 'Other' forms of continuing training in enterprises that are offered

Among the 'other' forms of continuing training in enterprises, in fifteen countries the dominant form was participation in information courses whose purpose was not continuing training but which are used by the enterprises as a matter of priority for the individual continuing training of individual employees. The highest proportions of all enterprises offering 'other' measures that use information courses for continuing training purposes were found in Slovenia (93%), Austria (86%), Estonia (86%), Germany (85%) and the Czech Republic (84%) (Table 2.3).

In the Netherlands, the highest value (72%) was recorded both for information courses and for measures related to the workplace. Continuing training in the workplace was also of the highest importance in nine other countries in the enterprises that offer 'other' forms of training (Ireland 95%, Belgium 83%, United Kingdom 76%, Luxembourg 70%, Portugal 69%, Bulgaria 65%, France 62%, Romania 59% and Spain 55%).

Self-directed learning was by some distance the most important form in Denmark (75%). This form of continuing training was least common in enterprises with 'other' forms of continuing training in Italy, with a figure of 6%, and in Portugal, with 11%.

In seven countries (Italy, Ireland, Luxembourg, Sweden, Belgium, France, the United Kingdom), the continuing training form of 'Job rotation and/or exchange programmes' was used in more than 40% of enterprises with 'other' forms of continuing training; the highest proportion registered was in Italy with 58%. In Latvia, Lithuania, Germany and the Czech Republic, this form of continuing training was used infrequently, with figures of below 10% in each case.

The differences between the countries regarding the continuing training form of 'Learning and quality circles' were smaller; the proportion of enterprises ranged from 4% in Poland to 33% in Spain.

Table 2.3: Proportion of enterprises that offer ‘other’ forms of continuing training according to the form of continuing training (% – 1999)

Information courses		Continuing training in the workplace		Job rotation / exchange programmes		Learning and quality circles		Self-directed learning	
SI	93	IRL	95	I	58	E	33	DK	75
A	86	B	83	IRL	48	SI	31	FIN	55
EE	86	UK	76	L	45	DK	30	NL	45
D	85	D	75	S	45	EL	29	NO	41
CZ	84	NL	72	B	43	UK	29	S	37
LT	83	A	72	F	41	B	28	UK	37
FIN	82	L	70	UK	41	F	27	L	36
DK	78	P	69	E	34	BG	27	BG	32
LV	77	I	67	PL	34	RO	27	CZ	30
IRL	73	NO	65	DK	32	P	23	E	29
I	72	BG	65	FIN	29	FIN	23	A	29
NL	72	S	64	NO	28	IRL	22	LV	28
HU	72	F	62	RO	28	NL	22	EE	26
PL	72	LV	61	A	24	I	21	RO	26
EL	71	RO	59	P	21	A	21	IRL	25
S	71	PL	56	EE	20	NO	20	F	23
NO	71	DK	55	NL	19	S	18	SI	23
L	68	E	55	BG	19	EE	17	B	22
P	63	FIN	55	SI	19	D	16	HU	20
UK	62	HU	54	HU	15	L	16	PL	20
BG	62	SI	53	EL	13	LV	14	D	19
E	52	CZ	49	CZ	8	HU	12	LT	18
B	47	EL	45	LV	8	CZ	10	EL	15
F	46	EE	44	D	6	LT	10	P	11
RO	45	LT	38	LT	5	PL	4	I	6

3. PARTICIPANTS IN TRAINING COURSES⁶

When assessing continuing vocational training systems with regard to their selectivity, the analysis of difficulties that exist in accessing continuing vocational training is an important area to be investigated. Inequalities or differences in accessing continuing training in enterprises are to be attributed both to the qualities of the enterprise as an employer and to the qualities of the individual employee. Since the available data come from surveys in enterprises, the information does not represent the entire range of possible causes of the variation that is to be observed in participation in continuing vocational training measures. Among the individual characteristics, gender is considered to be an important single factor in the analysis. The rates of participation in continuing vocational training are analysed in each country using the three criteria of gender, size of the enterprise and sector of the economy.

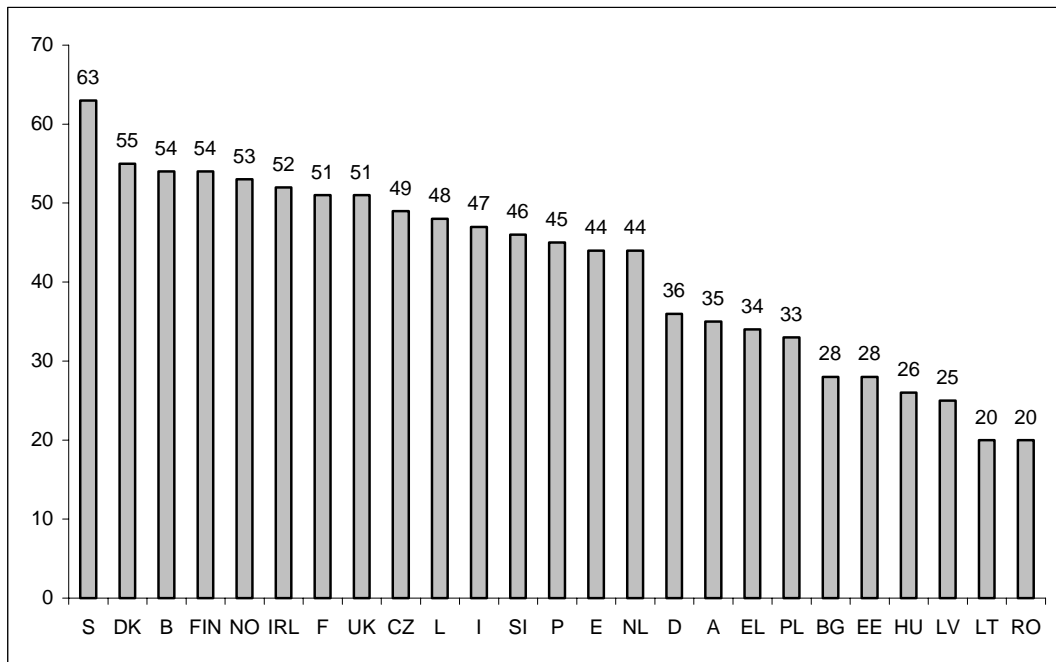
3.1. Rate of participation in training courses

The proportion of enterprises that ran training courses in 1999 ranged from 7% in Romania to 88% in Denmark. In terms of the rate of participation (participants as a percentage of employees in the enterprises offering training courses), the differences between the countries turned out to be smaller (Figure 3.1). In 15 countries, in enterprises with training courses more than 40% of employees participated in them. The participation rate varied between 20% in Lithuania and Romania and 63% in Sweden.

In 15 countries, the proportion of enterprises with training courses was higher than the participation rate. In Belgium, Slovenia, Spain, Poland, Hungary, Italy, Bulgaria, Portugal, Greece and Romania, in contrast, the participation rate was higher than the proportion of enterprises with training courses. In Spain, Italy and Portugal, the proportion of enterprises with training courses was particularly low; on the other hand, at any rate almost half of employees of enterprises with training courses in these countries participated in these courses. In Greece and Romania, too, the participation rates, at 34% and 20% respectively, were markedly higher than the proportions of enterprises with training courses (9% and 7% respectively).

⁶ Participants in training courses: A participant is a person who in 1999 took part in one or more training courses. Each person was counted only once, irrespective of the number of training courses in which he or she participated.

Figure 3.1: Participation rate in enterprises offering training courses (% - 1999)



On the basis of the results (Figure 3.1), it is possible to divide the 25 CVTS countries into four groups on the basis of the respective rates of participation in continuing vocational training.

- The first group, with a participation rate of more than 50%, comprises essentially the Nordic countries as well as a few Western European countries. In rank order, they are Sweden, Denmark, Belgium, Finland, Norway, Ireland, France and the United Kingdom.
- The second group, with a participation rate of between 40% and 50%, includes, in rank order, the Czech Republic, Luxembourg, Italy, Slovenia, Portugal, Spain and the Netherlands.
- The third group, with a participation rate of between 30% and 40%, contains Germany, Austria, Greece and Poland.
- The fourth group, with a participation rate of less than 30%, includes the rest of the countries, which are, in rank order, Bulgaria, Estonia, Hungary, Latvia, Lithuania and Romania. The participation rates in the last two countries are only 20%.

In order to come to an overall judgement, it is necessary to take into account the interplay between the proportion of enterprises with training courses and the participation rate. In countries in which only a comparatively small proportion of enterprises run training courses, even relatively high participation rates do not stop the overall proportion of all employees participating in training courses from being comparatively small. As already emphasised, while it is true that in Portugal 45% of employees in enterprises with training courses participate in these courses, only 11% of enterprises offer training courses. Thus, in Portugal overall 17% of employees in enterprises with 10 or more employees are integrated in training courses. By way of comparison, in Sweden 83% of enterprises offer training courses in which 63% of employees participate, so

that overall 61% of the employees of all enterprises participate in training courses at least once a year.

The figures found exhibit a striking gap in participation in continuing training in enterprises between the Nordic countries and Belgium, Ireland, the United Kingdom and France on the one hand and a few Eastern European countries (Bulgaria, Estonia, Hungary, Latvia, Romania and Lithuania) on the other hand.

As a result of their efforts to modernise production systems, a few Eastern European countries occupy an intermediate position and have already established a connection to the EU Member States in the field of continuing training in enterprises. Obvious examples are the Czech Republic and Slovenia, whose participation rates are only slightly lower than that of France and are even higher than those of Germany and Austria.

The situation is most problematic in Romania and Lithuania, where only every fifth employee in an enterprise with training courses has the opportunity to participate in a training course within a year.

3.2. Rate of participation in training courses according to size of enterprise

No uniform connection between the participation rate and the size of the enterprise emerges from the data in Table 3.1. An increase across the three classes of enterprise size can only be observed in Belgium, France, Ireland, Luxembourg and the United Kingdom.

The lowest participation rate is most frequently to be found in medium-sized enterprises with 50 to 249 employees. This phenomenon can be observed in eighteen of the 25 countries included. The values for this group of enterprises are particularly low in Lithuania (15%) and Romania (19%); in Bulgaria, Estonia, Hungary and Latvia the participation rate in medium-sized enterprises is between 20% and 25%. In the Czech Republic, small and medium-sized enterprises, with a figure of 42% in each case, accounted for the lowest participation rate.

In nine countries, the highest participation rate for the country is to be found among the small enterprises (those with 10 to 49 employees). Among these, the highest values are to be found in Denmark (56%) and Norway (54%).

Table 3.1: Participation rate in enterprises offering training courses, according to class of enterprise size (% – 1999)

	10-49 employees	50-249 employees	250 or more employees
B	44	46	62
DK	56	52	55
D	39	33	37
EL	45	32	34
E	40	39	47
F	34	41	59
IRL	47	49	59
I	46	41	50
L	42	46	52
NL	46	45	43
A	35	31	38
P	44	41	47

FIN	53	45	58
S	61	54	67
UK	47	50	52
NO	54	51	53
BG	27	22	29
CZ	42	42	53
EE	27	25	30
HU	32	22	26
LT	23	15	22
LV	31	22	24
PL	31	28	37
RO	30	19	20
SI	50	35	50

3.3. Rate of participation in training courses according to branches of the economy

If we ignore the sector of 'Other' branches of the economy, in nineteen countries the participation rate was highest in the branch of the 'Credit and insurance industry' (J) (Table 3.2). In Germany, the highest figure, 42%, was recorded both in the 'Credit and insurance industry' (J) and in the branch of 'Real estate activities, renting of movable property, provision of services predominantly for enterprises' (K). In Portugal and the United Kingdom, the highest figure was recorded in the branch of 'Trade in and maintenance/repair of motor vehicles and consumer goods' (G), in Luxembourg in the branch of 'Real estate activities, renting of movable property, provision of services predominantly for enterprises' (K) and in Ireland and Romania in the branch of 'Provision of other public and personal services' (O).

In sixteen countries, the lowest participation rate was likewise found in any case in the branch of 'Provision of other public and personal services' (O). This clearly shows the remarkable differences in the attitudes to continuing training exhibited by enterprises in individual sectors of the economy between different countries. In three countries (Ireland, Denmark and Norway) the 'Processing industry' (D) comes last in terms of the participation of employees. In Bulgaria, both the 'Processing industry' (D) and the branch of 'Real estate activities, renting of movable property, provision of services predominantly for enterprises' (K) have the lowest participation rate; likewise in Latvia the 'Processing industry' (D) and the branch of 'Provision of other public and personal services' (O) come equal last in terms of participation rate. In Germany and Italy, 'Trade in and maintenance/repair of motor vehicles and consumer goods' (G) has the lowest values.

If the branch of 'Other', which includes, *inter alia*, mining, the supply of energy and water, the construction trade, the hotel and restaurant trade and transport and communication, is also taken into consideration, then Finland (61%) and Italy (59%) have the highest participation rates in this sector, while in Ireland and Luxembourg, with respective figures of 50% and 30%, this sector comes at the bottom of the scale.

Table 3.2: Participation rate in enterprises offering training courses, according to branches of the economy (% –1999)

	NACE D	NACE G	NACE J	NACE K	NACE O	Other
B	53	51	66	57	49	48
DK	49	57	65	58	60	50
D	34	29	42	42	39	38
EL	28	37	57	23	22	25
E	45	46	65	37	34	42
F	47	51	73	48	40	53
IRL	51	58	60	52	69	50
I	40	39	57	49	42	59
L	46	50	55	78	32	30
NL	43	41	66	38	43	50
A	31	40	55	31	22	35
P	44	58	53	36	23	42
FIN	52	52	56	55	50	61
S	64	58	83	67	57	60
UK	44	63	37	59	31	59
NO	44	47	98	62	73	51
BG	25	26	49	25	28	30
CZ	48	36	71	47	33	53
EE	21	34	68	21	15	30
HU	24	22	53	29	19	29
LT	17	22	35	25	15	21
LV	19	27	46	24	19	27
PL	33	30	60	32	16	33
RO	21	21	17	23	37	19
SI	50	44	61	44	21	39

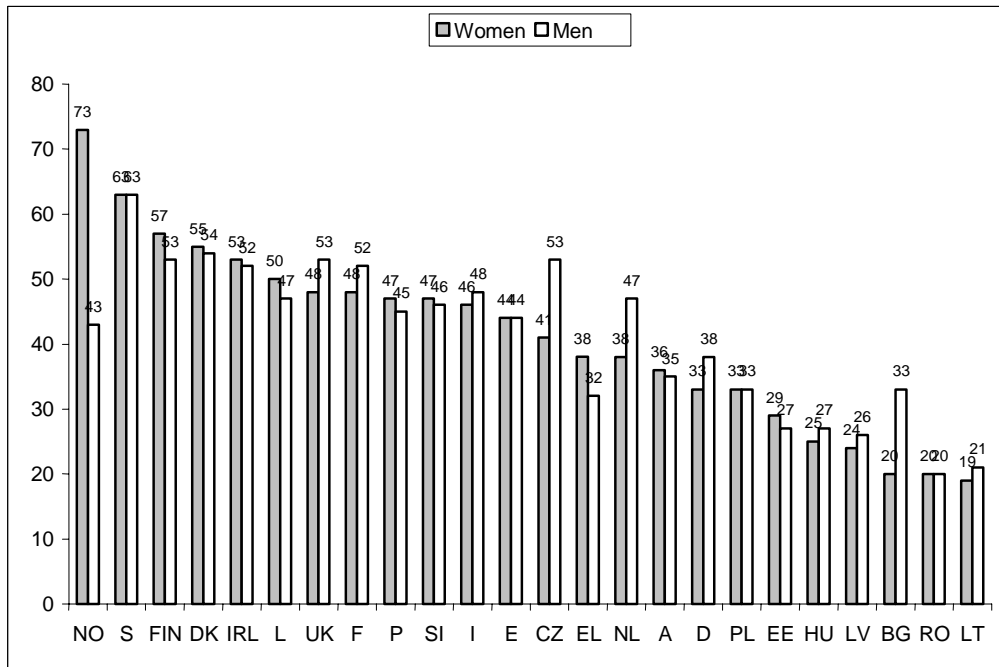
3.4. Rate of participation in training courses according to gender

The participation rates for men and women differed by more than five percentage points in only five out of 24 countries (no information regarding gender is available for Belgium) (Figure 3.2). In Norway and Greece, the participation rates for female employees, at 73% and 38%, were considerably higher than those for male employees (43% and 32%).

In the Czech Republic, the Netherlands and Bulgaria, in contrast, the rates for men, at 53%, 47% and 33%, were higher than for women, at 41%, 38% and 20%.

In an overview of all 24 countries (excluding Belgium) for which participation rates subdivided according to gender are available, there are four countries (Sweden, Spain, Poland and Romania) in which men and women have identical participation rates. The participation rate for women is somewhat higher in ten countries, and that for men is likewise somewhat higher in ten countries.

Figure 3.2: Participation rate in enterprises offering training courses, according to gender (% – 1999)



Higher participation rates for women can be established primarily in the countries which are known for their great efforts in the field of training and education, that is to say primarily the Nordic countries (Norway, Denmark and Finland).

In countries with a low participation rate in continuing vocational training (between 20% and 40%), in five countries men participate more frequently than women in training courses. In Greece, Estonia and Austria, in contrast, more women than men participate in continuing vocational training.

The overall conclusion must be that there is very little unequal treatment of the sexes in terms of participation in continuing training in enterprises, apart from the exceptions mentioned above.

It must be emphasised that differences in the participation structures between men and women also result in particular from gender-specific employment structures. Men and women are distributed differently across sectors with lower and higher continuing training activity. Likewise, men and women are employed to differing extents in enterprises of different sizes.

As already described, in a significant number of the countries the participation rate does not increase across the three classes of enterprise size. Equally, the differences in the participation rates for men and women in Europe do not follow a uniform pattern. However, more detailed analyses could show that different interrelations overlap in the totality of the data. While it is true that, as established above, women have higher participation rates in ten countries and men have higher participation rates in ten countries, and that the rates for men and women were equal in four countries, an analysis that takes into account the size of the enterprise shows a different picture (Table 3.3). In small enterprises (10 to 49 employees) the participation rate for women was higher in 15 countries than that for men; conversely, in large enterprises, in 16 countries the participation rate for men was higher than for women.

Table 3.3: Participation rate in enterprises offering training courses, according to gender and class of enterprise size (% - 1999)⁷

	10-49 employees		50-249 employees		250 or more employees	
	Women	Men	Women	Men	Women	Men
DK	60	54	52	52	55	55
D	39	39	31	34	32	40
EL	56	38	32	32	39	32
E	43	39	40	38	45	48
F	38	33	39	43	55	61
IRL	50	44	52	48	57	62
I	45	46	37	42	49	50
L	44	41	51	44	51	52
NL	38	49	40	47	37	47
A	37	33	33	30	38	38
P	43	44	41	41	49	46
FIN	60	49	48	43	59	57
S	61	61	53	55	68	67
UK	59	42	62	44	46	56
BG	22	31	22	22	19	35
CZ	34	46	34	46	45	59
EE	29	26	24	26	32	27
HU	32	32	23	22	24	28
LT	24	22	15	15	19	24
LV	34	29	22	22	22	26
PL	37	28	28	28	35	38
RO	36	25	20	18	19	20
SI	54	47	36	34	50	51

With regard to the participation rates for men and women in enterprises' training courses, there is no uniform picture if the individual branches of the economy are compared (Table 3.4):

- In the branch of 'Provision of other public and personal services' (O), the participation rate for women is higher than the rate for men in sixteen countries. In ten countries, the difference between the figures in this branch is more than 5%. These differences are particularly serious in Romania (55% for women, 10% for men), in Slovenia (35% compared with 12%) and in Poland (29% compared with 8%). Higher rates for men can be observed especially in Luxembourg (22% for women, 49% for men) and in Ireland (66% compared with 81%).
- In the branch of the 'Credit and insurance industry' (J), the participation rate for women is higher than the rate for men in twelve countries. In ten countries, the gender-specific participation rates differ by more than 5%. A noticeably higher rate for women can be established in particular in Bulgaria (with figures of 58% compared with 34%). The rate for men most clearly exceeds the participation rate for women in the United Kingdom (53% compared with 26%) and in the Czech Republic (78% compared with 68%).

⁷ No information according to sex is available for Belgium. The information for Norway is unreliable.

- In the traditionally male domain of the ‘Processing industry’ (D), the participation rate for women exceeds that for men in only two countries (the United Kingdom and Poland); in two further countries (Ireland and Latvia) the figures for women and men are equal. In this branch, there are differences in the gender-specific participation rates of more than 5% in ten countries. The gap between the participation rate for women and that for men is greatest in the United Kingdom (the figures are 52% and 41%). Men have greater access to enterprises’ training courses in particular in the Czech Republic (men 55%, women 38%) and Bulgaria (men 31%, women 17%).

Table 3.4: Participation rate in enterprises offering training courses, according to gender and branches of the economy (% - 1999)⁸

	NACE D		NACE G		NACE J		NACE K		NACE O		Other	
	Wom en	Men	Wom en	Men	Wom en	Men	Wom en	Men	Wom en	Men	Wom en	Men
DK	48	50	57	58	65	64	58	59	60	60	54	48
D	32	35	26	33	39	44	32	49	42	37	34	39
EL	27	29	35	38	57	56	22	24	27	19	36	23
E	44	45	46	45	66	64	32	40	45	28	44	41
F	42	49	48	53	69	78	48	48	42	39	47	54
IR L	51	51	60	57	56	64	50	55	66	81	52	48
I	34	42	34	44	57	56	47	51	53	38	65	57
L	34	47	50	51	54	55	75	79	22	49	33	29
NL	37	44	35	45	67	65	31	44	42	43	41	52
A	26	32	38	41	61	50	34	28	27	19	39	33
P	43	45	58	57	54	53	35	36	20	27	53	39
FI N	49	53	54	50	54	62	55	55	53	47	73	54
S	64	65	59	57	87	78	64	69	58	55	62	60
UK	52	41	45	75	26	53	60	58	42	26	63	56
BG	17	31	26	27	58	34	19	29	33	22	18	36
CZ	38	55	28	45	68	78	41	50	31	34	51	54
EE	17	24	34	34	70	63	20	21	18	14	37	26
HU	22	25	19	26	53	52	33	25	22	17	27	29
LT	13	21	23	21	33	38	26	24	12	18	22	20
LV	19	19	23	31	46	47	23	24	22	17	23	29
PL	34	33	28	33	60	59	23	38	29	8	33	33
RO	21	22	22	19	15	21	18	25	55	10	17	19
SI	48	51	42	48	60	65	51	40	35	12	36	40

⁸ No information according to sex is available for Belgium. The information for Norway is unreliable.

4. PARTICIPATION HOURS, FIELDS COVERED AND PROVIDERS OF TRAINING COURSES

4.1. Total participation hours⁹

The most important indicator of the intensity of continuing training in enterprises is the number of participation hours per participant. This states how many hours of continuing training were allotted to each participant during paid working hours but is no gauge of efficiency.

The results of CVTS 1 made it clear that for the countries that were EU Member States at that time there is in general no direct connection between the proportion of training enterprises with training courses, the opportunity for employees to participate in the enterprises' training courses and the intensity of the continuing training. This discovery is largely confirmed by the results of the second European Continuing Vocational Training Survey, CVTS 2. Although Sweden recorded the second highest proportion of training enterprises with training courses (83%) and the highest participation rate (63%), in terms of training intensity it came only twelfth out of the EU Member States, equal with Belgium, with 31 participation hours per participant. However, in Spain, where only 28% of enterprises ran training courses and the participation rate was 44%, the training intensity, at 42 participation hours per participant, was highest (Figure 4.1).

The lack of clear connections can be explained by the circumstance that the structure of the continuing training on offer can change if relatively large numbers of the enterprises' employees are included in the continuing training. If not only executives and specialists, who are offered comparatively extensive training, are included in continuing training activities, but the majority of all employees are as well, but are offered less intensive activities, then the average number of participation hours drops. Differences in the participation hours indicator or changes to this indicator can therefore only be interpreted in the context of the other indicators.

If a comparison is made of the three indicators analysed so far (training offered by enterprises, participation by employees and time spent on training courses per participant and year), most countries can be assigned to one of four groups:

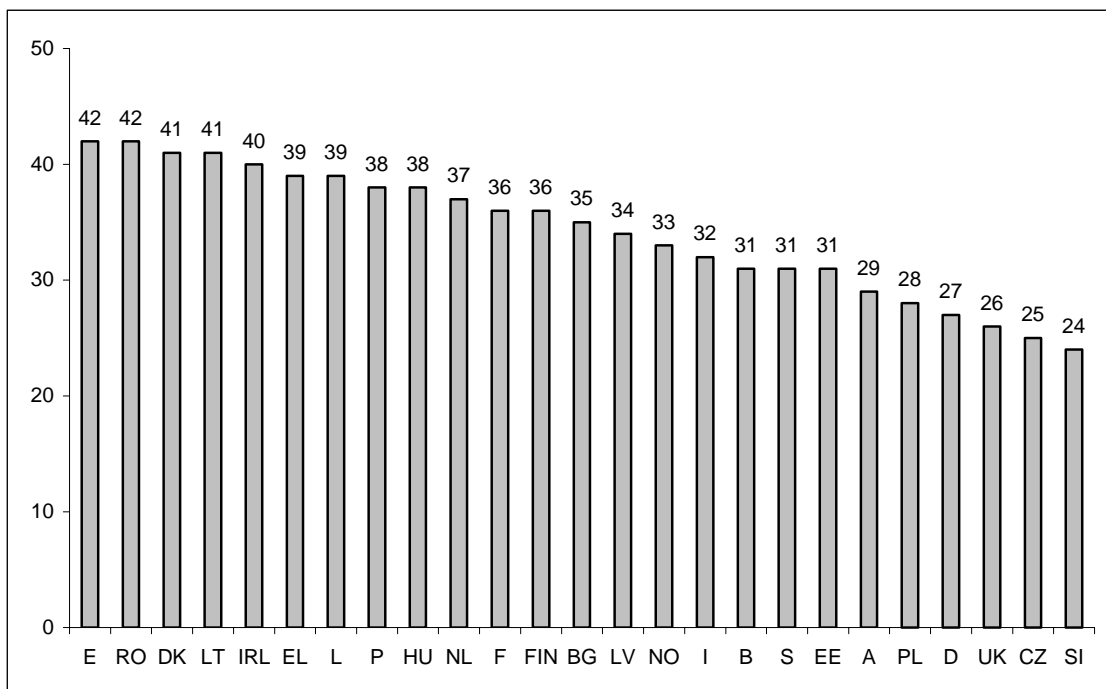
- A first group of countries is in the leading group for all indicators when the 25 countries are arranged in rank order (places 1 to 12; the countries concerned are Denmark, Ireland, Luxembourg and France). In Denmark in particular, the prospects of enjoying the benefits of training courses were very high and were coupled with a high training intensity: in addition to the highest proportion of enterprises with training courses (88%) and the second highest participation rate (55%), Denmark was also found to have the third highest continuing training intensity (41 participation hours per participant).
- A second (small) group had relatively low scores for all indicators and therefore occupied the lowest places (Latvia, Estonia and Poland).
- A third group of countries was characterised by a relatively high proportion of enterprises that run training courses and a quite high participation rate for employees, but a relatively short time for training measures; this is the typical situation for a predominant number of short-term adaptation training (Germany, Austria, the Czech Republic, Sweden and the United Kingdom). For example, although the Czech Republic recorded the largest proportion of enterprises offering continuing training and also the highest participation rate for the applicant countries, with training hours amounting to 25 per participant it only just comes

⁹ The total number of participation hours includes all hours that the participants spent in courses and seminars.

above Slovenia (with 24 hours per participant) in eighth place out of the nine applicant countries.

- Finally, a fourth group of countries is denoted by a situation characterised by rather low amounts of training on offer and rather low participation rates, but an amount of time spent on the measures offered that is clearly above average (Romania, Spain, Lithuania, Greece, Portugal, Hungary and Bulgaria). Romania, where a total of only 7 out of 100 enterprises ran training courses, had the highest average number of participation hours per participant in training courses, at 42 hours.

Figure 4.1: Participation hours per participant (1999)



4.2. Participation hours according to size of enterprise

If the participation hours are considered differentiated according to the size of the enterprise, an inhomogeneous picture is produced with mostly small differences. As has already been the case for participation rates, no uniform connection emerges for the intensity of the continuing training either (Table 4.1).

In six EU Member States and in Norway, but only in one applicant country, Estonia, the intensity of the continuing training was greatest in large enterprises (Luxembourg 45, the Netherlands 42, Norway 40, France 39, Portugal 39, Estonia 35, Sweden 32 and Austria 31 participation hours), while in fourteen countries it was greatest in small enterprises (Romania 57, Spain 54, Ireland 48, Lithuania 48, Hungary 45, Finland 43, Slovenia 43, Bulgaria 40, Latvia 39, Italy 38, Belgium 36, the United Kingdom 35, Poland 34 and the Czech Republic 26 participation hours). A high intensity of continuing training was thus observed in almost all the applicant countries in small enterprises. The lowest number of participation hours per participant was found in medium-sized enterprises in eleven countries and in large enterprises in ten countries.

In order to make an overall assessment, however, it should be borne in mind that, although in many countries small enterprises have a relatively high intensity of continuing training, only small proportions of all enterprises are active in the area of continuing training.

Table 4.1: Participation hours per participant according to class of enterprise size (1999)

	10-49 employees	50-249 employees	250 or more employees
B	36	32	29
DK	37	44	41
D	23	31	27
EL	39	45	38
E	54	41	40
F	33	29	39
IRL	48	36	39
I	38	33	30
L	40	27	45
NL	29	35	42
A	28	26	31
P	37	38	39
FIN	43	34	34
S	30	26	32
UK	35	30	25
NO	28	27	40
BG	40	24	36
CZ	26	24	25
EE	31	26	35
HU	45	38	36
LT	48	39	41
LV	39	33	32
PL	34	27	26
RO	57	40	42
SI	43	24	23

4.3. Participation hours according to branches of the economy

If the sector of 'Other' branches of the economy is ignored, in the majority of the countries the branch of 'Real estate activities, renting of movable property, provision of services predominantly for enterprises' (K) had the highest intensity of continuing training (16 countries: Denmark 60, Romania 57, Latvia 56, Luxembourg 53, Norway 51, Finland 49, Lithuania 48, Hungary 47, Slovenia 47, the Czech Republic 46, Poland 43, Italy 43, the United Kingdom 41, Germany 40, Belgium 38 and Sweden 36 participation hours per participant).

In Bulgaria (72), Ireland (59), Spain (54) and France (38) the greatest amount of time per participant was spent in each case in the branch of 'Provision of other public and personal services' (O). In Portugal (55), Austria (49), the Netherlands (48) and Estonia (46), the amount of time spent per participant was greatest in the 'Credit and insurance industry' (J).

In ten countries, the lowest intensity of continuing training was found to be in the branch of 'Trade in and maintenance/repair of motor vehicles and consumer goods' (G) (Slovenia 14,

Sweden 23, Portugal 24, France 25, Luxembourg 26, Finland 26, Latvia 26, Denmark 30, Greece 32 and Spain 36 participation hours per participant).

In Belgium, the lowest value, of 29 participation hours per participant, was recorded in both the branch of 'Trade in and maintenance/repair of motor vehicles and consumer goods' (G) and in the 'Processing industry' (D), and in the United Kingdom, with 15 participation hours each, in the branches of 'Trade in and maintenance/repair of motor vehicles and consumer goods' (G) and 'Provision of other public and personal services' (O) (Table 4.2).

Table 4.2: Participation hours per participant according to branches of the economy (1999)

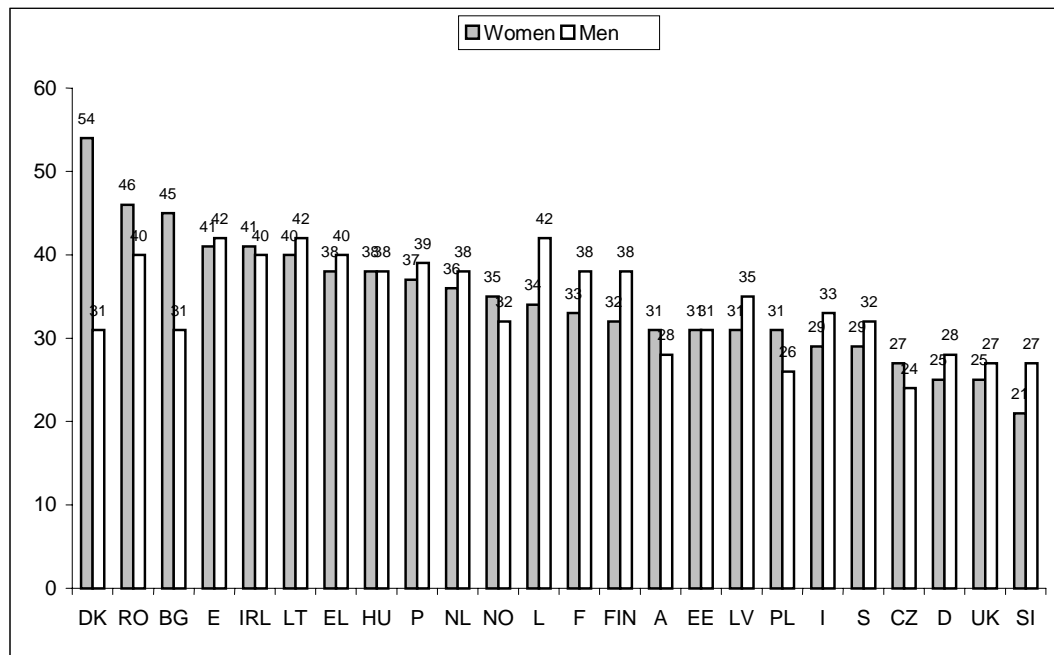
	NACE D	NACE G	NACE J	NACE K	NACE O	Other
B	29	29	34	38	31	28
DK	41	30	41	60	42	42
D	29	21	35	40	15	20
EL	49	32	34	43	44	38
E	46	36	44	43	54	38
F	33	25	37	36	38	49
IRL	40	32	28	41	59	43
I	30	32	35	43	39	30
L	47	26	43	53	37	28
NL	39	35	48	43	26	32
A	28	26	49	33	15	25
P	44	24	55	44	38	34
FIN	35	26	38	49	31	36
S	34	23	26	36	26	28
UK	29	15	27	41	15	26
NO	34	30	24	51	24	29
BG	19	35	20	50	72	46
CZ	24	24	41	46	22	20
EE	26	42	46	32	19	26
HU	34	42	19	47	30	44
LT	39	45	29	48	19	45
LV	31	26	32	56	27	34
PL	24	29	36	43	27	25
RO	33	31	27	57	45	56
SI	20	14	27	47	34	31

4.4. Participation hours according to sex

If the number of participation hours per participant are considered differentiated according to sex, clear differences in the intensity of continuing training between women and men emerge in only a few cases. The differences between the average number of participation hours per woman and per man are greatest in Denmark and Bulgaria (Figure 4.2). Only in these two countries was the intensity of continuing training for women, with a difference of 23 and 14 hours respectively, noticeably higher than that for men. In Bulgaria, the time spent on training courses for women to some extent balances out the lower participation rate that has already been mentioned with regard to the involvement of enterprises.

In a further six countries, the differences in favour of women varied between only one hour and six hours. In fourteen countries the intensity of continuing training was greater for men than for women, but the highest difference was only eight hours (in Luxembourg). In overall terms, therefore, no disadvantage for either women or men was recorded with regard to the intensity of continuing training.

Figure 4.2: Participation hours per participant according to sex (1999)¹⁰



4.5. Fields covered and providers of training courses

In addition to an analysis of the intensity of the continuing training according to the size of the enterprise, branch of the economy and sex of the participants, the survey makes it possible to carry out an analysis of the proportion of internal and external training courses, according to the contents of the training courses and the providers of continuing training.

4.5.1 Participation hours subdivided into internal and external training courses

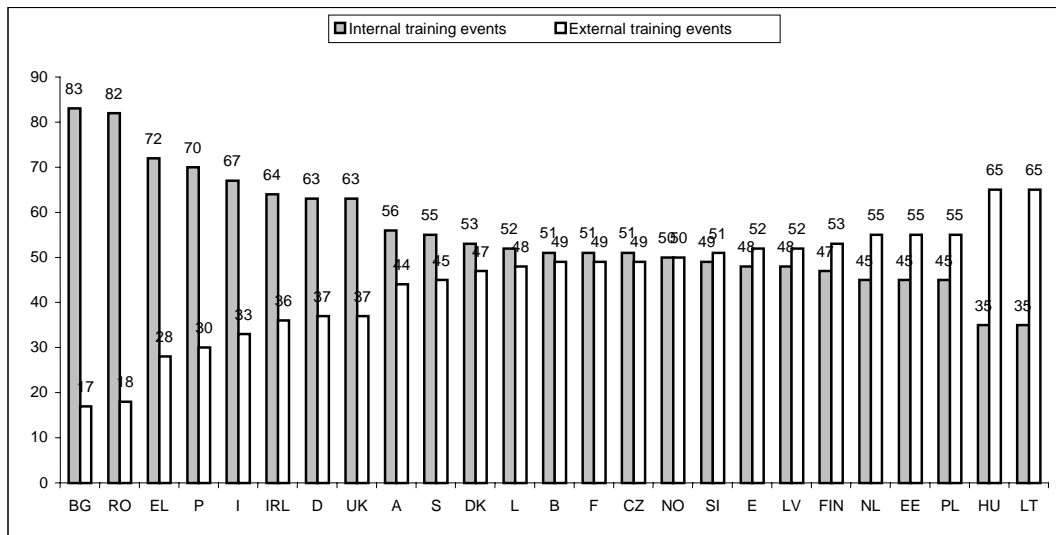
A comparison of the proportion of internal and external training courses in the participation hours strikingly illustrates the fundamental differences in the continuing training structures in the enterprises in the 25 countries surveyed (Figure 4.3).

In five countries (Bulgaria, Romania, Greece, Portugal and Italy), the proportion of internal training courses makes up more than 65% of the total number of participation hours. A particularly high proportion of external training courses, at 65% in each case, is found in two of the applicant countries, Lithuania and Hungary. The relationship between the proportion of internal and external training courses is relatively balanced in eight countries (with a proportion

¹⁰ No information according to sex is available for Belgium.

of internal training courses of between 48 and 52%). These countries are Luxembourg, Belgium, France, the Czech Republic, Norway, Slovenia, Spain and Latvia.

Figure 4.3: Proportion of internal and external training courses in the participation hours (% - 1999)



4.5.2. Fields covered in training courses¹¹

The contents of continuing training in enterprises primarily reflect the requirements of the enterprises in the various branches of the economy. In general, ‘Engineering and production’ and ‘Computer science and computer use’ were the most important fields for continuing training in enterprises.

If the various proportions of the total number of hours are differentiated in enterprises’ training courses according to continuing training fields, the picture illustrated in Table 4.3 emerges. In all of the following observations, the field of ‘Other continuing training fields’, which combines all the fields to which it was not possible to assign any contents, has not been taken into consideration.

Table 4.3: Highest and lowest proportions of hours out of the entire participation hours according to continuing training fields (% - 1999)

¹¹ The definition of the fields of continuing training follows the official classification according to the *Handbuch der Ausbildungsfelder*, CEDEFOP/EUROSTAT, 1999.

	Language courses	Trade and marketing/advertising	Taxation, accounting and finance	Management and administration	Secretarial and office work	Personal development and working life	Computer science and computer use	Engineering and production	Environmental protection, occupational health and safety	and restaurant trade, transport and security
Highest proportion of hours (%)	14 E, CZ, LT	16 NO	18 EL	15 UK	3 B, EL, I, FIN	59 RO	23 S	29 B	20 IRL	12 F
Lowest proportion of hours (%)	1 IRL, UK, NO	3 BG, RO	2 BG	3 RO	0 BG, RO	1 BG	5 EE, RO	6 RO	2 PL, RO	2 EL, L, A, UK, BG, LT
Difference (% points)	13	13	16	12	3	58	18	23	18	10

Large differences between the countries were recorded for almost all the fields covered in continuing training in enterprises. The difference between the lowest and highest proportion was greatest by some way in the field of ‘Personal development and working life’ (58 percentage points) and varied from 1% in Bulgaria to 59% in Romania.

However, the figure recorded in Romania for this field of continuing training constitutes an exception. In second place is Poland with 22% and in third place Italy with 16%. Overall, the proportion was below 10% in twelve countries. There were particularly low differences in continuing training in the field of ‘Secretarial and office work’, for which the proportions of hours were also at a low level and amounted to not more than 3% overall in the countries.

If the branch of the economy is included in the analysis, the picture produced is very heterogeneous and results from the different qualification requirements in the individual countries (Table 4.4). Specific fields that exhibited a low level overall played a prominent role in individual branches of the economy. Thus, for example, the continuing training field of ‘Taxation, accounting and finance’ did not record a high proportion of hours overall, but in the branch of the ‘Credit and insurance industry’ (J) proportions of hours amounting to more than 20% were observed in twelve countries. On the other hand, there are also countries in which this field could be disregarded even in this branch of the economy.

Table 4.4: Highest and lowest proportions of hours out of the entire participation hours according to continuing training fields and branches of the economy (% - 1999)

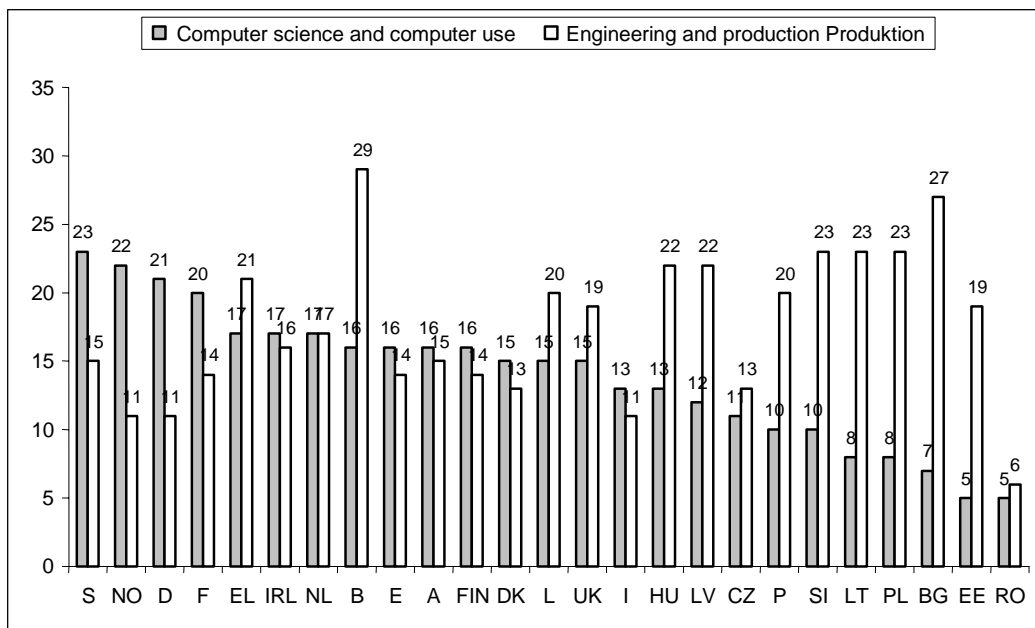
		Language courses	Trade and marketing/advertising	Taxation, accounting and finance	Management and administration	Secretarial and office work	Personal development and working life	Computer science and computer use	Engineering and production	Environmental protection, occupational health and safety	Personal services incl. hotel and restaurant trade, transport and security
NACE D	Highest proportion of hours (%)	18 E	12 EL	11 HU	14 NO	3 I FIN	76 RO	21 DK IRL NL	47 L	14 I	4 NL S
	Lowest proportion of hours (%)	1 RO	2 NL	1 NL P	3 RO	L P RO	1 BG	3 RO	4 RO	3 PL RO	0 9 countries
NACE G	Highest proportion of hours (%)	18 CZ	58 RO	17 LV	24 UK	7 IRL	32 EE	22 S	41 BG	17 IRL	8 HU
	Lowest proportion of hours (%)	0 IRL UK	11 DK	1 NL	4 PL	EL L NL SI	0 BG	2 RO	1 RO	0 PL EL	0 7 countries
NACE J	Highest proportion of hours (%)	23 BG	31 F	65 NL	23 UK	9 PL	67 PL	28 HU	22 B	14 UK	9 LV
	Lowest proportion of hours (%)	0 IRL PL	4 P HU PL RO	3 DK P	2 BG	BG EE RO	1 BG EE	2 PL	0 7 coun-tries	0 9 coun-tries	0 15 countries
NACE K	Highest proportion of hours (%)	20 BG	14 FIN	31 LT	17 IRL	8 EL	25 RO	41 S	37 SI	16 UK	44 PL
	Lowest proportion of hours (%)	1 EL IRL NL UK	1 L BG LT	3 E	1 L	L CZ LT SI	2 BG	4 EE	NL S EE LV	0 L	DK EL L
NACE O	Highest proportion of hours (%)	18 CZ	17 EL	19 LV	36 A	9 B	23 FIN	39 BG	41 P	23 NL	63 IRL

	Lowest proportion of hours (%)	0 IRL L NO EE PL	0 HU PL	0 IRL L RO	0 L RO	0 6 coun-tries	0 EE PL	0 L	IRL 0 EE PL RO	EL 0 P BG PL	EL UK 0 BG EE LT
Other	Highest proportion of hours (%)	23 LT	15 P	13 NL	17 A UK	3 DK FIN NO	54 RO	20 D UK	42 EL	44 IRL	34 F
	Lowest proportion of hours (%)	0 IRL	1 BG LT RO	1 F IRL P BG	2 BG RO SI	0 IRL BG LT RO SI	0 BG	3 BG	7 UK CZ	BG 2 PL RO	1 BG

The main focus of continuing training in enterprises in 1999 was on the fields of 'Engineering and production' and 'Computer science and computer use'. In 21 countries, one of these two fields in each case made up the highest proportion of the total number of participation hours. Only in Ireland, Italy, the Czech Republic and Romania were the highest proportions recorded in other fields.

There was a clearly recognisable difference between the EU Member States and Norway on the one hand and the applicant countries on the other hand (Figure 4.4). In nine EU Member States and Norway the field of 'Computer science and computer use' dominated. Its proportion of the total number of participation hours ranged from 10% in Portugal to 23% in Sweden and was more than 15% in almost all countries. In all the applicant countries, in contrast, the field of 'Engineering and production' dominated; its proportion ranged from 6% in Romania to 27% in Bulgaria and exceeded 20% in six of these countries.

Figure 4.4: Proportions of hours taken up by the fields of 'Engineering and production' and 'Computer science and computer use' out of the total number of participation hours (% - 1999)



The field of ‘Computer science and computer use’ predominated in the service sectors: in the branch of ‘Real estate activities, renting of movable property, provision of services predominantly for enterprises’ (K) primarily in the EU Member States and Norway and in the branch of ‘Provision of other public and personal services’ (O) primarily in the applicant countries. Except for in five countries, the highest proportions of hours for the field of ‘Engineering and production’ were observed, as expected, in the branch of the ‘Processing industry’ (D).

‘Trade and marketing/advertising’ was an important field of continuing training overall in Norway and Austria, with a proportion of 16% and 14% respectively of all participation hours. In contrast, in Bulgaria and Romania (3% in each case) and in Lithuania (4%) the proportion of hours was extremely low. However, even in the latter countries the proportion of hours in the branch of ‘Trade in and maintenance/repair of motor vehicles and consumer goods’ (G) exceeded 10%; in Romania it was even 58%. In total, this field led the rankings in this branch of the economy in twenty countries.

Overall, the field of ‘Taxation, accounting and finance’ played a somewhat smaller role in continuing training in enterprises than ‘Trade and marketing/advertising’, with there being a slight predominance in the applicant countries compared with the EU Member States. Proportions of hours amounting to more than 10% were recorded in three of the nine applicant countries (Latvia and Hungary each had 11% and Estonia had 13%), but in only two EU Member States (the Netherlands with 15% and Greece with 18%). In ten EU Member States and two applicant countries, the proportions were 5% or less. When the results are considered according to branches of the economy, it is clear that the field of ‘Taxation, accounting and finance’ was, as expected, most important primarily in the ‘Credit and insurance industry’ (J) (15 countries, including seven applicant countries) and in ‘Real estate activities, renting of movable property, provision of services predominantly for enterprises’ (K) (six countries, including one applicant country). In

France, these two sectors came equal first. In contrast, the proportion of hours for this field was only 3% in Denmark and Portugal, even in the 'Credit and insurance industry' (J).

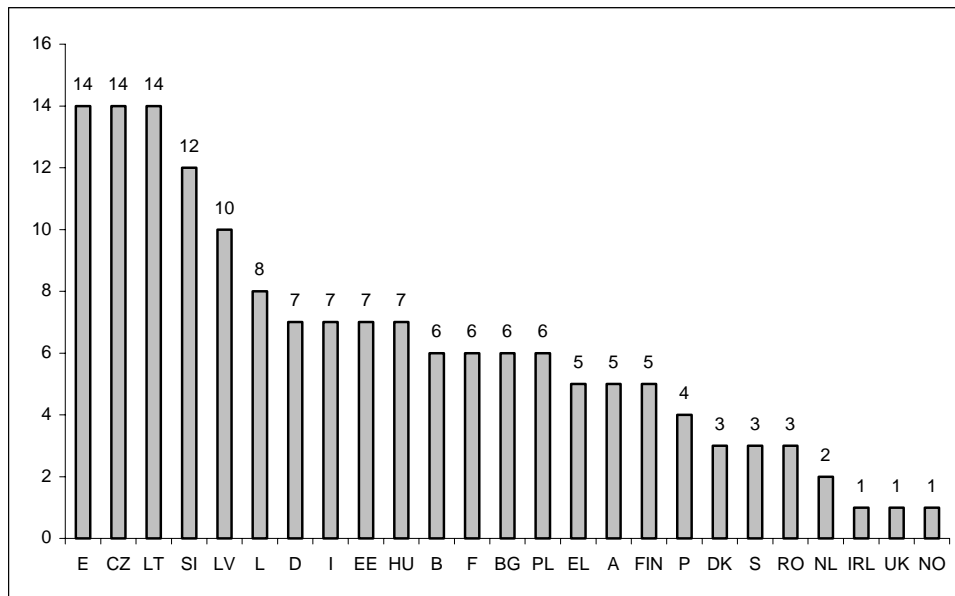
The continuing training field of 'Management and administration' achieved the same order of magnitude overall as the field of 'Taxation, accounting and finance' in terms of its proportion of participation hours, although the breadth of variation between the countries was somewhat smaller. The difference between the lowest and highest proportion of hours was only 12 percentage points. This field was most important in the United Kingdom (15%), in Austria (14%) and in Norway (13%). Proportions of no more than 5% were observed in six countries (Romania 3%, Bulgaria 4%, Denmark, Hungary, Poland and Slovenia each 5%).

As already mentioned initially, there are great differences in the continuing training field of 'Personal development and working life'. However, the extremely high proportion of hours in Romania, at 59% of all participation hours, constitutes an exception; Poland had the second highest proportion, at 22%. There was no clear preference for the field of 'Personal development and working life' in any specific branches of the economy.

In Ireland itself, but also in comparison with the other countries, the field of 'Environmental protection, occupational health and safety' was of greatest importance; its proportion of hours there was 20%. The only other countries to record a proportion of over 10% were the United Kingdom (15%) and the Netherlands (11%). Continuing training in this field was significant primarily in the branches of the 'Processing industry' (D) and 'Provision of other public and personal services' (O).

Language courses tended to be very important within continuing training in enterprises in the applicant countries (with the exception of Romania) and in Spain (Figure 4.5). In countries in which English is the native language or traditionally the first foreign language (the United Kingdom, Ireland, Norway, the Netherlands, Denmark, Sweden), the proportion of the total participation hours spent on language courses was rather smaller. Surprisingly, the proportions of hours were greatest in the branch of the 'Processing industry' (D) in 12 countries; in four further countries this sector came joint first with other branches of the economy. In Spain, the proportion of language courses in the 'Processing industry' (D) made up almost a fifth of all participation hours.

Figure 4.5: Proportions of hours for ‘Language courses’ out of the total number of participation hours (% - 1999)



Overall, for the field of ‘Personal services incl. hotel and restaurant trade, transport and security services’, there was a relatively low range of variation and a low level of participation. In all countries except for France (12%), the proportions were less than 10%, and in 17 countries in fact no higher than 5%. When the figures are differentiated according to branches of the economy, in many countries, as expected, relatively high proportions of hours were recorded in the service sectors; the highest values were registered in Ireland (63%) and Romania (62%) in the branch of ‘Provision of other public and personal services’ (O).

The lowest overall proportions of participation hours in enterprises were observed for the field of ‘Secretarial and office work’. They amounted to 3% in Belgium, Finland, Greece and Italy only; in the other countries they were negligible. Even when the figures were differentiated according to economic branches, almost all the proportions of hours in all countries were less than 5%.

4.5.3. Providers of external training courses

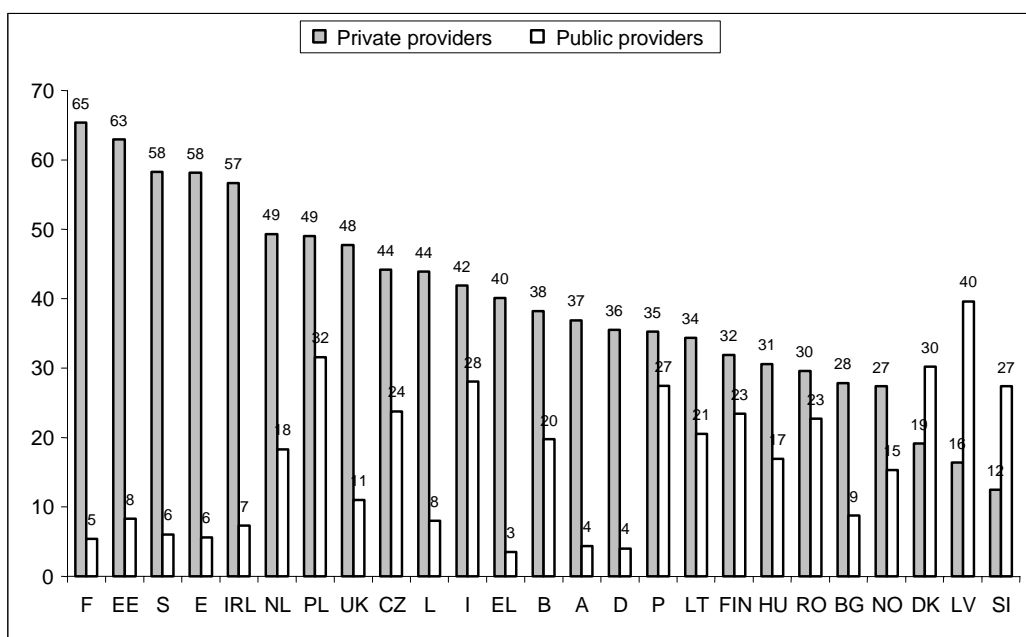
The empirical findings were informative with regard to the structure of training providers¹² in the training courses requested externally by the enterprises. Very different structures of training providers were found in the different countries; these structures differed primarily in terms of the respective importance of private providers, that is to say the scope of market structures in the external training courses.

It becomes clear in an examination of the proportions of hours of external training courses differentiated according to the different providers of continuing training in enterprises that in 1999, in almost all the countries, the highest proportion of participation hours was accounted for by private providers (Figure 4.6). The second highest proportion of participation hours was

¹² The definition of providers of continuing training is to be found in the ‘EU Manual – Continuing Vocational Training Survey (CVTS2)’, Eurostat Working Papers, Population and social conditions 3/2000/EN/NO 17.

accounted for by specialised continuing training institutions ('public providers'). On average, they played a greater role in the applicant countries than in the EU Member States and Norway.

Figure 4.6: Proportions of hours accounted for by public and private training providers out of the total number of external participation hours (% - 1999)



The differences in the country-specific proportion for the eight providers of continuing training that were investigated were greatest for the private providers (53 percentage points) and the public providers (37 percentage points). The lowest proportion of hours for private providers, at 12%, was found in Slovenia, and the highest, at 65%, in France. Public providers were most important in continuing vocational training in Latvia, with 40%, and least important in Greece, with 3% (Table 4.5).

Table 4.5: Highest and lowest proportions of hours out of the total number of external participation hours according to providers of continuing training (% - 1999)

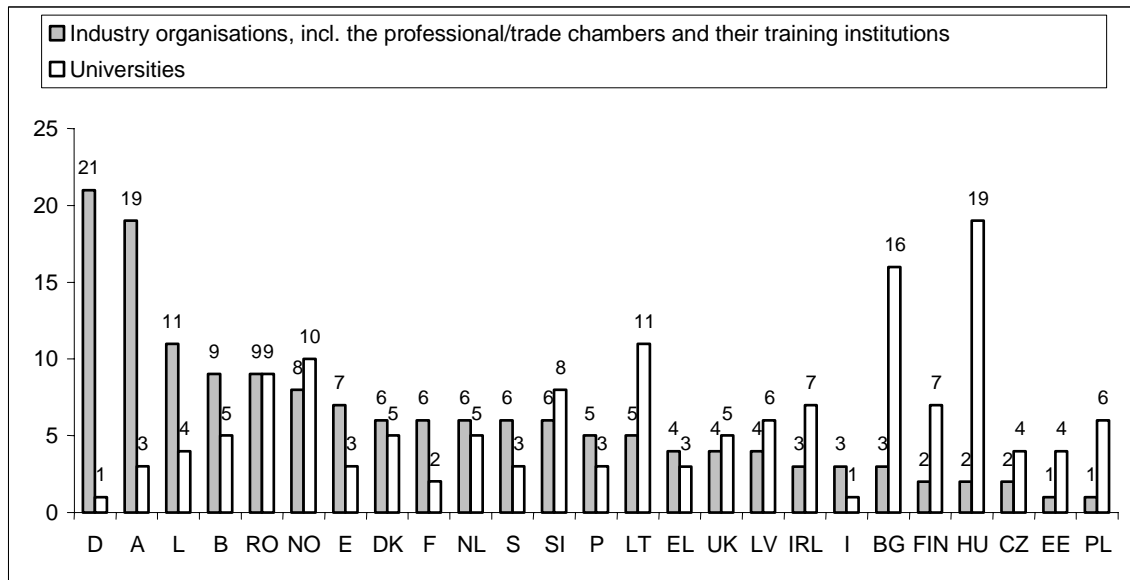
	Technical colleges							
	Universities and higher education institutions							
	Public providers							
	Private providers							
	Manufacturers / suppliers							
	Parent companies / associated companies							
	Unions and their training institutions							
	Industry organisations, incl. professional/trade chambers and their training institutions							
	Other providers							

Highest proportion of hours (%)	15 DK, UK, SI	19 HU	40 LV	65 F	16 D, NO	12 P	4 BG	21 D	31 EL
Lowest proportion of hours (%)	0 EL, P	1 D, I	3 EL	12 SI	2 LT	0 SI	0 9 countries	1 EE, PL	2 B, NL
Difference (% points)	15	18	37	53	14	12	4	20	29

In all countries, the proportion of hours accounted for by unions and their training institutions was negligible. In 14 countries, this proportion was no more than 1%; it was largest in Bulgaria, with 4%.

Another remarkable fact is that in Germany and Austria industry organisations, including professional/trade chambers and their training institutions, are heavily involved in continuing training in enterprises. The proportion of external participation hours in these countries, at 21% and 19% respectively, was the largest by some way when compared with the other countries (Figure 4.7).

Figure 4.7: Proportions of hours accounted for by universities and industry organisations and their training institutions out of the total number of external participation hours (% - 1999)



With regard to the proportion of the total number of external participation hours accounted for by universities as providers of continuing vocational training, the lowest values were registered in Germany and Italy, with 1%. In Hungary (19%) and Bulgaria (16%), in contrast, universities played a perceptibly greater role among providers of continuing training.

Noticeably higher proportions than in all the other countries were observed for technical colleges in Slovenia, Denmark and the United Kingdom, with 15% each, and in Hungary, with 14%.

5. COSTS FOR TRAINING COURSES

The second European Continuing Vocational Training Survey (CVTS 2) provides important figures for the analysis of continuing training costs.

The financing structure for vocational training courses is an important basis for assessing the enterprises' readiness to invest and moreover reflects the importance of continuing training measures on the demand side of the labour market. The increasing importance of qualifications that are acquired by such measures is also revealed by the enterprises' level of expenditure on internal and external training courses. This chapter describes fundamental results regarding the costs and forms of finance for enterprises' training courses in the 25 European countries.

The total costs for training courses are the sum of direct costs, personnel absence costs and the balance from contributions to national or regional vocational training funds and receipts from national or other financial settlements.

In order to be able to analyse this structure and make comparisons between the countries, the following figures are presented:

- the costs to the enterprises for each participation hour,
- the total costs per participant, subdivided into direct costs and personnel absence costs,
- the distribution of the direct costs to the individual costs levied,
- the balance between contributions to public funds and public subsidies for the purposes of continuing training in enterprises and
- the proportion of the costs for training courses in the labour costs.

The CVTS 2 results with regard to the costs and financing of training courses are very interesting, since it was definitely possible to establish large regional differences. These emerged primarily when comparing the applicant countries, which are in the difficult stage of transition to market economies, with the EU Member States, whose economies are at a more advanced level. Differences were also apparent between the Northern European countries and the other countries.

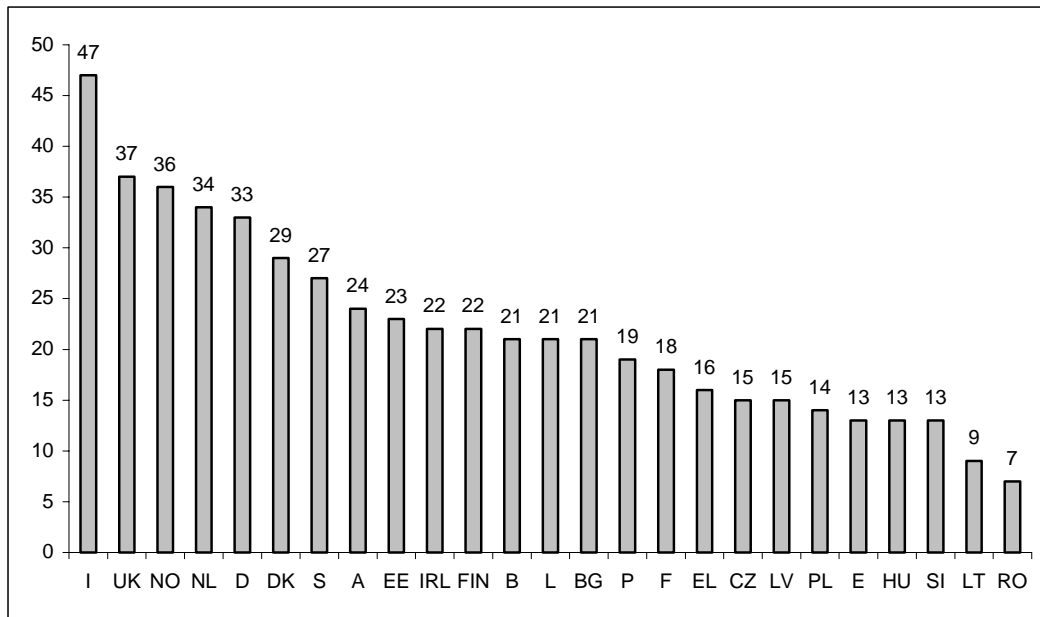
5.1. Direct costs and personnel absence costs for training courses per hour of continuing training

The financial expenditure for training courses in enterprises per participation hour is an important indicator for assessing the level of investment by the enterprises in this area.

In 1999, the direct costs per participation hour varied between 47 PPS¹³ in Italy and only 7 PPS in Romania (Figure 5.1). Costs amounting to more than 30 PPS per participation hour were levied in the United Kingdom, Norway, the Netherlands and Germany as well as in Italy. Participation hour costs were less than 20 PPS in all of the applicant countries (with the exception of Estonia and Bulgaria) and in Spain (with the lowest figure in the EU at 13 PPS), Greece, France and Portugal.

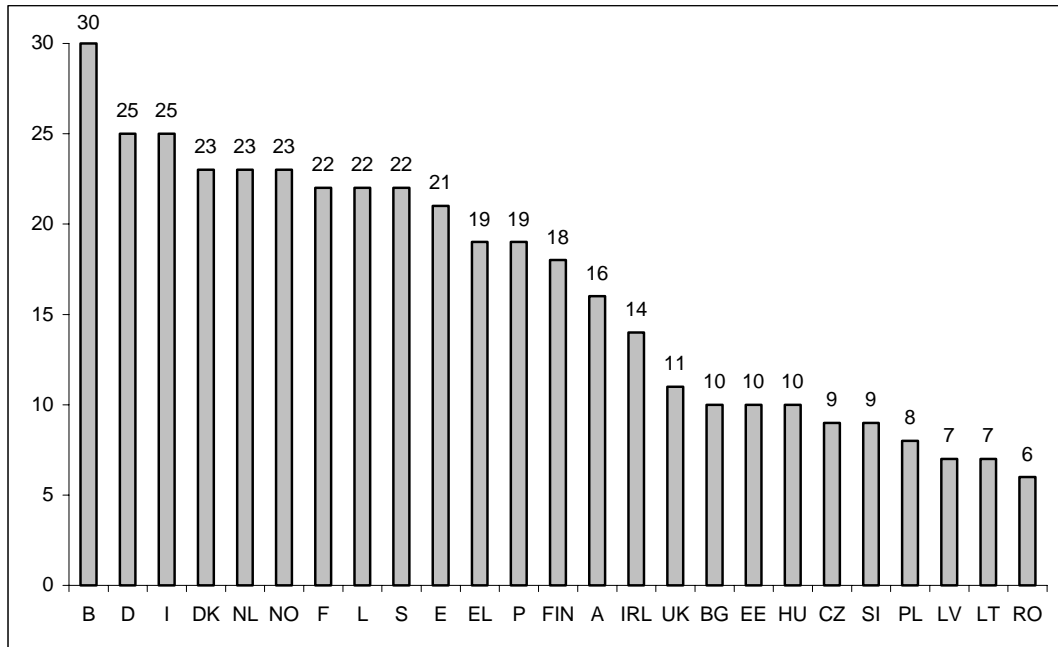
Figure 5.1: Direct costs of training courses per hour of continuing training (PPS – 1999)

¹³ PPS (purchasing-power standards): Costs are indicated in PPS to allow for price differences between the individual countries. The PPS conversion factors indicate how many national currency units the same quantity of goods and services would cost in the individual countries.



In terms of personnel absence costs, Belgium is the only country to reach 30 PPS per participation hour and thus tops the rankings (Figure 5.2). All nine applicant countries are to be found in places 17 to 25, separated by only 4 PPS (they range from Bulgaria, Estonia and Hungary, with 10 PPS each, to Romania, with only 6 PPS).

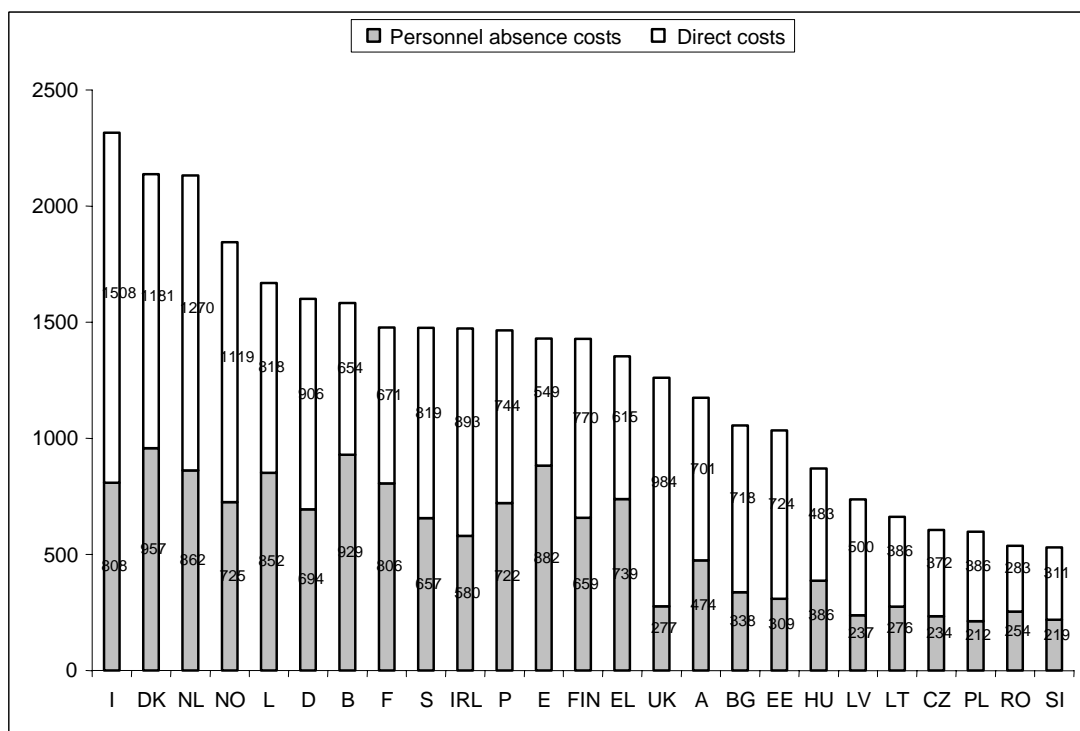
Figure 5.2: Personnel absence costs for training courses per hour of continuing training (PPS – 1999)



5.2. Direct costs and personnel absence costs for training courses per participant

If the total costs of continuing training in enterprises are related to the participants, Italy leads the ranking order ahead of Denmark (Figure 5.3). While Italy is only in sixth place in terms of personnel absence costs, in terms of direct costs Italian enterprises have by some distance the highest direct costs (1508 PPS) here. In terms of direct costs, Spain, with 549 PPS, comes last out of the EU Member States, followed by seven applicant countries. Denmark has the highest personnel absence costs per participant, with Belgium in second place. As is to be expected, personnel absence costs are particularly low in the applicant countries (ranging from 212 PPS in Poland to 386 PPS in Hungary).

Figure 5.3: Direct costs and personnel absence costs for training courses per participant (PPS – 1999)



5.3. Total costs of training courses per participant according to size of enterprise

If the total costs of training courses per participant are differentiated according to the class of enterprise size, the picture that emerges is a varied one (Table 5.1)¹⁴.

In nine countries, the total costs per participant and year increased with the number of employees (Austria, the Czech Republic, Germany, Spain, France, Lithuania, the Netherlands, Portugal and Sweden). The differences between the small enterprises (10 to 49 employees) and the large enterprises (250 or more employees) were greatest in Germany (+73%) and the Netherlands (+68%).

Participant costs that decreased with an increasing number of employees were observed in Hungary, Italy, Romania and Slovenia, with Italy, at 2913 PPS, having the highest costs per participant in small enterprises.

In six countries (Bulgaria, Finland, Ireland, Latvia, Luxembourg and Poland), the medium-sized enterprises had the lowest cost figures.

In five countries (Belgium, Denmark, Estonia, Greece and the United Kingdom), the highest costs per participant were found for medium-sized enterprises (50 to 249 employees). The question of whether public development instruments and/or the regionalised labour market concept were one reason for the comparatively high level of readiness to invest among medium-sized enterprises, particularly in Denmark and the United Kingdom, must be examined in more detailed analyses.

¹⁴ No reliable information according to size classes is available for Norway.

Denmark has the highest level of uniformity of total costs per participant over all the classes of enterprise size. Out of the 25 countries participating, it is in second place for small and large enterprises and in fourth place for medium-sized enterprises.

Table 5.1: Total costs of training courses per participant according to class of enterprise size (PPS – 1999)¹⁵

	10-49 employees	50-249 employees	250 or more employees
B	1651	1765	1592
DK	1879	2297	2163
D	1003	1548	1736
EL	1512	2935	1165
E	1352	1380	1590
F	1238	1373	1751
IRL	1620	1319	1453
I	2913	2430	1927
L	1603	1174	1930
NL	1467	1954	2462
A	1020	1104	1232
P	1105	1208	1473
FIN	1381	1311	1418
S	1229	1263	1544
UK	1768	2971	991
BG	872	423	1145
CZ	575	597	608
EE	1278	1306	732
HU	1390	1317	1057
LT	524	672	676
LV	1037	649	656
PL	735	494	609
RO	782	756	520
SI	859	530	481

5.4. Total costs of training courses per participant according to branches of the economy

A comparison of total costs for training courses per participant between selected branches of the economy reveals that the ‘Credit and insurance industry’ (J) and the branch of ‘Real estate activities, renting of movable property, provision of services predominantly for enterprises’ (K) had the highest costs in each case in almost all countries (Table 5.2). It was only in Greece that the total costs per participant were highest in the ‘Processing industry’ (D), in Poland that they were highest in the branch of ‘Trade in and maintenance/repair of motor vehicles and consumer goods’ (G) and in Bulgaria that they were highest in ‘Other’ branches of the economy.

In thirteen countries, the sector of ‘Real estate activities, renting of movable property, provision of services predominantly for enterprises’ (K) comes top of the list (the highest figure is to be found in Italy, with 3708 PPS), while in eight countries the highest total costs per participant

¹⁵ No reliable information according to size classes is available for Norway.

were identified in the 'Credit and insurance industry' (J) (the Netherlands came top of the list, with 3628 PPS).

If the level of total costs for enterprises' training courses in a country is taken as an indication of their readiness to invest in qualifications for their employees, a comparison between the individual sectors does not reveal any uniform indications of underinvestment. The lowest figures are primarily found in the personal services sectors of 'Provision of other public and personal services' (O) and 'Trade in and maintenance/repair of motor vehicles and consumer goods' (G). Eight countries have the lowest costs in each of these sectors. However, the lowest figures are to be found in four countries, all of them applicant countries, in the 'Processing industry' (D), in one country in the 'Credit and insurance industry' (J) and in three countries in the sector of 'Other', which includes, *inter alia*, mining, the supply of energy and water, and the hotel and restaurant trade.

Table 5.2: Total costs of training courses per participant according to branches of the economy (PPS – 1999)¹⁶

	NACE D	NACE G	NACE J	NACE K	NACE O	Other
B	1553	1596	1800	2019	1316	1462
DK	2083	1499	3019	3388	2311	1948
D	1601	949	2614	2394	909	1059
EL	2371	1637	1131	1974	1216	869
E	1569	1116	2098	1390	1473	1483
F	1524	1036	1980	2104	1614	1720
IRL	1538	1144	1454	1614	1142	1472
I	1979	2471	2737	3708	2823	1658
L	1630	896	2554	2218	1010	877
NL	2072	1430	3628	2666	1543	1856
A	1189	930	1807	1383	582	1052
P	1125	854	2382	2723	1424	1413
FIN	1433	1128	1975	1734	1027	1326
S	1398	1034	1423	1894	1183	1424
UK	1544	853	1436	1914	1127	1059
BG	337	1066	688	674	453	1660
CZ	416	651	1449	1436	589	529
EE	678	1641	1727	2286	305	691
HU	1000	1224	1246	2089	1042	1150
LT	510	602	761	914	230	749
LV	402	864	813	1365	403	786
PL	555	799	523	715	618	558
RO	304	707	1338	785	234	766
SI	376	368	1013	1087	788	631

5.5 The importance of direct costs and personnel absence costs with respect to the total costs for training courses

It has already been pointed out in the introduction to this chapter that three items are to be differentiated when recording costs:

- the direct costs
- the personnel absence costs and
- payments to external parties (contributions to public institutions or other institutions for the joint financing of continuing training programmes, e.g. regional or national funds) or subsidies from external parties for the purposes of continuing vocational training.

The first two cost items are of particular quantitative importance, that is the direct costs, those costs that are directly connected with the running of the courses, and the personnel absence costs for the participants in training courses. The latter are of particular interest and can be understood as ‘opportunity costs for training courses’ that the enterprises incur if the employees are not working productively during participation in training courses but are giving rise to labour costs.

¹⁶ No reliable information according to branches of the economy is available for Norway.

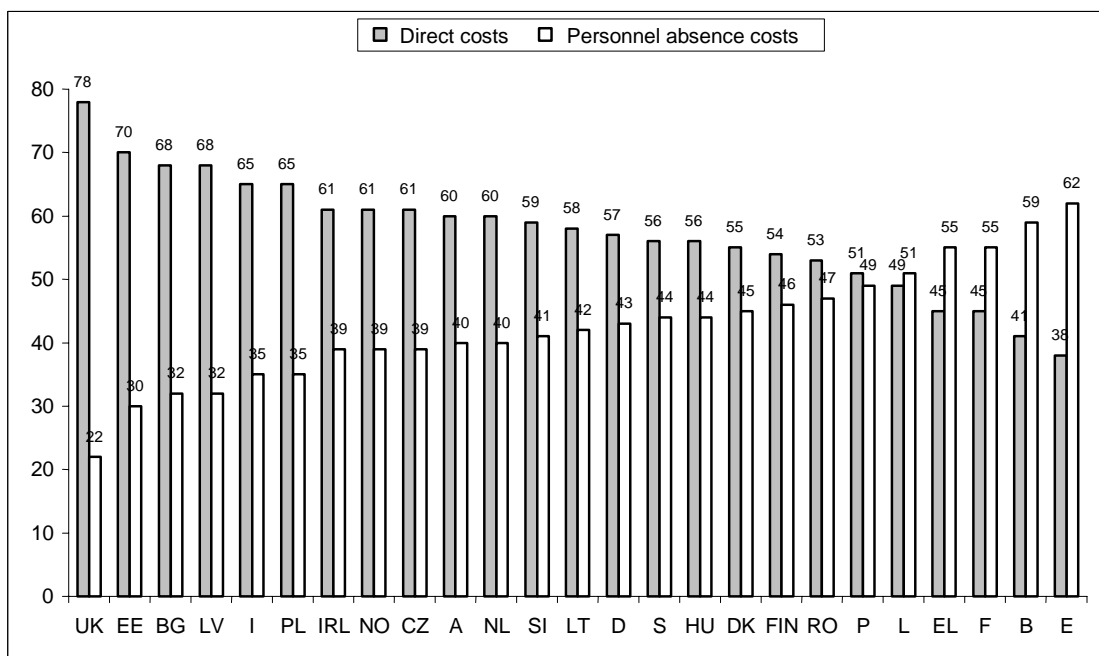
Unlike in the case of direct costs, personnel absence costs do not in all cases constitute direct expenditure by the enterprises. Particularly in the case of measures of short duration and measures for executives and some specialists, enterprises manage to transfer the cost burden to the employees. This is made possible firstly by moving training measures to employees' free time. Secondly, costs are also shifted when the enterprises expect participants in training measures to make up for the working time lost through continuing training by undertaking unpaid work in their free time or by short-term intensification of the employees' own work or that of the team of colleagues.

The proportion of direct costs and personnel absence costs in the total costs per participant¹⁷ differs a great deal in the individual countries (Figure 5.4). Proportions range from 78% direct costs as opposed to 22% personnel absence costs in the United Kingdom to 38% direct costs as opposed to 62% personnel absence costs in Spain.

Personnel absence costs are higher than direct costs in only five of the 25 countries surveyed (Spain 62%, Belgium 59%, France 55%, Greece 55% and Luxembourg 51%).

It will certainly be necessary to undertake more intensive research to establish the reasons for the considerable differences in the cost structures of the individual countries. The structure of the direct costs and the duration of the training measures naturally constitute influencing factors here. The participants' qualification structure, national models for the distribution of costs between the enterprise and employee, the importance and structure of the national or European development instruments and differing levels of national income might be of particular importance.

Figure 5.4: Proportion of direct costs and personnel absence costs in the total costs per participant (% - 1999)¹⁸



¹⁷ Total costs = Direct costs + Personnel absence costs (without transfer payments)

¹⁸ Total costs = Direct costs + Personnel absence costs (without transfer payments)

5.6 Contributions to public or other institutions and receipts from such institutions or funds for the purposes of continuing training

Receipts from national or other financial settlements and contributions to national or regional institutions played a subordinate role with regard to the total costs. However, if these payments are related to the direct costs per participant, that is to say to the enterprises' direct payments for specific continuing training that is on offer, a different picture emerges in some countries.

Table 5.3: Contributions by enterprises to public institutions and other institutions and external receipts in relation to the direct costs per participant (1999)¹⁹

	Contributions per participant (PPS)	% of direct costs		Receipts per participant (PPS)	% of direct costs		Direct costs ²⁰
HU	319	66.0	EL	158	25.3	I	1508
F	261	38.9	E	114	20.8	DK	1249
E	197	35.9	F	112	16.7	UK	984
EL	166	26.6	P	83	11.2	IRL	893
B	89	13.7	I	144	9.6	D	869
UK	86	8.7	FIN	55	7.1	S	819
DK	44	3.5	UK	61	6.2	FIN	770
FIN	18	2.4	S	49	5.9	P	740
RO	7	2.3	SI	17	5.3	EE	725
IRL	19	2.1	HU	23	4.8	BG	718
S	6	0.7	B	28	4.3	A	701
SI	1	0.4	IRL	38	4.3	F	671
I	5	0.4	DK	42	3.4	B	654
A	2	0.4	A	18	2.5	GR	623
D	3	0.3	LV	9	1.8	E	549
PL	1	0.3	D	10	1.1	LV	500
LV	1	0.3	CZ	4	1.1	HU	483
P	2	0.2	RO	3	1.0	PL	386
EE	1	0.1	LT	3	0.7	LT	386
CZ	0	0.1	EE	5	0.6	CZ	372
BG	0	0.0	BG	3	0.4	SI	311
LT	0	0.0	PL	1	0.3	RO	283

Enterprises made contributions to public institutions for the purposes of continuing vocational training to differing extents, but also received subsidies from the state or other authorities. In principle, it was possible to establish that in 1999 the said receipts and contributions played a subordinate role in relation to the direct costs in most countries (Table 5.3).

¹⁹ No information relating to contributions/receipts is available for Luxembourg, the Netherlands and Norway.

²⁰ Enterprises which did not supply information on contribution/receipts have been excluded from this table. There may therefore be slight differences for some countries with respect to direct costs in comparison with Table 5.3.

Hungary was an exception: here the contributions to continuing training funds constituted 66.0% of the direct costs for continuing training courses, while receipts were just under 5%. Although receipts were recorded in all countries, their ratio to the direct costs was greater than 10% in only four countries (Greece 25.3%, Spain 20.8%, France 16.7% and Portugal 11.2%).

Five countries were above the 10% threshold where payments were concerned. Three of them, France, Spain and Greece, were among the leading recipients of subsidies. The other two were Hungary, already mentioned, with 66.0%, and Belgium, with 13.7%. Two countries with relatively high subsidies, Portugal and Italy, came low in the ranking order for contributions, with 0.2% and 0.4% respectively.

5.7 Structure of the direct costs (types of costs) of training courses

When examining the direct costs for training courses, that is to say only those costs that are directly connected with the running of training courses, the following cost items can be distinguished:

- Fees/payments to external training providers and external training staff
- Travel costs, expenses and daily allowances
- Labour costs for internal training personnel who were exclusively or partially occupied with the conception, organisation and running of the training courses and
- Costs for rooms (including training centres) and equipment/fittings and costs of materials.

Table 5.4 gives a breakdown in percentages of the direct costs.²¹

In all countries with the exception of the United Kingdom, 'Fees/payments' made up the greatest proportion of direct costs for training courses. This proportion was particularly high in Hungary (80%), Estonia (73%) and the Netherlands (72%). It was only in the United Kingdom that the proportion for 'Labour costs for internal training staff' was highest, at 43%. The proportion for 'Labour costs for internal training staff' was also relatively high in Ireland (39%), France (35%), Luxembourg (33%) and Spain (32%). In most countries (15 countries) a proportion of less than 15% was recorded for 'Travel costs, expenses and daily allowances'; it was only in Bulgaria, with 39%, that it was exceptionally high, and in Romania and Greece it exceeded 20% in each case.

Expenditure on rooms and equipment/fittings for them (media etc.) were even lower than the amounts recorded for travel costs relating to training courses. Double-figure percentages were recorded here in four countries only (the Czech Republic 19%, the United Kingdom 16% and Germany and Denmark, both with 11%).

If the assumption is made that the main costs for external training courses are usually fees and travel costs, and that internal training courses are characterised by costs for internal training personnel and rooms²², it is possible to make some statements on the relative importance of training offered externally in comparison with the internal infrastructure in the individual countries. Thus, from the point of view of expenditure, internal training courses are of little significance in Bulgaria (8%), Hungary (13%), Estonia (14%), Latvia (16%), Lithuania (17%), Denmark (17%) and Slovenia (19%).

Internal continuing training has great significance in terms of expenditure in the United Kingdom (59%), Ireland (42%), Spain (40%), Luxembourg (40%), France (36%) and Germany (35%).

²¹ No reliable information is available for Belgium and Norway.

²² In individual cases, there may also be travel costs for internal training courses or costs for rooms for external training courses.

A question which should be examined in more in-depth analyses is whether national differences in enterprises' 'outsourcing strategies' or different state strategies are the cause of the differences.

Table 5.4: Structure of the direct costs of training courses (% - 1999)²³

	Fees and payments to external parties	Travel and accommodation costs	Labour costs for internal trainers (full- and part-time)	Costs for rooms/ equipment + fittings/media
DK	63	19	6	11
D	51	14	24	11
EL	46	21	24	9
E	49	12	32	8
F	57	6	35	1
IRL	53	5	39	3
I	63	9	22	6
L	47	13	33	7
NL	72	6	18	4
A	64	14	13	9
P	67	9	20	5
FIN	61	18	15	6
S	64	11	20	4
UK	32	9	43	16
BG	54	39	5	3
CZ	60	10	10	19
EE	73	13	10	4
HU	80	7	8	5
LT	67	16	11	6
LV	65	18	10	6
PL	60	19	16	4
RO	50	24	18	8
SI	69	13	16	3

5.8 Proportion of total costs for training courses out of labour costs

As already mentioned, the total costs for training courses are the sum of direct costs, personnel absence costs and the balance from contributions to national or regional vocational training funds and receipts from national or other financial settlements.

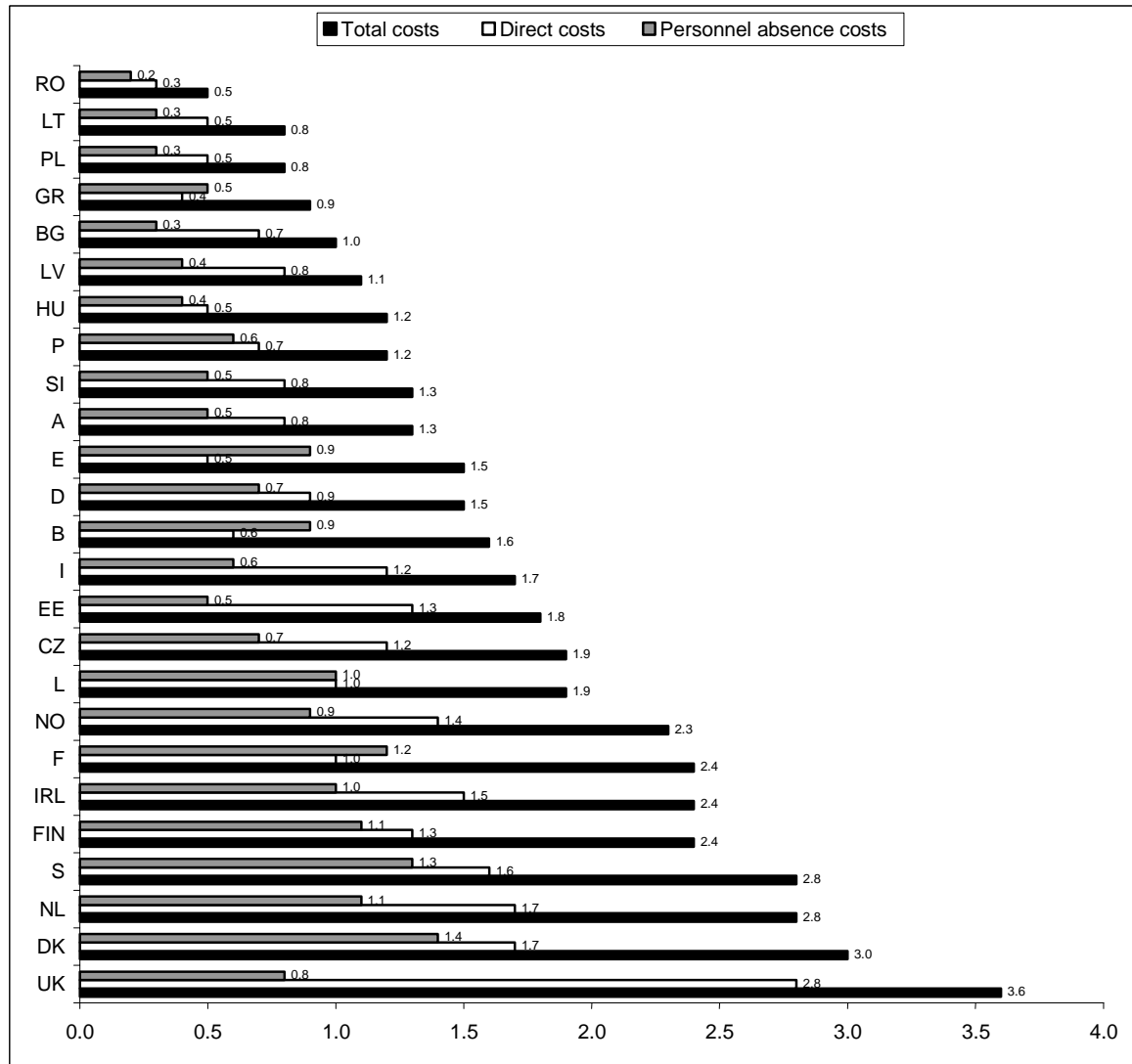
In 1999, the proportions of these total costs for training courses out of the labour costs of all enterprises ranged from 0.5% in Romania to 3.6% in the United Kingdom²⁴ (Figure 5.5). The proportions of the direct costs for training courses out of the labour costs varied between 0.3% in

²³ No reliable information is available for Belgium and Norway.

²⁴ As a result of the lack of indirect labour costs in the information relating to the overall labour costs, the training costs for the United Kingdom are not comparable with those of other countries.

Romania and 2.8% in the United Kingdom. In addition, the proportion of personnel absence costs was lowest in Romania (0.2%) and highest in Denmark (1.4%).

Figure 5.5: Costs of training courses as a proportion of the total labour costs of all enterprises, according to type of cost (% - 1999)



In all countries, with the exception of the United Kingdom, the proportion of the total costs for training courses out of the labour costs was higher in large enterprises than in small enterprises (or, in Estonia and Latvia, at least at the same level).²⁵

The distribution of the proportions of the total costs for training courses in the labour costs of all enterprises according to branches of the economy is illustrated in Table 5.5. In more than half of the countries, the highest proportion of costs for training courses out of the labour costs was to be found in the branch of the 'Credit and insurance industry' (J). It amounted to between 1.1% in Romania and Bulgaria and 5.4% in the Netherlands. In the 'Processing industry' (D), Romania

²⁵ No reliable information according to size classes is available for Norway.

and Bulgaria were once again at the bottom of the scale, this time with a proportion of 0.3%, while the United Kingdom, with 3.6%, topped the list. In the branch of ‘Trade in and maintenance/repair of motor vehicles and consumer goods’ (G), in Romania the costs for training courses made up 0.2% of the total labour costs; this proportion is surprisingly very high in Estonia, at 3.7%, in comparison with the other countries.

In nine countries (Denmark, the United Kingdom, Luxembourg, Sweden, Finland, Italy, Germany, Belgium and Hungary), the branch of ‘Real estate activities, renting of movable property, provision of services predominantly for enterprises’ (K) exhibited the highest proportion of total costs for training courses out of the labour costs. In these countries, the proportion in question ranged from 2.1% in Hungary to 5.3% in Denmark. In Ireland, the highest proportion of the costs for training courses out of the labour costs was to be found for the branch of ‘Provision of other public and personal services’ (O), with 2.8%.

Table 5.5: Proportion of the total costs of training courses in the total labour costs of all enterprises according to branches of the economy (% - 1999)²⁶

	NACE J	NACE D	NACE G	NACE K	NACE O
NL	5.4	2.3	2.2	3.5	2.1
CZ	5.0	1.4	1.4	3.3	1.2
EE	4.8	1.0	3.7	1.9	0.3
DK	4.4	2.6	2.0	5.3	4.1
A	3.7	1.1	1.3	1.4	0.4
F	3.3	2.0	1.8	2.8	1.9
UK	3.2	3.6	3.5	5.2	1.4
FIN	3.1	2.1	2.0	3.4	2.3
S	3.0	2.6	2.0	3.5	2.3
LV	2.9	0.5	1.2	1.6	0.5
I	2.8	1.2	1.5	3.1	1.3
P	2.6	1.0	1.0	2.0	0.8
SI	2.6	1.2	0.7	2.0	0.6
E	2.5	1.4	1.3	1.5	1.1
L	2.5	1.9	1.5	4.5	1.1
D	2.5	1.3	0.9	2.6	0.8
IRL	2.0	2.6	1.4	2.4	2.8
B	2.0	1.5	1.4	2.3	1.5
PL	1.7	0.8	0.9	1.2	0.3
HU	1.7	0.9	1.1	2.1	0.9
LT	1.6	0.6	0.5	1.1	0.2
EL	1.4	1.2	1.0	1.0	0.5
RO	1.1	0.3	0.2	0.6	0.4
BG	1.1	0.3	0.7	0.4	0.3

²⁶ No reliable information according to branches of the economy is available for Norway.

6. QUALITATIVE QUESTIONS RELATING TO CONTINUING TRAINING IN ENTERPRISES

In the continuing training survey, special emphasis was placed on recording quantitative indicators for continuing training in enterprises. Both in CVTS 1 and in the current survey, a few supplementary questions were asked with regard to the structuring of the content of continuing training in enterprises. The responses to these questions are intended to give information on the degree of professionalisation of continuing training in enterprises. These question complexes related to:

- the determination of requirements (future personnel and qualification requirements and the qualifications and training requirements of individual employees)
- the instruments for carrying out continuing training in enterprises (continuing training planning and budget for continuing training)
- the use of evaluation tools.

The qualitative indicators used to date in European surveys on continuing training in enterprises form a good basis for developing an overall concept for measuring the professionalism of continuing training in enterprises; it should be borne in mind that, for use within the scope of statistical comparative surveys, this concept should be limited to a few key structural questions which must also be suitable for use in international comparisons. The important factors in this connection are the level of goal formulation (currently analysis of qualification requirements of workplaces or of the individuals' training requirements), indicators for the 'input quality' of the continuing training measures (currently the use of plans and continuing training budgets) and indicators for measuring success (currently enquiries regarding forms of systematic measurement of success).

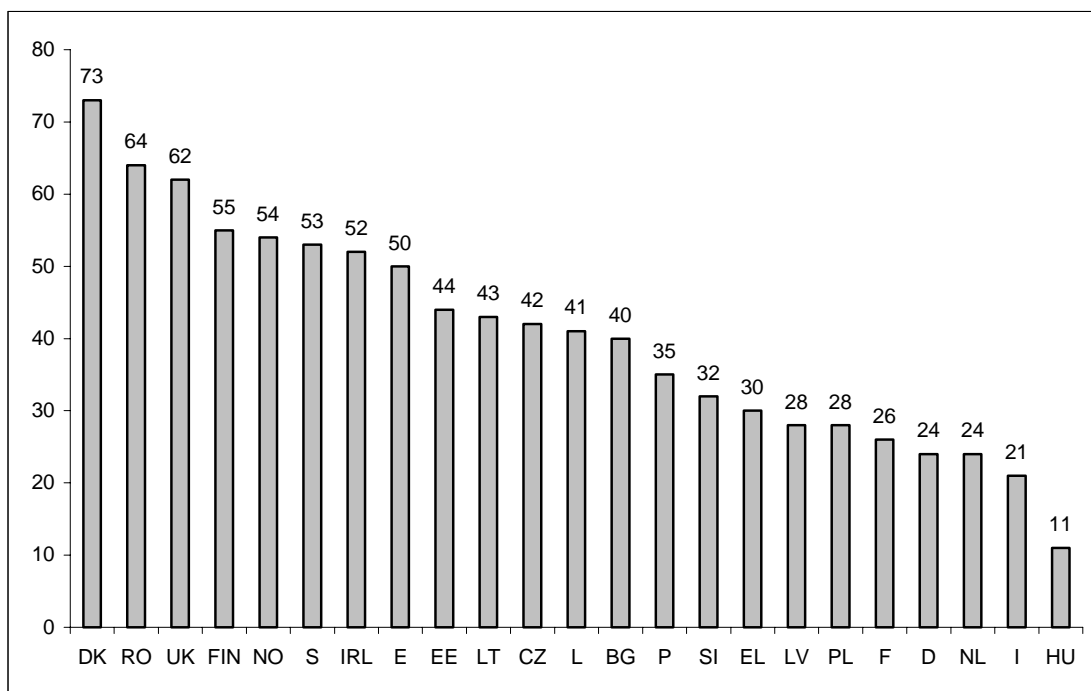
The following text presents the responses to the questions hitherto incorporated in the survey; in the case of tools for measuring 'input quality' in particular, the extent to which differences in the frequency of use of certain indicators may possibly indicate quality differences in the respective continuing training systems when transnational comparisons are made still needs to be examined, as does the related question of whether the fulfilment of specific conditions to attain national or European subsidies is the reason for significant differences.

6.1. Analysis of future personnel and/or qualification requirements

As can be seen from Figure 6.1, there are eight countries in which at least 50% of enterprises determine requirements (Denmark, Romania, the United Kingdom, Finland, Norway, Sweden, Ireland and Spain).

The great differences between individual applicant countries in the use of personnel and/or qualification requirements analyses are striking. For example, Romania, which has the smallest proportion of training enterprises in Europe, is in second place in terms of enterprises that carry out requirement analyses, with 64%, whereas the comparable figure in Hungary is only 11%. Hungary's figure here is the lowest for any country. The differences between the EU Member States are also fundamental. More than 50% of enterprises in the countries of Northern Europe determine training requirements, while this tool is used relatively infrequently in France, the Netherlands, Germany and Italy (the figures range between 21% and 26%).

Figure 6.1: Proportion of all enterprises that determine their future personnel and/or qualification requirements (% - 1999)²⁷



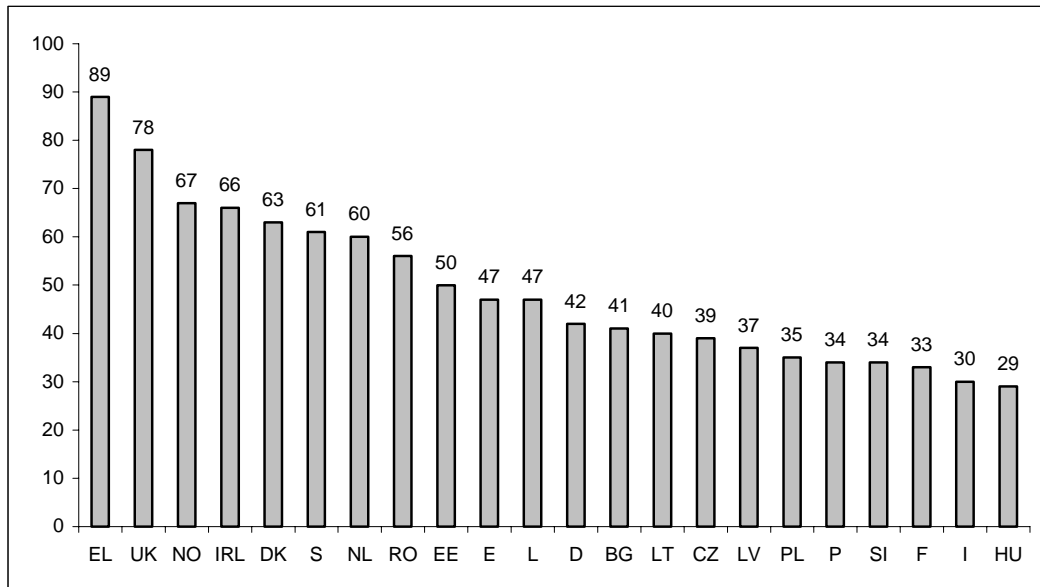
Overall, the expected positive connection between the size of the enterprise and the frequency of requirements analyses is found to exist. In countries in which requirements analyses are less frequent (with a proportion of less than 40%), the interval between small enterprises (10 to 49 employees) and large enterprises (250 or more employees) is usually very large. In these countries, with the exception of France and Latvia, the difference between small and large enterprises is more than 30%. In Hungary, for example, the figure for small enterprises is 7% and that for large enterprises is 50%, while in Denmark, by way of comparison, 70% of small enterprises and 91% of large enterprises carry out requirements analyses.

6.2. Determining the qualifications and training requirements of individual employees

Enterprises in Greece and the United Kingdom determine the qualifications and training requirements of their employees significantly more frequently than those in the other countries (with respective figures of 89% and 78%). Three Scandinavian countries are also to be found in the top third of countries (with figures ranging between 67% in Norway and 61% in Sweden). Hungary also has the lowest figure for any country (29%) for individual requirements analyses (Figure 6.2).

²⁷ No reliable information for Austria and Belgium due to the high proportion of information that has not been supplied for this variable.

Figure 6.2: Proportion of all enterprises in which the qualifications and training requirements of employees are determined (% - 1999)²⁸



In almost all countries, medium-sized and large enterprises (enterprises with 50 or more employees) determine the qualifications and training requirements of their employees significantly more frequently than small enterprises. It is only in Greece that this connection does not exist; here, the largest proportion is to be found in small enterprises.²⁹

6.3. Drawing up plans for continuing training in enterprises

In the United Kingdom, the largest number of enterprises by some way (64%) carry out their continuing training on the basis of plans. Plans are also encountered relatively frequently in enterprises in Ireland (42%), France (41%) and Slovenia (38%).

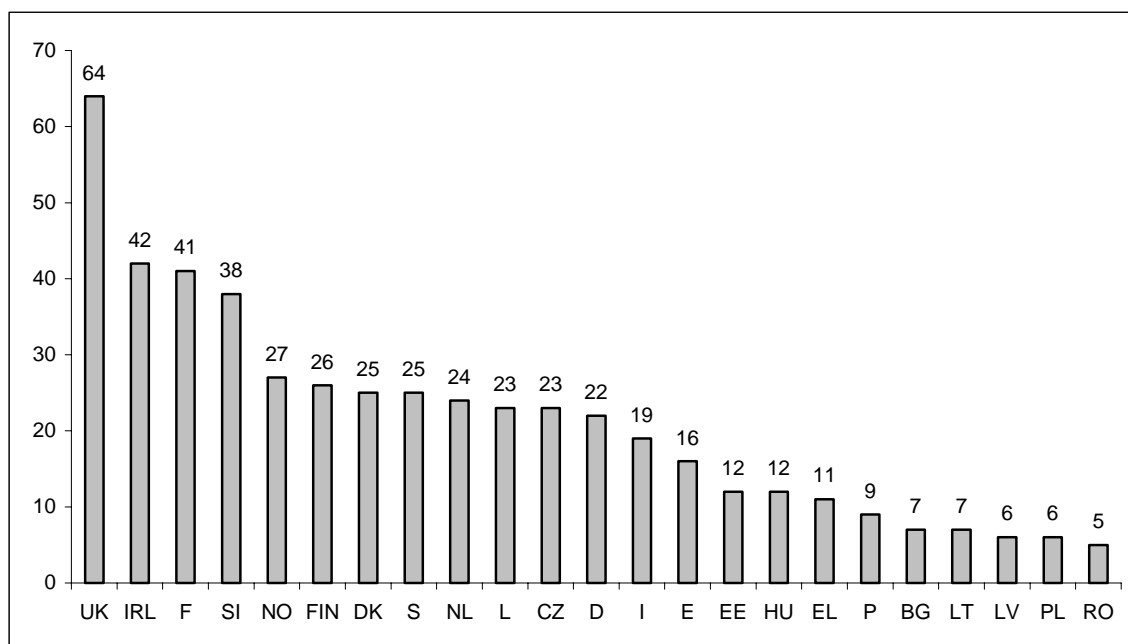
In Greece, Portugal and the applicant countries, with the exception of the Czech Republic and Slovenia, less than 15% of enterprises have a written continuing training plan (Figure 6.3).

Figure 6.3: Proportion of enterprises with a continuing training plan (% - 1999)³⁰

²⁸ No reliable information for Austria, Belgium and Finland due to the high proportion of information that has not been supplied for this variable.

²⁹ No reliable information for Austria, Belgium and Finland due to the high proportion of information that has not been supplied for this variable.

³⁰ No reliable information for Austria and Belgium due to the high proportion of information that has not been supplied for this variable.



When interpreting the findings, it should be borne in mind that proof of written plans is a precondition for national or European financing mechanisms, or is a mandatory rule within the framework of regulations relating to collective pay agreements.

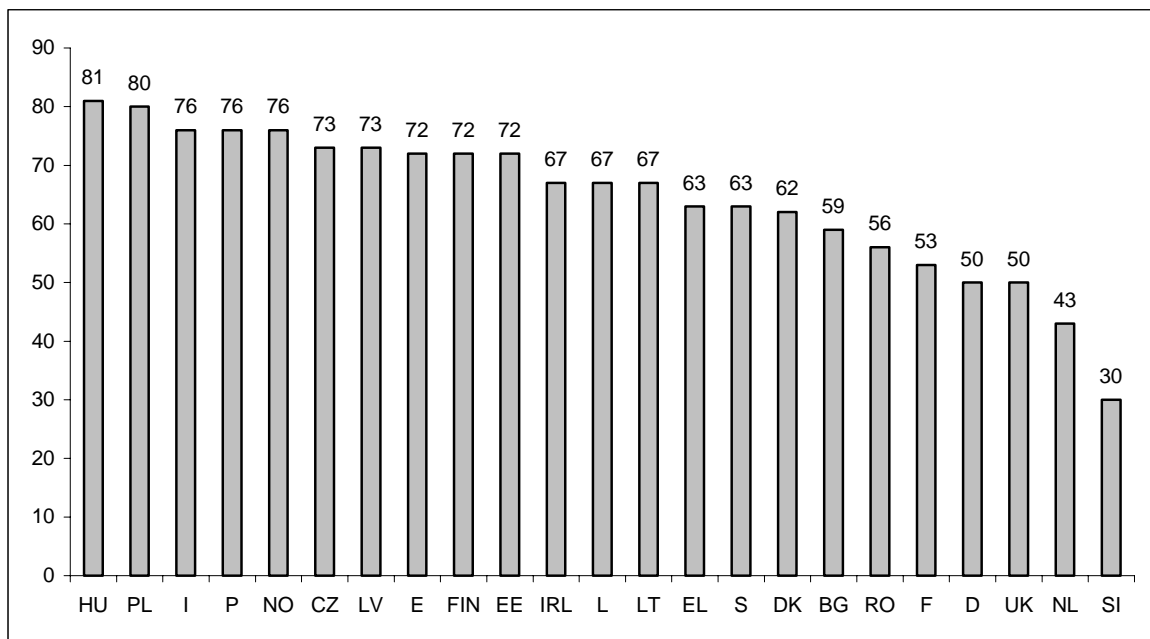
In all countries, the proportion of enterprises with a training plan increases with the size of the enterprise. The gap between small enterprises and large enterprises is relatively large in most countries; the largest differences, of 60 percentage points or more, are to be found in Finland, France, Slovenia and Spain.

The most frequent reason for the lack of a training plan by enterprises which do not have one was that it was unnecessary to draw up a training plan (Figure 6.4). This was the answer given by 50% or more of enterprises in all countries with the exception of two of them.³¹

Figure 6.4: Proportion of enterprises without a training plan which stated their reason to be that it was not necessary to draw up a continuing training plan (% - 1999)³²

³¹ No reliable information for Austria and Belgium due to the high proportion of information that has not been supplied for this variable.

³² No reliable information for Austria and Belgium due to the high proportion of information that has not been supplied for this variable.



If the other possible answers are considered, a very complex picture emerges (Table 6.1):

- A few applicant countries are primarily in agreement with the statement that continuing vocational training is the individual responsibility of the employee and should take place in free time; the list is headed by Bulgaria (32%), Lithuania (25%), Latvia (23%) and Romania (22%). This reason is mentioned very infrequently in Norway (1%) and Sweden and Poland (3% each).
- More than half of the French enterprises that do not have continuing training plans (58%) stated that continuing vocational training measures were only offered when requested by the employees or superiors. Obviously the plans referred to here are individual continuing training plans for individual employees. A similar supposition is also to be made with regard to the relatively high figures in Denmark (42%) and Bulgaria (27%). Enterprises in Italy and Portugal (5% in each case) and Hungary (9%) chose this reason least often.
- Enterprises in France (38%), one of the countries with statutory national regulations on continuing training, in the United Kingdom (30%) and in Denmark (26%), a country which is a leader in the field of continuing training in enterprises, are most afraid of the time required to draw up continuing training plans. The time needed is not an argument in most of the applicant countries, such as Poland (3%), Lithuania (4%) and Hungary, Latvia and Slovenia (each with 6%).
- Those running enterprises in France referred most often to insufficient experience in enterprises in drawing up continuing training plans (33%), possibly a reference to an excessively high administrative burden in the implementation of statutory national regulations on continuing training. The corresponding figure is also in double digits in the United Kingdom (17%), Greece (15%) and five other countries. Enterprises in the Czech Republic (2%), in Bulgaria and Poland (3% in each case) and Slovenia (4%) have hardly any problems in this area.

- In Slovenia (54%), France (25%) and the Netherlands (22%), there was a large proportion of enterprises that referred to other reasons for the non-existence of plans; these reasons should be investigated in the future.

Table 6.1: Proportion of enterprises without a continuing training plan according to reasons for not having set up a continuing training plan (% - 1999)³³

Continuing vocational training is the individual responsibility of the individual employee. He/she should use his/her free time for it.		Continuing vocational training is only offered when requested by employees or superiors.		Drawing up a continuing training plan is too time-consuming		Experience in the enterprise was not sufficient to be able to draw up a continuing training plan		Other reasons	
BG	32	F	58 ^r	F	38 ^r	F	33 ^r	SI	54
LT	25 ^r	DK	42 ^r	UK	30	UK	17	F	25 ^r
LV	23	BG	27	DK	26 ^r	EL	15 ^r	NL	22
RO	22	NL	25	EL	24 ^r	FIN	14	IRL	16
D	16	CZ	22 ^r	NL	24	RO	14	HU	15
F	14	D	21	S	24	IRL	13	UK	15
UK	13	L	19	FIN	23 ^r	NL	11	S	13
SI	12	S	19	L	21	E	10	EL	12 ^r
EL	11 ^r	FIN	18 ^r	IRL	20	D	9	P	10
CZ	11 ^r	EE	17	E	18	NO	9	FIN	10 ^r
L	10	E	15	I	18 ^r	EE	9	E	9
EE	9	UK	15	D	12	I	8 ^r	CZ	8
HU	8	RO	15	RO	12	L	7	D	8
E	7	EL	12 ^r	P	11	S	7	EE	8
FIN	7	IRL	12	EE	9	LV	7	NO	8
NL	7	PL	12	NO	8	LT	6	BG	6
DK	6 ^r	SI	12	BG	7	DK	5 ^r	I	5
IRL	6	LT	11	CZ	7	P	5	PL	5
I	5	LV	11	HU	6	HU	5	RO	5
P	4	NO	10	LV	6	SI	4	L	3
PL	3	HU	9	SI	6	BG	3	LT	1
S	3	I	5	LT	4	PL	3	LV	1
NO	1	P	5	PL	3	CZ	2	DK	0

6.4. Special training budgets for continuing training in enterprises

In France (55%) and Sweden (49%), a particularly high proportion of enterprises have a budget earmarked for continuing vocational training. Since in the case of the statutory vocational

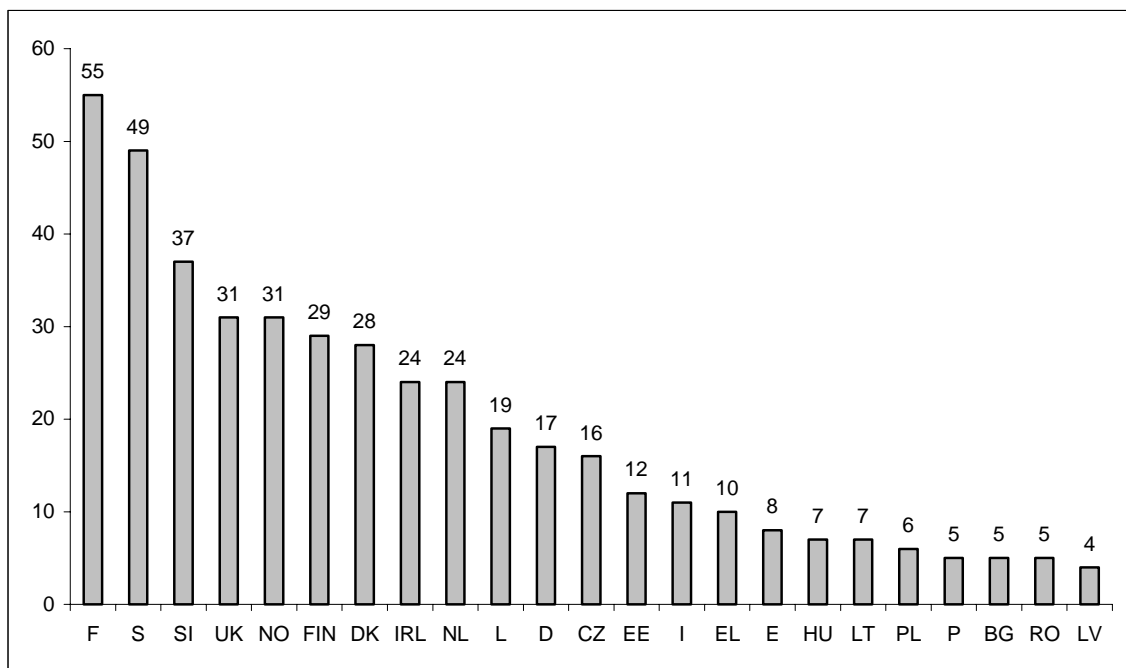
³³ No reliable information for Belgium and Austria due to the high proportion of information that has not been supplied for this variable. The figures marked with 'r' have been revised by Eurostat.

training tax in France the costs of a continuing vocational training programme can be offset against the tax, this is hardly a surprising result. The figures for Sweden and the leading positions occupied by the other Scandinavian states in the responses to this question (Norway in 4th place, Finland in 6th place and Denmark in 7th place) also indicate that in these cases the quantitative importance of continuing vocational training also finds its expression in the enterprises' accounts (Figure 6.5).

It is not surprising that in the applicant countries, in which continuing vocational training is comparatively insignificant, there is also only a low proportion of enterprises with a continuing training budget. This is the case in Latvia (4%), Bulgaria and Romania (5% each), Poland (6%), Lithuania and Hungary (7% each). In the EU Member States, only the countries of Southern Europe have a similarly small number of enterprises with a budget for continuing training (Portugal has 5%, Spain 8%, Greece 10% and Italy 11%).

On the other hand, Slovenia stands out clearly among the applicant states, with 37%.

Figure 6.5: Proportion of enterprises with a training budget (% - 1999)³⁴



In all countries, the proportion of enterprises with a training budget increases with the size of the enterprise (in Bulgaria the proportions for small and medium-sized enterprises are equally low, at 4% each). Great differences can be observed between the individual countries within the classes of enterprise size. The range spanned by the figures for the availability of a training budget is very large in the case of medium-sized enterprises, varying between 4% in Bulgaria and 72% in Sweden. Six applicant countries have values of 15% or less. In small enterprises with from 10 to 49 employees, the figures range from 3% in Latvia, Portugal and Romania to 48% in France.

³⁴ No reliable information for Austria and Belgium due to the high proportion of information that has not been supplied for this variable.

Among the large enterprises, in most countries more than 50% of enterprises have a special training budget; the exceptions are Portugal, Hungary, Poland, Lithuania, Latvia, Romania and Bulgaria, where the figures for large enterprises are all below this mark. All in all, the figures range from 19% in Bulgaria to 91% in Slovenia.³⁵

6.5. Systematic measurement of success for continuing training courses

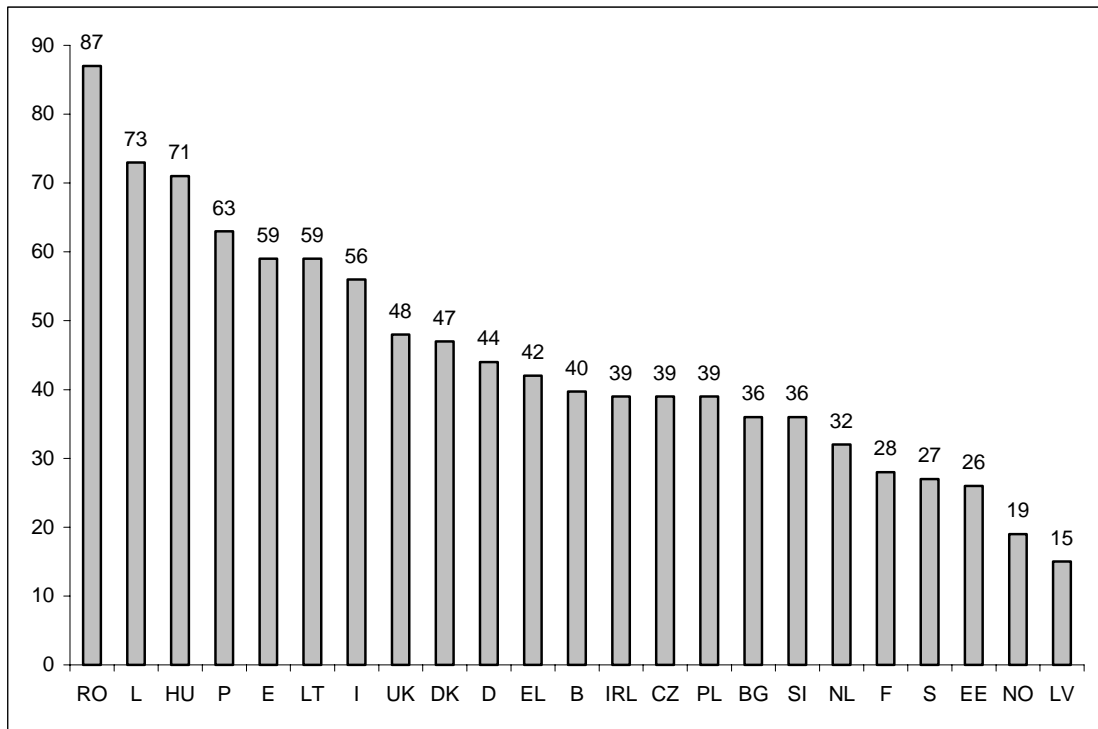
There is also considerable variation between the individual countries in the responses given with regard to the importance of systematic measurement of success in enterprises with training courses. It is very difficult to give more wide-ranging interpretations without a more in-depth knowledge of the structural and legal framework conditions for continuing vocational training in the EU Member States.

Romania has the highest figure (87%), but it refers only to the 7% of Romanian enterprises that offer vocational training courses. At the bottom of the scale, as well as Latvia and Estonia, are the countries which offer the greatest amount of training courses: Sweden (83%), Norway (81%), the Netherlands (82%) and Finland (75%).

An intermediate group contains some countries with a high proportion of enterprises that run training courses, such as Denmark (88%), Germany (67%) and the Czech Republic (61%). Between 47% and 39% of enterprises there systematically measure the success of their training courses (Figure 6.6).

³⁵ No reliable information for Belgium and Austria due to the high proportion of information that has not been supplied for this variable.

Figure 6.6: Enterprises that evaluate training courses (% - 1999)³⁶



There is a clear connection between the ratio of enterprise size and the systematic examination of the success of continuing training measures by enterprises. In almost all countries, the use of evaluation of continuing training measures rises in parallel with the size of the enterprise; it is only in Bulgaria and Luxembourg that the use of evaluation in small enterprises is slightly above that in medium-sized enterprises. In Lithuania and Romania, the proportions for small and medium-sized enterprises are equal. In most countries, the difference between the figure for small enterprises and that for large enterprises is actually very great. The largest differences between small and large enterprises are to be found in Ireland (55 percentage points), France (49 percentage points), the Czech Republic (46 percentage points) and Denmark (45 percentage points); in Romania the difference amounts to only 2 percentage points.³⁷

In Romania, where 87% of enterprises that run training courses evaluate them, they concentrate on measuring the application of capabilities achieved by attending training courses in the workplace (69%). The tool most frequently used to examine the success of training courses is the assessment of the measures by employees. In all countries – except for Romania and Poland – the figures exceed 50%. Formal certification of the qualifications awarded is particularly important in the Netherlands (74%) and Poland (68%), whereas this method is seldom used in Italy (16%) and

³⁶ No reliable information for Finland and Austria due to the high proportion of information that has not been supplied for this variable.

³⁷ No reliable information for Austria and Finland due to the high proportion of information that has not been supplied for this variable.

Sweden (15%). A further tool which is frequently used is checking the utilisation of the new qualifications in the workplace. 16 countries recorded figures of 50% or above here.

Table 6.2: Enterprises that evaluate continuing training courses: type of evaluation (% - 1999)³⁸

Assessment of the measures by the employees (satisfaction)		Tests to achieve the goals of the measures		Formal certification of the qualifications awarded		Checking the utilisation of the new qualifications in the workplace		Calculation of indicators that indicate an improvement in work achievements		By other methods	
UK	88	UK	51	NL	74	I	72	UK	31	DK	19
F	84 ^r	F	48 ^r	PL	68	UK	72	I	30	S	17
IRL	76	EL	44	UK	61	RO	69	LT	25	F	12 ^r
EE	76	RO	43	SI	51	EE	68	SI	25	SI	11
P	73	BG	38	BG	50	PL	67	IRL	24	IRL	10
B	69	L	36	NO	47 ^r	HU	66	EE	21	B	8
DK	69	IRL	33	E	45	CZ	63 ^r	L	19	NL	7
L	69	S	31	L	44	IRL	59	HU	19	NO	7 ^r
S	66	SI	30	LV	42	LV	59	F	18	D	6
D	65	CZ	25 ^r	IRL	41	D	58	B	16	BG	5
E	64	LV	25	LT	39	F	57 ^r	NO	16	E	4
SI	63	NO	24 ^r	EL	38	L	55	DK	15	UK	4
LT	61 ^r	HU	24	CZ	37	P	55	EL	14	EE	4
EL	58 ^r	B	23	RO	37	B	54	E	13	HU	4
HU	57	D	21	F	30	LT	51	LV	13	P	4
I	56	P	21	D	27	E	50	PL	13	EL	3
CZ	56	DK	19	DK	26	SI	48	D	11	CZ	3
NO	53 ^r	PL	18	EE	26	EL	44	P	11	I	2
BG	53	I	17	HU	26	NO	41 ^r	S	10	RO	2
LV	52	NL	16	P	25	S	39	RO	10	L	0
NL	51	E	12	B	20	DK	35	BG	8	LT	0
RO	37	EE	12	I	16	NL	32	NL	7	LV	0
PL	29	LT	12	S	15	BG	31	CZ	6	PL	0

Most enterprises that do not carry out evaluations do not believe that they are a priority matter, an answer that scarcely leaves room for further analyses. In the applicant countries Bulgaria, Lithuania and Poland, on the other hand, evaluation is most frequently regarded as too difficult, and in the United Kingdom and Sweden as too time-consuming. In Slovenia, the largest proportion of enterprises opted for the answer 'Other reasons' (Table 6.3).

³⁸ No reliable information for Finland and Austria due to the high proportion of information that has not been supplied for this variable. The figures marked with 'r' have been revised by Eurostat.

Table 6.3: Reasons given by enterprises that do not evaluate continuing training courses (% - 1999)³⁹

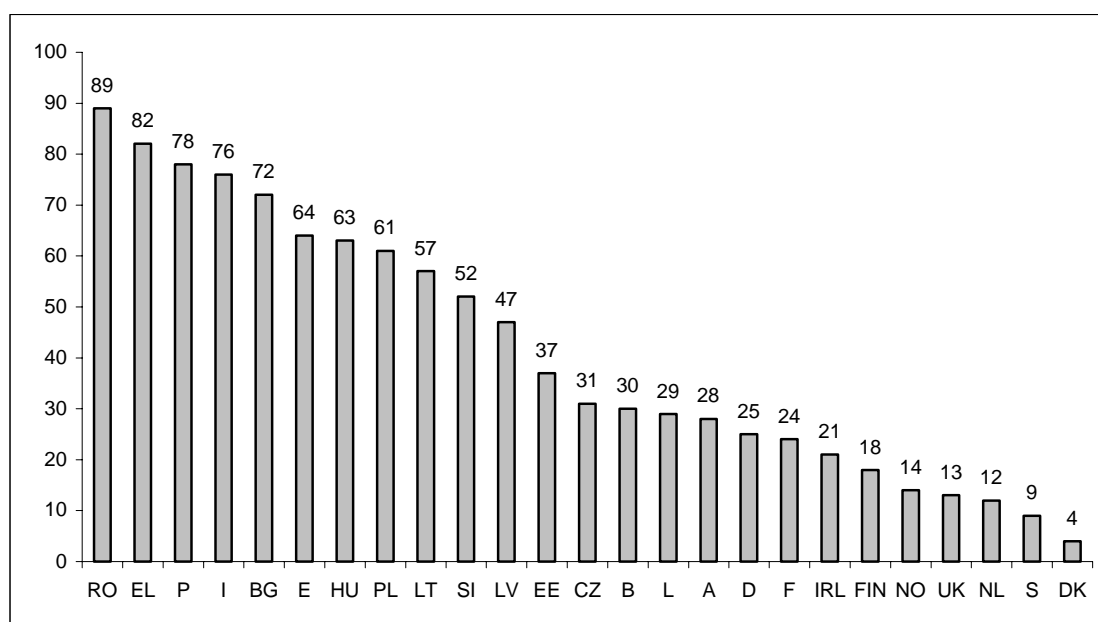
	Not a priority matter	Too expensive	Too time-consuming	Too difficult (to get reliable/conclusive results)	Resistance among employees	Other reasons
B	50	4	20	16	3	10
DK	55 ^r	2	13 ^r	5	0	24 ^r
D	31	13	22	29	0	5
EL	35 ^r	7 ^r	17 ^r	33 ^r	3 ^r	6 ^r
E	57	5	20	26	8	7
F	46	3	28	7	2	14
IRL	62	3	33	20	0	5
I	37	9	24	18	5	12
L	66	2	14	17	0	2
NL	63	3	17	6	1	11
P	53	3	1	28	4	11
S	22	3	36	20	1	19
UK	23	7	39	15	1	14
NO	45 ^r	5 ^r	9	36 ^r	1	12 ^r
BG	29	11	15	36	0	10
CZ	45	6	16	20	2	11
EE	59	6	5	25	1	3
HU	51	5	10	26	3	6
LT	27 ^r	11	20	37 ^r	4	1
LV	55	12	11	19	1	1
PL	12	14	14	46	4	11
RO	60	6	7	10	1	17
SI	29	6	15	17	5	37

³⁹ No reliable information for Finland and Austria due to the high proportion of information that has not been supplied for this variable. The figures marked with 'r' have been revised by Eurostat.

7. NON-TRAINING ENTERPRISES

The proportion of enterprises that did not carry out either training courses or any other forms of continuing training in 1999 ranged from 4% in Denmark to 89% in Romania (Figure 7.1).

Figure 7.1: Proportion of all enterprises that are non-training enterprises (% - 1999)



It had already become clear in connection with the first European Continuing Vocational Training Survey that the question of carrying out continuing training measures is not a decision that all non-training enterprises make on principle. About every fourth enterprise in the EU that had not carried out any continuing training measures in 1993 was able to refer to measures of this kind that it had carried out in the past two years.

According to the results of the new survey, the proportion of non-training enterprises that had carried out continuing training measures in the past two years is significantly smaller and worth mentioning primarily in the United Kingdom (49%), as well as in Hungary (23%), the Netherlands and Estonia (19% each), in Norway (14%) and Sweden (10%). In all other countries, less than 10% of non-training enterprises offered continuing training in the previous two years.⁴⁰

On the other hand, in 1999 non-training enterprises primarily in Luxembourg (92%), France (56%), Norway (51%), Slovenia (48%), the United Kingdom and Estonia (44% each), Lithuania, Spain and the Netherlands, with 42%, and Portugal, Romania and Sweden, with 41% each, considered it to be certain or at least probable that they would run training courses in 2000/2001. Only in Ireland (14%), Germany (12%) and especially in Italy (6%) was this proportion significantly smaller.⁴¹

⁴⁰ No reliable information is available for France, Austria and Belgium.

⁴¹ No reliable information is available for Austria, Belgium and Denmark.

For example, 'other' forms of continuing vocational training were planned by the following proportions of non-training enterprises in the following countries: Luxembourg 92%, Portugal 50%, Slovenia 47%, Lithuania and the United Kingdom 46%, Spain 45% and Romania 41%. These countries were closely followed by Latvia, Estonia and Greece (40%, 39% and 38%). In a further three countries (the Netherlands, Norway and Sweden) this proportion was 34%; in Ireland, Germany and Italy, at 12%, 11% and 3% respectively, it was very small in comparative terms.⁴²

In 1999 the most important reason for enterprises not carrying out any continuing training measures was the fact that the capabilities possessed by the employees corresponded to the enterprise's needs. The proportion of enterprises making this statement ranged from 54% in Lithuania to 90% in Denmark (Table 7.1).

Many non-training enterprises also referred to the possibility of recruiting the employees with the necessary qualifications from the labour market; this was the case especially for Denmark (86%), Ireland (77%) and the applicant countries of Bulgaria (71%) and Hungary (70%), while this argument was cited comparatively rarely by enterprises in Austria (9%) and Italy (18%).

Further important reasons for not carrying out any continuing training were the possibility of gaining suitable employees through the normal process of vocational training in enterprises (particularly in Denmark, with 67%, the United Kingdom, with 47%, and Belgium and Romania, with 40% each) and that employees were fully occupied (especially in France, with 55%, in Denmark, with 38%, in Finland, with 30%, and in Austria and Germany, with 28% each).

The presumed high costs of continuing training were cited primarily by non-training enterprises in the applicant countries (the figure for Lithuania was 45%, that for Estonia was 41%, in Poland and Bulgaria it was 37% and Romania 29%) as a reason for not carrying out any continuing training. It was noticeable that there was a relatively high proportion of non-training enterprises in Denmark (44%) that stated that it was too difficult to assess the enterprise's requirements. In Belgium, 24% of enterprises stated that they had carried out continuing training measures only a short time ago.

⁴² No reliable information is available for Austria, Belgium and Denmark.

Table 7.1: Proportion of non-training enterprises according to reasons for their decision not to carry out any continuing training (% – 1999)⁴³

Capabilities of employees correspond to enterprise's needs		New appointment of qualified employees		The costs for continuing vocational training measures are too high		Full occupation of employees does not allow any continuing training		Continuing training was carried out only a short time ago; not needed in 1999		It was too difficult for the enterprise to assess continuing training requirements		vocational training in the enterprise is sufficient to recruit the necessary qualifications		Other reasons	
DK	90 ^r	DK	86	LT	45	F	55 ^r	B	24	DK	44 ^r	DK	67 ^r	SI	27
IRL	89	IRL	77	EE	41	DK	38 ^r	F	9 ^r	UK	30 ^r	UK	47 ^r	A	22
CZ	86	BG	71	BG	37	FIN	30 ^r	UK	9 ^r	F	23 ^r	B	40	NO	16 ^r
L	83	HU	70	PL	37	D	28	A	8	NO	20 ^r	RO	40	F	14 ^r
HU	83	UK	69 ^r	RO	29	A	28	NL	6	I	17	HU	39	NL	13
BG	82	RO	63	D	28	L	27	S	6	IRL	13	IRL	36	DK	12 ^r
PL	82	FIN	60 ^r	S	24	E	25	I	5	LV	11	PL	36	FIN	12 ^r
UK	80 ^r	SI	59	HU	22	B	24	LV	5	SI	11	L	34	P	11
D	79	NL	58	SI	22	I	21	DK	4 ^r	S	10	EE	30	E	10
FIN	79 ^r	EE	54	DK	19 ^r	UK	20 ^r	FIN	4 ^r	P	9	D	28	IRL	8
LV	79	L	53	F	19 ^r	P	19	NO	4	BG	9	E	27	S	8
E	78	LT	50	FIN	18 ^r	IRL	18	CZ	3	LT	9	SI	27	B	7
F	78 ^r	CZ	48	UK	16 ^r	S	17	HU	3	D	8	F	26 ^r	I	7
RO	77	P	43	LV	16	EE	17	LT	3	FIN	8 ^r	FIN	24 ^r	UK	6 ^r
B	75	B	42	I	15	NO	16 ^r	PL	3	B	7	P	20	CZ	6
I	74 ^r	LV	42	P	15	SI	16	D	2	NL	7	S	19	D	4
NL	72	F	41 ^r	NO	14 ^r	NL	14	L	2	EE	7	NO	16 ^r	L	4
EE	69	S	39	CZ	14	PL	14	EE	2	E	6	BG	14	BG	4
P	68	NO	37 ^r	B	12	BG	13	SI	2	L	6	LV	13	EE	4
NO	67 ^r	E	27	E	12	HU	12	E	1	A	6	I	12	PL	4
S	66	PL	27	A	12	RO	11	P	1	CZ	5	CZ	12	RO	4
A	64	D	21	L	9	LV	9	BG	1	HU	5	NL	8	HU	3
SI	60	I	18	NL	8	CZ	6	RO	1	RO	3	A	8	LT	1
LT	54	A	9	IRL	0	LT	5	IRL	0	PL	0	LT	1	LV	1

⁴³ No information is available for Greece. The figures marked with 'r' have been revised by Eurostat.

8. COMPARISON OF STRUCTURES FOR CONTINUING TRAINING IN ENTERPRISES BETWEEN 1993 AND 1999 (CVTS 1 AND CVTS 2)

8.1 Introduction⁴⁴

Following the completion of the second European Continuing Vocational Training Survey (CVTS 2), for the first time comparative structural data for twelve European countries⁴⁵ are available. The information from the two surveys relates to 1993 and 1999. In the majority of questions, there were only slight changes in the data ascertained. It is therefore possible to carry out a temporal comparison with regard to the quantitative key indicators used to describe the structures for continuing vocational training in enterprises in the twelve Member States of the EU. The four essential key indicators are:

1. The offer indicator

It records the proportion of all enterprises that have offered their employees internal or external training courses.

2. The participation indicator

It records the proportion of participants in training courses out of all employees of enterprises that offer training courses.

3. The intensity indicator

It records the number of participation hours per participant in the reference year.

4. The costs indicator

This indicator describes the total costs to the enterprise per continuing training hour in the reference year.

It is possible to describe certain structural relationships between continuing training in enterprises in the individual countries on the basis of the four key indicators. This thus makes possible for the first time a temporal and transnational comparison of the continuing training activities of enterprises from different countries (for example in the form of a ranking order). However, in order to make a comprehensive assessment of the data it is necessary to take into account all the indicators and to include qualitative (national) data.

8.2 Development of continuing training in enterprises in twelve EU Member States between 1993 and 1999

Averaged across the twelve EU Member States, the number of internal and external training courses offered by enterprises has risen by ten percentage points and the proportion of employees in enterprises offering training courses has risen by nine percentage points.

⁴⁴ The comparative figures from 1993 come from the Eurostat publication '*Erhebung über die berufliche Weiterbildung in Unternehmen, Ergebnisse, 1994 (CVTS)*', Luxembourg 1997' and the authors' own calculations.

⁴⁵ Belgium, Denmark, Germany, France, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, United Kingdom.

The intensity of continuing training has fallen by fifteen continuing training hours. The average continuing training costs in the twelve EU Member States surveyed have risen by nineteen PPS (Figure 8.1).

Figure 8.1: Development of the four indicators for continuing training in enterprises, averaged across the twelve EU Member States

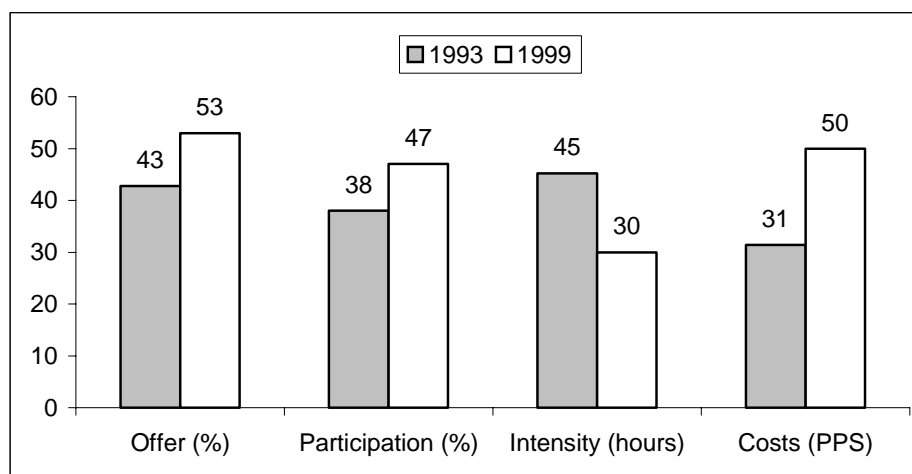
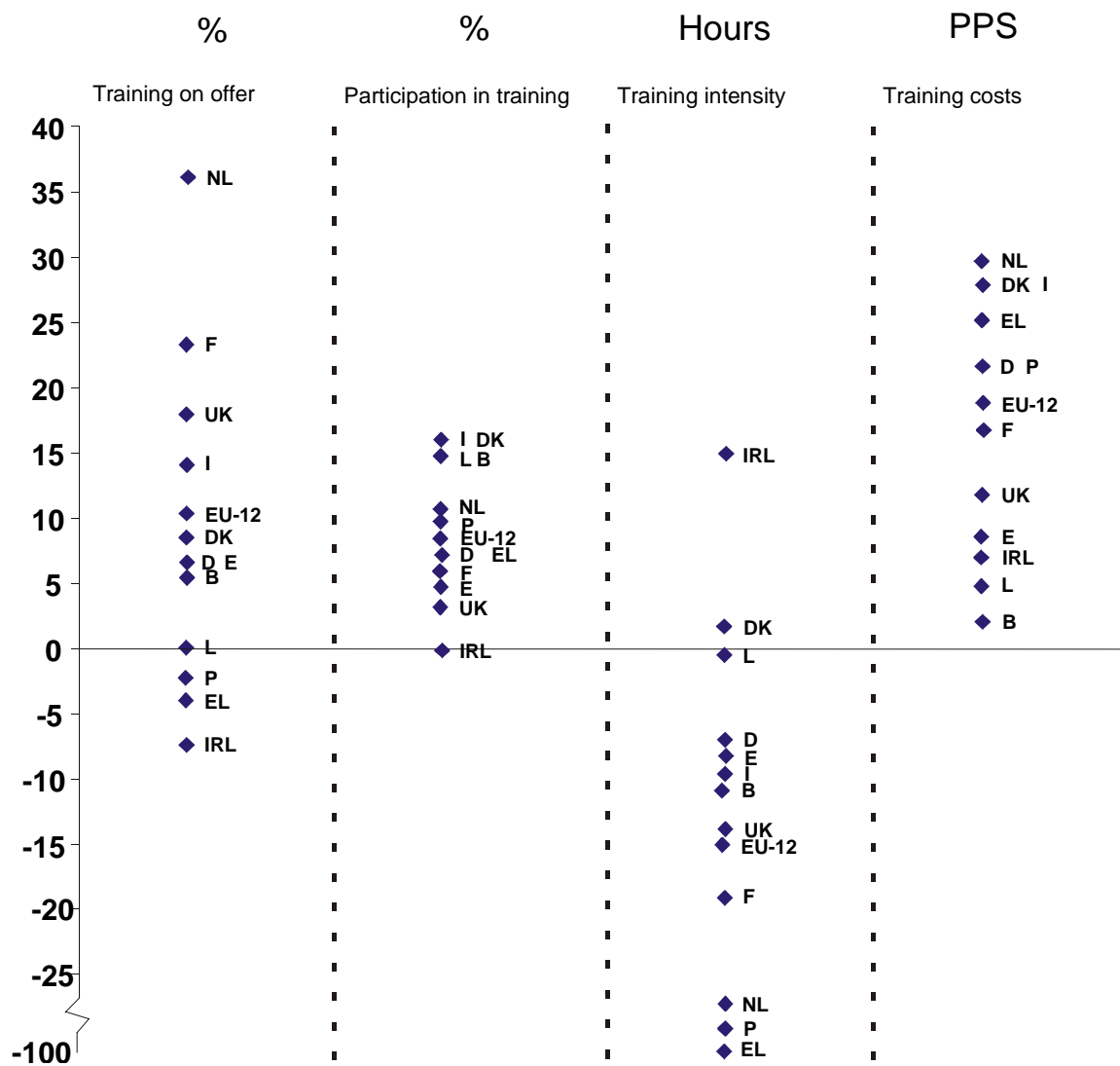


Figure 8.2 below breaks down the changes between 1993 and 1999 into results for individual countries:

- The proportion of enterprises that offer internal or external training courses has increased in eight of the twelve EU Member States (by between six percentage points in Belgium and thirty-six percentage points in the Netherlands). The proportion of training enterprises has fallen in only three of the EU Member States in this six-year period (Portugal, Greece and Ireland); there was no change in Luxembourg.
- The participation rate has risen between 1993 and 1999 in eleven EU Member States (by between four percentage points in the United Kingdom and 16 percentage points in Italy and Denmark); the participation rate remained constant in Ireland.
- In contrast, the intensity of continuing training has fallen in all countries with the exception of two (Ireland and Denmark). The greatest reduction was to be found in Greece (from 139 hours per participant to only 39 hours) and the smallest in Luxembourg (a reduction of one hour). In Denmark the number of hours per participant rose from 39 to 41 hours, and in Ireland it rose from 25 to 40.
- There has been a uniform development with regard to the total costs per participation hour: they have risen in all twelve countries between 1993 and 1999 (by between 2 PPS in Belgium and 30 PPS in the Netherlands).

Figure 8.2: Changes in the main indicators for continuing vocational training in enterprises between CVTS 1 (1993) and CVTS 2 (1999)



8.3 Changes in the key indicators at a European level

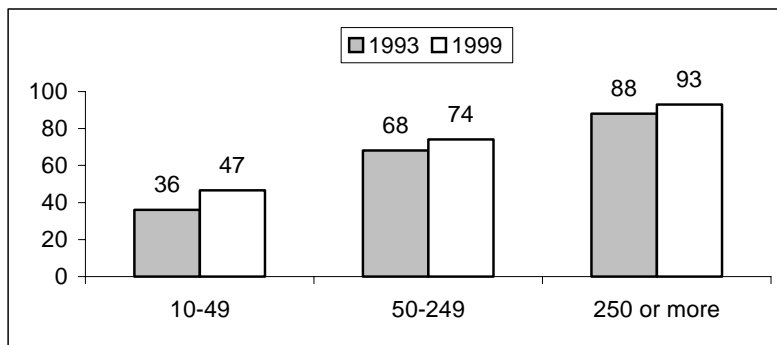
8.3.1 The offer indicator

It is clear from Figure 8.3 that a central problem of continuing training in enterprises, the above average low level of participation by small enterprises, has become less significant between 1993 and 1999.

Averaged over the twelve EU Member States, the amount of continuing training on offer rose in all classes of enterprise size. The clearest rise in the amount of continuing training on offer was found in small enterprises (10 to 49 employees), at eleven percentage points, followed by

medium-sized enterprises (50 to 249 employees), with a rise of six percentage points, and large enterprises (250 or more employees), with four percentage points.

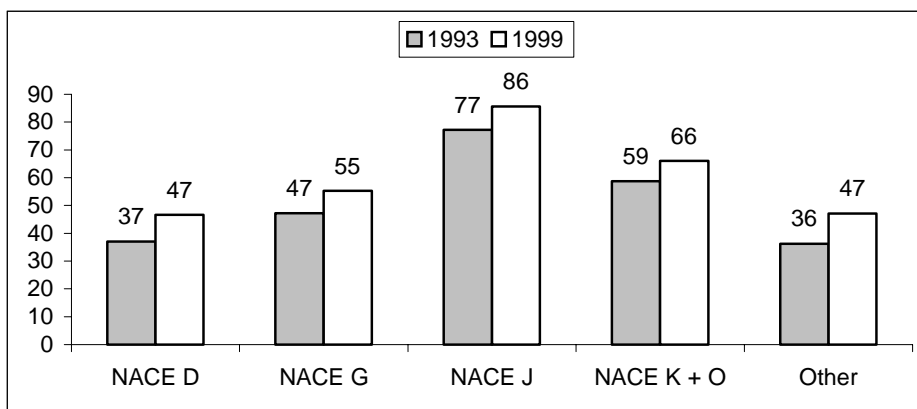
Figure 8.3: Proportion of enterprises with training courses out of all enterprises in CVTS 1 (1993) and CVTS 2 (1999), according to classes of enterprise size



A glance at the development of the offer rate in the individual branches of the economy (Figure 8.4) shows a rise in all the branches surveyed, although the development in the sector for which there are the greatest hopes for future developments, the service sector, was the least dynamic.

The size of the increase was virtually identical in all sectors of the economy: it was eleven percentage points in the 'Other branches of the economy' (C, E, F, H, I), ten percentage points in the 'Processing industry' (D), nine percentage points in the 'Credit and insurance industry' (J), eight percentage points in 'Trade in and maintenance/repair of motor vehicles and consumer goods' (G) and seven percentage points in 'Provision of services' (K + O) (cf. Figure 8.4).

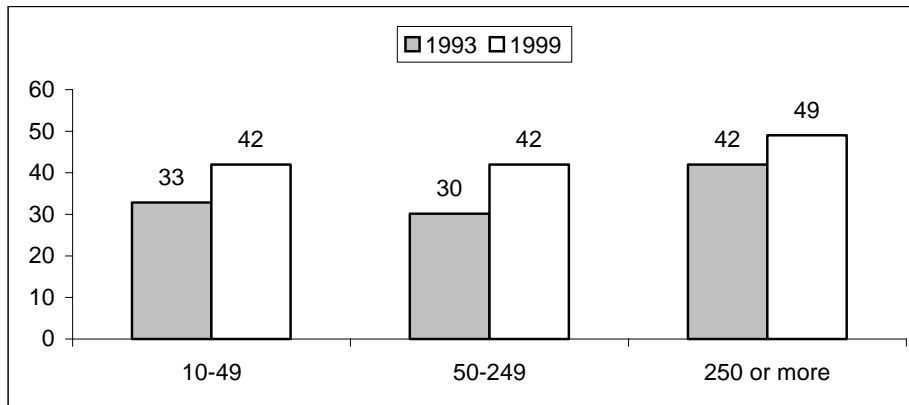
Figure 8.4: Proportion of enterprises with training courses out of all enterprises in CVTS 1 (1993) and CVTS 2 (1999), according to branches of the economy



8.3.2 The participation indicator

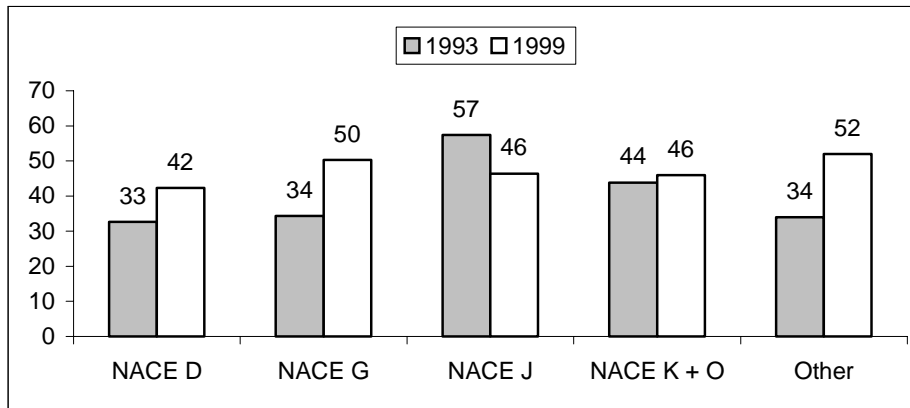
Averaged across the twelve EU Member States, participation in training courses rose in all classes of enterprise size. The most noticeable rise in the participation rate, at twelve percentage points, was in medium-sized enterprises (50 to 249 employees), followed by small enterprises (10 to 49 employees) with a rise of nine percentage points and large enterprises (250 or more employees) with a rise of seven percentage points (cf. Figure 8.5).

Figure 8.5: Participation rate in enterprises that offer training courses in CVTS 1 (1993) and CVTS 2 (1999), according to class of enterprise size



Averaged across the twelve EU Member States, the participation rate rose in four branches of the economy. The clearest rises were in ‘Other branches of the economy’ (C, E, F, H, I), with a rise of 18 percentage points, and in the sector of ‘Trade in and maintenance/repair of motor vehicles and consumer goods’ (G), with 16 percentage points. The increase was considerably smaller in the ‘Processing industry’ (D), at nine percentage points, and in the branch of ‘Provision of services’ (K + O) it was only two percentage points. It is striking that the participation rate in the sector of the ‘Credit and insurance industry’ (J) has fallen by eleven percentage points (Figure 8.6). This indicates that in one of the branches of the economy with the greatest training intensity the proportion of enterprises with training courses is still rising, but that the participation rate is falling to a figure which is if anything below average if all branches are compared. More detailed analyses will be required in order to ascertain if it is a matter of falling average figures because of additional enterprises that are now offering training but not yet offering training to the extent that is usual in the sector, or whether there has actually been a reduction in the previous commitment of enterprises in the banking and insurance sector.

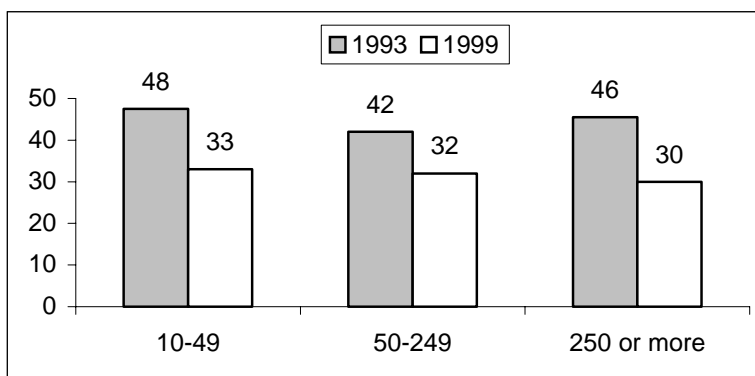
Figure 8.6: Participation rate in enterprises that offer training courses in CVTS 1 (1993)⁴⁶ and CVTS 2 (1999), according to branches of the economy



8.3.3 The intensity indicator

Averaged across the twelve EU Member States, the intensity of continuing training in enterprises with training courses fell in all classes of enterprise size, most markedly in large enterprises (250 or more employees), with a figure of 16 continuing training hours per participant, and in small enterprises (10 to 49 employees), with 15 hours per participant; the fall was smallest in medium-sized enterprises (50 to 249 employees), with a fall of 10 hours per participant (Figure 8.7). Small enterprises and large enterprises are thus equally affected by a reduction in the intensity of continuing training measures.

Figure 8.7: Participation hours per participant in enterprises with training courses in CVTS 1 (1993) and CVTS 2 (1999), according to class of enterprise size

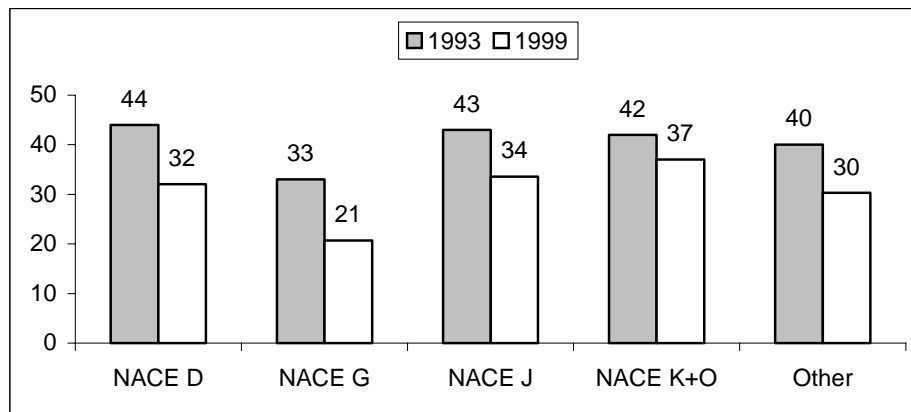


The total annual participation hours per participant have fallen between 1993 and 1999 in all branches of the economy (Figure 8.8). The greatest drop was found in the 'Processing industry'

⁴⁶ No information from France or the Netherlands

(D) and in the branch of ‘Trade in and maintenance/repair of motor vehicles and consumer goods’ (G), at 12 hours in each case. The smallest drop, of 5 hours per participant, was in the branch of ‘Provision of services’ (K + O).

Figure 8.8: Participation hours per participant in enterprises with training courses in CVTS 1 (1993) and CVTS 2 (1999), according to branches of the economy

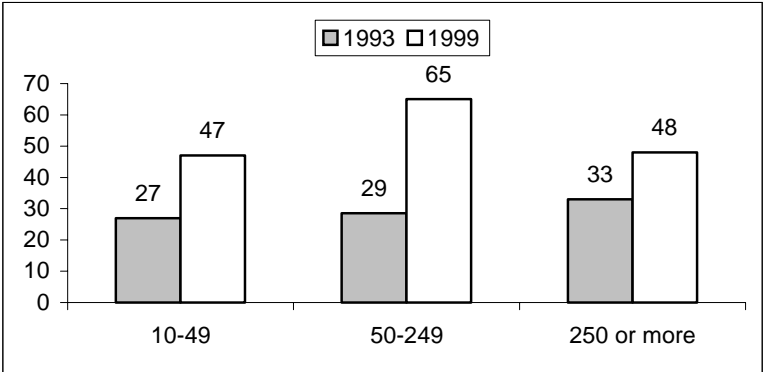


8.3.4 The costs indicator

Averaged over the twelve EU Member States, the total costs per participation hour in enterprises with training courses rose markedly between CVTS 1 (1993) and CVTS 2 (1999) in all classes of enterprise size, the clearest rise, of 36 PPS, being for medium-sized enterprises (50 to 249 employees), followed by small enterprises (10 to 49 employees) with a rise of 20 PPS and large enterprises (250 or more employees) with a rise of 15 PPS (Figure 8.9).

Since in the comparison between 1993 and 1999 the relative importance of personnel absence costs has fallen in seven countries and risen in only four countries, the rises in costs are to be attributed primarily to higher direct costs.

Figure 8.9: Total costs of training courses per hour of continuing training in CVTS 1 (1993) and CVTS 2 (1999), according to classes of enterprise size



The data do not allow a differentiation of costs according to economic sector.

APPENDIX I

METHODICAL COMPARISON OF THE EUROPEAN CONTINUING TRAINING SURVEYS, CVTS 1 AND CVTS 2

1. Area of application of the surveys

The definition of continuing training in enterprises has remained essentially unchanged in CVTS 1 and CVTS 2. Both surveys exclusively collected information on continuing vocational training in enterprises. Initial vocational training was excluded from both surveys. At any rate, the enterprises were given the definitions of initial vocational training and continuing training in order to enable them to exclude initial vocational training measures from the information they gave. The enterprises offer their employees training courses in the form of courses and seminars. In addition, questions were also asked about the 'other' forms of continuing training in enterprises.

2. Survey concept and questionnaire

In CVTS 1 and CVTS 2, it was up to the countries involved to optimise the organisation of the survey. Thus, for example, the countries participating were free to implement a one-stage or multi-stage survey concept. In CVTS 1, the majority of the twelve countries participating either used staged methods (a preliminary survey and a main survey) to request data (countries doing this included Germany, Portugal, Denmark and the United Kingdom) or at least made use of the advantageous aspects of a staged procedure in order to subdivide the enterprises into training enterprises and non-training enterprises. In CVTS 2, only Austria used a more detailed multi-stage survey concept.

The main advance in CVTS 2 as compared with CVTS 1 was the fact that the questionnaire was designed with standardised contents. There was an English-language master questionnaire which formed the basis for designing the national questionnaires. In addition to the mandatory questions, the countries were also able to include additional questions whose contents were in the national interest. Some of the questions contained in the questionnaire for CVTS 1 were the same as those in CVTS 2. The data could be elicited in writing, in telephone interviews or by interviewers working on site in the enterprises. For the most part, the countries used a mixture of these different forms to carry out the survey.

3. The structuring of the contents of the surveys

The way in which the key data on continuing training in enterprises (continuing training on offer, participation in continuing training, continuing training hours and continuing training costs) is surveyed has not changed significantly between CVTS 1 and CVTS 2:

- Both surveys recorded the continuing training on offer in enterprises (internal and external training courses). In CVTS 2, however, enterprises were only asked about the incidence of 'other' forms of continuing training in enterprises, and not, as in CVTS 1, additionally about the participants in and training hours spent on 'other' forms of continuing training. In addition, CVTS 2 no longer asked separate questions about instruction by superiors and induction training, or about job rotation and exchange programmes.

- CVTS 1 asked about the sex and professional status of employees and participants (however, this was not the case in all countries – e.g. no questions were posed about professional status in the Netherlands). CVTS 2 only determined the sex of employees and participants.
- In CVTS 1 and CVTS 2, the duration of continuing training was determined in terms of hours, broken down according to sex, internal/external training courses, fields covered in continuing training in enterprises and providers of external training courses. CVTS 1 additionally determined continuing training hours according to professional status and participation hours in training courses within and outside working hours.
- In CVTS 2, in contrast to CVTS 1, enterprises were not asked directly about personnel absence costs for participants in training courses. These costs were calculated on the basis of hourly labour costs and continuing training hours.
Moreover, both CVTS 1 and CVTS 2 surveyed payments to third parties and receipts from third parties for the purposes of continuing training. However, these were recorded in a more differentiated manner in CVTS 2 than in CVTS 1.
- Both continuing training surveys included a few supplementary qualitative questions on the structuring of continuing training in enterprises (*inter alia* on the existence of analyses of personnel and qualification requirements, a training budget and a training plan). CVTS 2 incorporated a few new qualitative questions (for example regarding the systematic measurement of success of continuing training measures and the reasons for drawing up or not drawing up a continuing training plan).

4. Preparation of data and dissemination of results

A standardised approach was established in advance regarding the treatment of missing figures, imputations and plausibility checks, and this area was thus handled more strictly in CVTS 2 than in CVTS 1. Improved central coordination of data checking and transmission made it possible in the case of CVTS 2 to publish the first European results only a year after the survey was completed. In the case of CVTS 1, three years had passed between the completion of the survey and the first publication.

APPENDIX II

SELECTED COUNTRY INDICATORS

EU Member States and Norway

INDICATORS – BELGIUM

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	106.5
Real rate of growth of GDP (from 1998 to 1999 – change in per cent from the previous year)	3.2
Export ratio (2001) (as a percentage of GDP)	79.7****
Labour productivity per hour (1999) (EU-15 = 100)	123.0

Working population (1999)	Women	Men	Overall
Total number of economically active persons (millions)	1.873	2.492	4.365
Employment growth in %	3.8	-0.2	1.4
Employment rate	50.4	68.1	59.3
Employment rate 55 to 64	15.7	33.8	24.6
Unemployment rate (unemployed persons as a proportion of the total working population)	10.3	7.3	8.6

Enterprises (1999)	as % of employees	as % of enterprises
Microenterprises (up to 9)	30.0***	92.1***
Small enterprises (10-49)	21.4***	6.7***
Medium-sized enterprises (50-249)	15.3***	1.0***
Large enterprises, 250 or more	33.3***	0.2***

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			32
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			34
Lifelong learning*	6.1	7.8	6.9
Expenditure per pupil – secondary sector (US \$ PPP)			6 444

Expenditure per student – tertiary sector (US \$ PPP)	9 724
Expenditure on training institutions as % of GDP	5.53

Continuing training in enterprises			Ran	Overa
CVTS (1999)	Women	Men	k**	ll
Training enterprises			(12)	70
Enterprises with training courses			(12)	48
Participants in training courses - overall			(3)	54
Hours per participant - overall (hr)			(12)	31
Direct costs per hour of continuing training (PPS)			(11)	21
Total costs per participant (PPS)			(6)	1 644
Total costs as a proportion of the labour costs of all enterprises (%)			(11)	1.6

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the 4 weeks prior to the survey

** Rank within the EU-15 + Norway

*** Branches of the economy included: NACE sections D, F, G, H, I and K

**** Figure for 2000.

INDICATORS – DENMARK

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	118.8
Real rate of growth of GDP (from 1998 to 1999 – change in per cent from the previous year)	2.6
Export ratio (2001) (as a percentage of GDP)	31.3
Labour productivity per hour (1999) (EU-15 = 100)	104.2
Labour costs per hour in €(2000)	27.10

Working population (1999)	Women	Men	Overall
Total number of economically active persons (millions)	1.326	1.529	2.855
Employment growth in %	1.8	1.3	1.5
Employment rate	71.1	80.8	76.0
Employment rate 55 to 64	45.8	62.6	54.5
Unemployment rate (unemployed persons as a proportion of the total working population)	5.4	4.4	4.8

Enterprises (1999)	as % of employees	as % of enterprises
Microenterprises (up to 9)	13.9***	79.7***
Small enterprises (10-49)	23.8***	16.4***
Medium-sized enterprises (50-249)	23.5***	3.2***
Large enterprises, 250 or more	38.8***	0.7***

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			29
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			54
Lifelong learning*	23.0	16.7	19.8
Expenditure per pupil – secondary sector			7 626

(US \$ PPP)	
Expenditure per student – tertiary sector	
(US \$ PPP)	10 657
Expenditure on training institutions as % of GDP	8.14

Continuing training in enterprises			Rank**	Overall
CVTS (1999)	Women	Men		
Training enterprises			(1)	96
Enterprises with training courses			(1)	88
Participants in training courses - overall	55	54	(2)	55
Hours per participant - overall (hr)	54	31	(2)	41
Direct costs per hour of continuing training (PPS)			(6)	29
Total costs per participant (PPS)			(2)	2 141
Total costs as a proportion of the labour costs of all enterprises (%)			(2)	3.0

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the EU-15 + Norway

*** Branches of the economy included: NACE sections D and F

INDICATORS – GERMANY

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	106.4
Real rate of growth of GDP (from 1998 to 1999 – change in per cent from the previous year)	2.0
Export ratio (2001) (as a percentage of the GDP)	30.9
Labour productivity per hour (1999) (EU-15 = 100)	109.2
Labour costs per hour in €(2000)	26.54

Working population (1999)	Women	Men	Overall
Total number of economically active persons (millions)	17.317	22.279	39.595
Employment growth in %	2.2	0.5	1.2
Employment rate	57.1	72.4	64.8
Employment rate 55 to 64	28.7	46.8	37.7
Unemployment rate (unemployed persons as a proportion of the total working population)	8.9	8.1	8.4

Enterprises (1999)	as % of employees	as % of enterprises
Microenterprises (up to 9)	19.1***	81.4***
Small enterprises (10-49)	22.5***	15.5***
Medium-sized enterprises (50-249)	19.5***	2.6***
Large enterprises, 250 or more	39.0***	0.5***

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			26
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			59
Lifelong learning*	5.0	6.0	5.5
Expenditure per pupil – secondary sector			6 603

(US \$ PPP)	
Expenditure per student – tertiary sector	
(US \$ PPP)	10 393
Expenditure on training institutions as % of GDP	4.58

Continuing training in enterprises			Ran	Overa
–			k**	ll
CVTS (1999)	Women	Men		
Training enterprises			(9)	75
Enterprises with training courses			(9)	67
Participants in training courses - overall	33	38	(14)	36
Hours per participant - overall (hr)	25	28	(15)	27
Direct costs per hour of continuing training (PPS)			(5)	33
Total costs per participant (PPS)			(8)	1 593
Total costs as a proportion of the labour costs of all enterprises (%)			(12)	1.5

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the EU-15 + Norway

*** Branches of the economy included: NACE sections D, F and G.

INDICATORS – GREECE

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	66.1
Real rate of growth of GDP (from 1998 to 1999 – change in per cent from the previous year)	3.6
Export ratio (2001) (as a percentage of GDP)	9.0
Labour productivity per hour (1999) (EU-15 = 100)	66.3
Labour costs per hour in €(2000)	10.40

Working population (1999)	Women	Men	Overall
Total number of economically active persons (millions)	1.753	2.693	4.445
Employment growth in %	1.4	-0.8	0.0
Employment rate	40.6	70.8	55.3
Employment rate 55 to 64	24.0	55.4	39.1
Unemployment rate (unemployed persons as a proportion of the total working population)	17.8	7.8	11.8

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			23
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			33
Lifelong learning*	1.2	1.2	1.2
Expenditure per pupil – secondary sector (US \$ PPP)			2 904
Expenditure per student – tertiary sector (US \$ PPP)			4 260
Expenditure on training institutions as % of GDP			3.63
	Women	Men	Ran Overa

Continuing training in enterprises		k**	II
–			
CVTS (1999)			
<hr/>			
Training enterprises		(16)	18
Enterprises with training courses		(16)	9
Participants in training courses - overall	38	32 (16)	34
Hours per participant - overall (hr)	38	40 (4)	39
Direct costs per hour of continuing training (PPS)		(15)	16
Total costs per participant (PPS)		(9)	1 529
Total costs as a proportion of the labour costs of all enterprises (%)		(16)	0.9

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the EU-15 + Norway

INDICATORS – SPAIN

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	82.2
Real rate of growth of GDP (from 1998 to 1999 – change in per cent from the previous year)	4.2
Export ratio (2001) (as a percentage of GDP)	19.8
Labour productivity per hour (1999) (EU-15 = 100)	83.0
Labour costs per hour in €(2000)	14.22

Working population (1999)	Women	Men	Overall
Total number of economically active persons (millions)	6.482	9.857	16.339
Employment growth in %	5.5	2.3	3.5
Employment rate	38.3	69.2	53.7
Employment rate 55 to 64	18.9	52.4	35.1
Unemployment rate (unemployed persons as a proportion of the total working population)	18.7	9.0	12.8

Enterprises (1999)	as % of employees	as % of employees
Microenterprises (up to 9)	40.6***	93.0***
Small enterprises (10-49)	24.4***	6.2***
Medium-sized enterprises (50-249)	14.8***	0.7***
Large enterprises, 250 or more	20.3***	0.1***

Training and education (1999)	Women	Men	Overall
Proportion of the working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			27
Proportion of the working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			17
Lifelong learning*	5.5	4.6	5.1
Expenditure per pupil – secondary sector			4 864

(US \$ PPP)	
Expenditure per student – tertiary sector	
(US \$ PPP)	5 707
Expenditure on training institutions as % of GDP	4.50

Continuing training in enterprises			Ran	Overa
CVTS (1999)	Women	Men	k**	ll
–				
Training enterprises			(13)	36
Enterprises with training courses			(13)	28
Participants in training courses - overall	44	44	(12)	44
Hours per participant - overall (hr)	41	42	(1)	42
Direct costs per hour of continuing training (PPS)			(16)	13
Total costs per participant (PPS)			(10)	1 514
Total costs as a proportion of the labour costs of all enterprises (%)			(12)	1.5

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the EU-15 + Norway

*** Branches of the economy included: NACE sections D, G, H and K.

INDICATORS – FRANCE

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	99.7
Real rate of growth of GDP (from 1998 to 1999 – change in per cent from the previous year)	3.2
Export ratio (2001) (as a percentage of GDP)	22.5
Labour productivity per hour (1999) (EU-15 = 100)	112.0
Labour costs per hour in €(2000)	24.39

Working population (1999)	Women	Men	Overall
Total number of economically active persons (millions)	11.834	14.048	25.882
Employment growth in %	2.1	1.7	1.9
Employment rate	54.0	68.0	60.9
Employment rate 55 to 64	25.4	32.3	28.8
Unemployment rate (unemployed persons as a proportion of the total working population)	12.7	9.1	10.7

Enterprises (1999)	as % of employees	as % of enterprises
Microenterprises (up to 9)	24.5***	92.1***
Small enterprises (10-49)	21.2***	6.7***
Medium-sized enterprises (50-249)	16.6***	1.1***
Large enterprises, 250 or more	37.7***	0.2***

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			24
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			43
Lifelong learning*	2.7	2.4	2.6
Expenditure per pupil – secondary sector			7 152

(US \$ PPP)	
Expenditure per student – tertiary sector	
(US \$ PPP)	7 867
Expenditure on training institutions as % of GDP	5.87

Continuing training in enterprises			Ran	Overa
CVTS (1999)	Women	Men	k**	ll
–				
Training enterprises			(8)	76
Enterprises with training courses			(7)	71
Participants in training courses - overall	48	52	(7)	51
Hours per participant - overall (hr)	33	38	(9)	36
Direct costs per hour of continuing training (PPS)			(14)	18
Total costs per participant (PPS)			(5)	1 625
Total costs as a proportion of the labour costs of all enterprises (%)			(7)	2.4

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the EU-15 + Norway

*** Branches of the economy included: NACE sections D, F, G, H, I and K

INDICATORS – IRELAND

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	112.3
Real rate of growth of GDP (from 1998 to 1999 – change in per cent from the previous year)	11.1
Export ratio (2001) (as a percentage of GDP)	81.5
Labour productivity per hour (1999) (EU-15 = 100)	108.5
Labour costs per hour in €(2000)	17.34

Working population (1999)	Women	Men	Overall
Total number of economically active persons (millions)	0.682	1.007	1.689
Employment growth in %	7.7	4.9	6.0
Employment rate	51.9	74.4	63.2
Employment rate 55 to 64	25.5	61.7	43.7
Unemployment rate (unemployed persons as a proportion of the total working population)	5.5	5.7	5.6

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			26
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			32
Lifelong learning*	8.8	6.5	7.7***
Expenditure per pupil – secondary sector (US \$ PPP)			4 383
Expenditure per student – tertiary sector (US \$ PPP)			9 673
Expenditure on training institutions as % of GDP			4.56
	Women	Men	Ran Overa

Continuing training in enterprises		k**	II
–			
CVTS (1999)			
Training enterprises		(7)	79
Enterprises with training courses		(10)	56
Participants in training courses - overall		53	52 (6)
Hours per participant - overall (hr)		41	40 (3)
Direct costs per hour of continuing training (PPS)		(9)	22
Total costs per participant (PPS)		(11)	1 454
Total costs as a proportion of the labour costs of all enterprises (%)		(5)	2.4

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the EU-15 + Norway

*** Data for the year 2002

INDICATORS – ITALY

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	103.4
Real rate of growth of GDP (from 1998 to 1999 – change in per cent from the previous year)	1.7
Export ratio (2001) (as a percentage of GDP)	21.9
Labour productivity per hour (1999) (EU-15 = 100)	113.7

Working population (1999)	Women	Men	Overall
Total number of economically active persons (millions)	8.956	14.391	23.347
Employment growth in %	2.4	0.4	1.1
Employment rate	38.3	67.2	52.7
Employment rate 55 to 64	15.0	41.4	27.8
Unemployment rate (unemployed persons as a proportion of the total working population)	15.5	8.6	11.3

Enterprises (1999)	as % of employees	as % of enterprises
Microenterprises (up to 9)	47.8***	94.9***
Small enterprises (10-49)	21.9***	4.5***
Medium-sized enterprises (50-249)	12.5***	0.5***
Large enterprises, 250 or more	17.8***	0.1***

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			13
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			40
Lifelong learning*	5.2	5.9	5.5
Expenditure per pupil – secondary sector (US \$ PPP)			6 518

Expenditure per student – tertiary sector (US \$ PPP)	7 552
Expenditure on training institutions as % of GDP	4.55

Continuing training in enterprises

CVTS (1999)	Women	Men	Rank**	Overall
Training enterprises			(14)	24
Enterprises with training courses			(14)	23
Participants in training courses - overall	46	48	(10)	47
Hours per participant - overall (hr)	29	33	(11)	32
Direct costs per hour of continuing training (PPS)			(1)	47
Total costs per participant (PPS)			(1)	2 177
Total costs as a proportion of the labour costs of all enterprises (%)			(10)	1.7

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the 4 weeks prior to the survey

** Rank within the EU-15 + Norway

*** Data for 2000; branches of the economy included: NACE sections D, F, G, H, I and K

INDICATORS – LUXEMBOURG

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	188.8
Real rate of growth of GDP (from 1998 to 1999 – change in per cent from the previous year)	6.0
Export ratio (2001) (as a percentage of GDP)	42.1****
Labour productivity per hour (1999) (EU-15 = 100)	143.0
Labour costs per hour in €(2000)	24.23

Working population (1999)	Women	Men	Overall
Total number of economically active persons (millions)	0.071	0.109	0.18
Employment growth in %	8.4	2.9	5.0
Employment rate	48.6	74.5	61.7
Employment rate 55 to 64	17.2	35.8	26.4
Unemployment rate (unemployed persons as a proportion of the total working population)	3.3	1.8	2.4

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			22
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			46
Lifelong learning*	4.4	6.2	5.3
Expenditure on training institutions as % of GDP			4.1***

Continuing training in enterprises			Ran	Overa
CVTS (1999)	Women	Men	k**	ll
Training enterprises			(11)	71
Enterprises with training courses			(11)	50
Participants in training courses -	50	47	(9)	48

overall				
Hours per participant - total (hr)	34	42	(4)	39
Direct costs per hour of continuing training (PPS)			(11)	21
Total costs per participant (PPS)			(5)	1 666
Total costs as a proportion of the labour costs of all enterprises (%)			(9)	1.9

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the 4 weeks prior to the survey

** Rank within the EU-15 + Norway

*** Data for 1997.

*** Data for 2000.

INDICATORS – THE NETHERLANDS

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	114.6
Real rate of growth of GDP (from 1998 to 1999 – change in per cent from the previous year)	4.0
Export ratio (2001) (as a percentage of GDP)	56.5
Labour productivity per hour (1999) (EU-15 = 100)	119.2
Labour costs per hour in €(2000)	22.99

Working population (1999)	Women	Men	Overall
Total number of economically active persons (millions)	3.395	4.974	7.890
Employment growth in %	4.3	1.4	2.6
Employment rate	61.7	80.9	71.4
Employment rate 55 to 64	22.8	49.3	36.1
Unemployment rate (unemployed persons as a proportion of the total working population)	4.4	2.3	3.2

Enterprises (1999)	as % of employees	as % of enterprises
Microenterprises (up to 9)	22.3***	91.3***
Small enterprises (10-49)	24.3***	7.3***
Medium-sized enterprises (50-249)	14.9***	1.1***
Large enterprises, 250 or more	38.5***	0.3***

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			27
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			45
Lifelong learning*	12.7	14.5	13.6
Expenditure per pupil – secondary sector			5 670

(US \$ PPP)	
Expenditure per student – tertiary sector	
(US \$ PPP)	12 285
Expenditure on training institutions as % of GDP	4.78

Continuing training in enterprises			Ran	Overa
CVTS (1999)	Women	Men	k**	ll
–				
Training enterprises			(3)	88
Enterprises with training courses			(3)	82
Participants in training courses - overall (%)	38	47	(12)	44
Hours per participant - overall (hr)	36	38	(7)	37
Direct costs per hour of continuing training (PPS)			(4)	34
Total costs per participant (PPS)			(3)	2 132
Total costs as a proportion of the labour costs of all enterprises (%)			(3)	2.8

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the EU-15 + Norway

*** Branches of the economy included: NACE sections F, G, H, I and K

INDICATORS – AUSTRIA

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	111.3
Real rate of growth of GDP (from 1998 to 1999 - change in per cent from the previous year)	2.7
Export ratio (2001) (as a percentage of GDP)	35.3
Labour productivity per hour (1999) (EU-15 = 100)	103.3
Labour costs per hour in €(2000)	23.60

Working population (1999)	Women	Men	Overall
Total number of economically active persons (millions)	1.696	2.163	3.859
Employment growth in %	1.8	0.8	1.2
Employment rate	59.6	77.5	68.6
Employment rate 55 to 64	17.9	43.0	30.1
Unemployment rate (unemployed persons as a proportion of the total working population)	4.7	3.4	3.9

Enterprises (1999)	as % of employees	as % of enterprises
Microenterprises (up to 9)	22.4***	83.2***
Small enterprises (10-49)	24.2***	14.2***
Medium-sized enterprises (50-249)	20.4***	2.2***
Large enterprises, 250 or more	33.0***	0.4***

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			13
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			67
Lifelong learning*	8.4	9.8	9.1
Expenditure per pupil - secondary sector			8 504

(US \$ PPP)	
Expenditure per student - tertiary sector	
(US \$ PPP)	12 070
Expenditure on training institutions as % of GDP	5.9

Continuing training in enterprises			Ran	Overa
–			k**	ll
CVTS (1999)	Women	Men		
Training enterprises			(10)	72
Enterprises with training courses			(7)	71
Participants in training courses - overall	36	35	(15)	35
Hours per participant - overall (hr)	31	28	(14)	29
Direct costs per hour of continuing training (PPS)			(8)	24
Total costs per participant (PPS)			(16)	1 160
Total costs as a proportion of the labour costs of all enterprises (%)			(14)	1.3

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the 4 weeks prior to the survey

** Rank within the EU-15 + Norway

*** Branches of the economy included: NACE sections D, F, G, H, I and K

INDICATORS – PORTUGAL

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	72.3
Real rate of growth of GDP (from 1998 to 1999 - change in per cent from the previous year)	3.8
Export ratio (2001) (as a percentage of GDP)	21.7
Labour productivity per hour (1999) (EU-15 = 100)	60.9
Labour costs per hour in €(2000)	8.13

Working population (1999)	Women	Men	Overall
Total number of economically active persons (millions)	2.298	2.765	5.063
Employment growth in %	3.0	0.8	1.8
Employment rate	59.4	75.7	67.4
Employment rate 55 to 64	41.1	62.1	50.8
Unemployment rate (unemployed persons as a proportion of the total working population)	5.2	3.9	4.5

Enterprises (1999)	as % of employees	as % of enterprises
Microenterprises (up to 9)	43.4***	93.0***
Small enterprises (10-49)	21.3***	5.9***
Medium-sized enterprises (50-249)	17.3***	1.0***
Large enterprises, 250 or more	18.0***	0.1***

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			11
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			12
Lifelong learning*	3.4	3.1	3.2
Expenditure per pupil - secondary sector			5 181

(US \$ PPP)	
Expenditure per student - tertiary sector	
(US \$ PPP)	4 802
Expenditure on training institutions as % of GDP	5.74

Continuing training in enterprises			Rank	
–			**	Overa
CVTS (1999)	Women	Men		ll
Training enterprises			(15)	22
Enterprises with training courses			(15)	11
Participants in training courses - overall	47	45	(11)	45
Hours per participant - overall (hr)	37	39	(6)	38
Direct costs per hour of continuing training (PPS)			(13)	19
Total costs per participant (PPS)			(14)	1 387
Total costs as a proportion of the labour costs of all enterprises (%)			(15)	1.2

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the EU-15 + Norway

*** Branches of the economy included: NACE sections D, F, G, H, I and K, enterprises: F not included

INDICATORS – FINLAND

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	100.7
Real rate of growth of GDP (from 1998 to 1999 - change in per cent from the previous year)	3.4
Export ratio (2001) (as a percentage of GDP)	35.5
Labour productivity per hour (1999) (EU-15 = 100)	94.6
Labour costs per hour in €(2000)	22.13

Working population (1999)	Women	Men	Overall
Total number of economically active persons (millions)	1.267	1.374	2.642
Employment growth in %	3.6	1.9	2.7
Employment rate	63.5	69.4	66.5
Employment rate 55 to 64	38.4	40.4	39.3
Unemployment rate (unemployed persons as a proportion of the total working population)	10.7	9.8	10.2

Enterprises (1999)	as % of employees	as % of enterprises
Microenterprises (up to 9)	22.5***	90.2***
Small enterprises (10-49)	18.4***	8.1***
Medium-sized enterprises (50-249)	17.6***	1.5***
Large enterprises, 250 or more	41.5***	0.2***

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			35
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			41
Lifelong learning*	19.1	16.2	17.6
Expenditure per pupil - secondary sector			5 863

(US \$ PPP)	
Expenditure per student - tertiary sector	
(US \$ PPP)	8 114
Expenditure on training institutions as % of GDP	6.22

Continuing training in enterprises			Ran	Overa
CVTS (1999)	Women	Men	k**	ll
Training enterprises			(6)	82
Enterprises with training courses			(6)	75
Participants in training courses - overall	57	53	(3)	54
Hours per participant - overall (hr)	32	38	(8)	36
Direct costs per hour of continuing training (PPS)			(9)	22
Total costs per participant (PPS)			(13)	1 393
Total costs as a proportion of the labour costs of all enterprises (%)			(5)	2.4

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the EU-15 + Norway

*** Data for 2000; branches of the economy included: NACE sections D, F, G, H, I and K

INDICATORS – SWEDEN

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	105.2
Real rate of growth of GDP (from 1998 to 1999 - change in per cent from the previous year)	4.6
Export ratio (2001) (as a percentage of GDP)	36.0
Labour productivity per hour (1999) (EU-15 = 100)	95.6
Labour costs per hour in €(2000)	28.56

Working population (1999)	Women	Men	Overall
Total number of economically active persons (millions)	2.073	2.315	4.388
Employment growth in %	2.4	2.0	2.2
Employment rate	69.7	73.6	71.7
Employment rate 55 to 64	60.9	66.9	63.9
Unemployment rate (unemployed persons as a proportion of the total working population)	6.8	6.6	6.7

Enterprises (1999)	as % of employees	as % of enterprises
Microenterprises (up to 9)	28.0***	93.3***
Small enterprises (10-49)	19.0***	5.6***
Medium-sized enterprises (50-249)	16.1***	0.9***
Large enterprises, 250 or more	36.9***	0.2***

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			31
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			49
Lifelong learning*	28.6	23.2	25.8
Expenditure per pupil - secondary sector			5 911

(US \$ PPP)	
Expenditure per student - tertiary sector	
(US \$ PPP)	14 222
Expenditure on training institutions as % of GDP	7.46

Continuing training in enterprises			Ran	Overa
CVTS (1999)	Women	Men	k**	ll
Training enterprises			(2)	91
Enterprises with training courses			(2)	83
Participants in training courses - overall	63	63	(1)	63
Hours per participant - overall (hr)	29	32	(12)	31
Direct costs per hour of continuing training (PPS)			(7)	27
Total costs per participant (PPS)			(12)	1 434
Total costs as a proportion of the labour costs of all enterprises (%)			(3)	2.8

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the EU-15 + Norway

*** Data for 1998; branches of the economy included: NACE sections D, F, G, H, I and K

**INDICATORS –
THE UNITED KINGDOM**

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	100.6
Real rate of growth of GDP (from 1998 to 1999 - change in per cent from the previous year)	2.4
Export ratio (2001) (as a percentage of GDP)	19.4
Labour productivity per hour (1999) (EU-15 = 100)	84.6
Labour costs per hour in €(2000)	23.85

Working population (1999)	Women	Men	Overall
Total number of economically active persons (millions)	12.826	16.063	28.889
Employment growth in %	1.7	1.4	1.5
Employment rate	64.2	77.7	71
Employment rate 55 to 64	39.9	59.7	49.6
Unemployment rate (unemployed persons as a proportion of the total working population)	5.1	6.5	5.9

Enterprises (1999)	as % of employees	as % of enterprises
Microenterprises (up to 9)	21.7****	85.5****
Small enterprises (10-49)	18.1****	12.2****
Medium-sized enterprises (50-249)	15.3****	1.9****
Large enterprises, 250 or more	44.9****	0.4****

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			28
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			60
Lifelong learning*	22.3	16.4	19.2
Expenditure per pupil - secondary sector			5 608

(US \$ PPP)	
Expenditure per student - tertiary sector	
(US \$ PPP)	9 554
Expenditure on training institutions as % of GDP	4.41

Continuing training in enterprises			Ran	Overa
CVTS (1999)	Women	Men	k**	ll
Training enterprises			(4)	87
Enterprises with training courses			(5)	76
Participants in training courses - overall	48	53	(7)	51
Hours per participant - overall (hr)	25	27	(16)	26
Direct costs per hour of continuing training (PPS)			(2)	37
				1 286*
Total costs per participant (PPS)			-	**
Total costs as a proportion of the labour costs of all enterprises (%)			-	3.6***

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the EU-15 + Norway

*** Data not comparable, because personnel absence costs recorded differently

**** Data for 2000; branches of the economy included: NACE sections D, F, G, H, I and K

INDICATORS – NORWAY

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	129.0
Real rate of growth of GDP (from 1998 to 1999 - change in per cent from the previous year)	2.1
Export ratio (2001) (as a percentage of GDP)	35.8***
Labour productivity per hour (1999) (EU-15 = 100)	126.7

Working population (1999)	Women	Men	Overall
Employment growth in %			1.1
Employment rate	73.6	81.3	77.5***
Employment rate 55 to 64	58.9	71.4	65.2***
Unemployment rate (unemployed persons as a proportion of the total working population)	3.0	3.4	3.2

Enterprises (1999)	as % of employees	as % of enterprises
Microenterprises (up to 9)	25.5****	-
Small enterprises (10-49)	24.4****	-
Medium-sized enterprises (50-249)	18.9****	-
Large enterprises, 250 or more	31.1****	-

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			29
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			58
Lifelong learning*	13.8	12.8	13.3***
Expenditure per pupil - secondary sector (US \$ PPP)			7.628
Expenditure per student - tertiary			12.096

sector
 (US \$ PPP)
 Expenditure on training institutions
 as % of GDP 7.15

Continuing training in enterprises			Ran	Overa
CVTS (1999)	Women	Men	k**	ll
Training enterprises			(5)	86
Enterprises with training courses			(4)	81
Participants in training courses - overall	73	43	(5)	53
Hours per participant - overall (hr)	35	32	(10)	33
Direct costs per hour of continuing training (PPS)			(3)	36
Total costs per participant (PPS)			(4)	1.844
Total costs as a proportion of the labour costs of all enterprises (%)			(8)	2.3

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the 4 weeks prior to the survey

** Rank within the EU-15 + Norway

*** Data for the year 2000.

**** Branches of the economy included: NACE sections D, G, H, I and K

CANDIDATE COUNTRIES

INDICATORS – BULGARIA

Economic indicators

Per capita GDP in PPS (1999) (EU-15 = 100)	28.34
Real rate of growth of GDP (from 1998 to 1999 - change in per cent from the previous year)	2.34
Export ratio (2001) (as a percentage of GDP)	55.7
Labour costs per hour in €(2000)	1.35

Working population (1999)	Women	Men	Overall
Persons in gainful employment in millions			2.7****
Employment growth in %			-2.1
Employment rate	46.3	54.7	50.4***
Employment rate 55 to 64	10.3	33.2	20.8***
Unemployment rate (unemployed persons as a proportion of the total working population)	16.2	16.7	16.4***

Training and education (1999)	Women	Men	Overall
Lifelong learning*	1.4	1.5	1.5****
Expenditure on training institutions as % of GDP			3.66

Continuing training in enterprises			Ran	Overa
CVTS (1999)	Women	Men	k**	ll
Training enterprises			(8)	28
Enterprises with training courses			(8)	17
Participants in training courses - overall	20	33	(4)	28
Hours per participant - overall (hr)	45	31	(4)	35
Direct costs per hour of continuing training (PPS)			(2)	21
Total costs per participant (PPS)			(2)	1 053
Total costs as a proportion of the labour costs of all enterprises (%)			(6)	1.0

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the nine candidate countries which participated in CVTS 2.

*** Data for the year 2000.

**** Data for the year 2001.

**INDICATORS –
THE CZECH REPUBLIC**

Economic indicators

Per capita GDP (1999) (EU-15 = 100)				59.16
Real rate of growth of GDP (from 1998 to 1999 - change in per cent from the previous year)				0.47
Export ratio (2001) (as a percentage of GDP)				71.3
Labour costs per hour in €(2000)				3.90

Working population (1999)	Women	Men	Overall
Persons in gainful employment in millions			4.7*****
Employment growth in %	-1.7	-2.4	-2.1
Employment rate	57.4	74.0	65.6
Employment rate 55 to 64	23.2	53.6	37.5
Unemployment rate (unemployed persons as a proportion of the total working population)	10.3	7.2	8.6

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			12
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			78
Lifelong learning*	5.8	6.2	6.0***
Expenditure per pupil - secondary sector (US \$ PPP)			3 449
Expenditure per student - tertiary sector (US \$ PPP)			5 688
Expenditure on training institutions as % of GDP			4.34

Continuing training in enterprises	Women	Men	Overall
			4.34

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CVTS (1999)

Training enterprises			(1)	69
Enterprises with training courses			(1)	61
Participants in training courses - overall	41	53	(1)	49
Hours per participant - overall (hr)	27	24	(8)	25
Direct costs per hour of continuing training (PPS)			(3)	15
Total costs per participant (PPS)			(6)	602
Total costs as a proportion of the labour costs of all enterprises (%)			(1)	1.9

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the nine candidate countries which participated in CVTS 2.

*** Data for the year 2002.

**** Data for the year 2001.

INDICATORS – ESTONIA

Economic indicators

Per capita GDP (1999) (EU-15 = 100)	38.7
Real rate of growth of GDP (from 1998 to 1999 - change in per cent from the previous year)	-0.63
Export ratio (2001) (as a percentage of GDP)	90.6
Labour costs per hour in €(2000)	3.03

Working population (1999)	Women	Men	Overall
Persons in gainful employment in millions			0.6****
Employment growth in %	-3.7	-5.1	-4.4
Employment rate	57.7	66.1	61.7
Employment rate 55 to 64	39.1	58.8	47.4
Unemployment rate (unemployed persons as a proportion of the total working population)	10.1	12.5	11.3

Training and education (1999)	Women	Men	Overall
Proportion of persons (25-64 years old) which has completed college/university education	35.1	23.2	29.4***
Lifelong learning*	8.4	4.4	6.5
Expenditure on training institutions as % of GDP			7.37

Continuing training in enterprises			Ran	Overa
CVTS (1999)	Women	Men	k**	ll
Training enterprises			(2)	63
Enterprises with training courses			(2)	47
Participants in training courses - overall	29	27	(4)	28
Hours per participant - overall (hr)	31	31	(6)	31
Direct costs per hour of continuing training (PPS)			(1)	23
Total costs per participant (PPS)			(3)	1 030
Total costs as a proportion of the			(2)	1.8

labour costs of all enterprises (%)

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the nine candidate countries which participated in CVTS 2.

*** Data for 2001.

INDICATORS – HUNGARY

Economic indicators

Per capita GDP (1999) (EU-15 = 100)			49.0
Real rate of growth of GDP (from 1998 to 1999 - change in per cent from the previous year)			4.17
Export ratio (2001) (as a percentage of GDP)			60.5
Labour costs per hour in €(2000)			3.83

Working population (1999)	Women	Men	Overall
Persons in gainful employment in millions			3.9***
Employment growth in %	3.5	2.9	3.2
Employment rate	49.0	62.4	55.6
Employment rate 55 to 64	11.3	29.7	19.4
Unemployment rate (unemployed persons as a proportion of the total working population)	6.3	7.4	6.9

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			17
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			63
Lifelong learning*	3.1	2.6	2.9
Expenditure per pupil - secondary sector (US \$ PPP)			2 368
Expenditure per student - tertiary sector (US \$ PPP)			5 861
Expenditure on training institutions as % of GDP			4.66

Continuing training in enterprises	Women	Men	Ran k**	Overall
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CVTS (1999)

Training enterprises		(7)	37
Enterprises with training courses		(6)	24
Participants in training courses - overall	25	27 (6)	26
Hours per participant - overall (hr)	38	38 (3)	38
Direct costs per hour of continuing training (PPS)		(6)	13
Total costs per participant (PPS)		(1)	1 166
Total costs as a proportion of the labour costs of all enterprises (%)		(4)	1.2

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the nine candidate countries which participated in CVTS 2.

*** Figure for 2001.

INDICATORS – LITHUANIA

Economic indicators

Per capita GDP (1999) (EU-15 = 100)	34.5
Real rate of growth of GDP (from 1998 to 1999 - change in per cent from the previous year)	-1.82
Export ratio (2001) (as a percentage of GDP)	50.4
Labour costs per hour in €(2000)	2.71

Working population (1999)	Women	Men	Overall
Persons in gainful employment in millions			1.5***
Employment growth in %	1.2	-2.1	-0.5
Employment rate	60.7	67.5	64.0
Employment rate 55 to 64	32.1	55.9	42.4
Unemployment rate (unemployed persons as a proportion of the total working population)	10.0	12.3	11.2

Training and education (1999)	Women	Men	Overall
Lifelong learning*	5.3	2.5	4.0
Expenditure on training institutions as % of GDP			6.28

Continuing training in enterprises			Rank**	Overall
CVTS (1999)	Women	Men		Overall
Training enterprises			(5)	43
Enterprises with training courses			(7)	21
Participants in training courses - overall	19	21	(8)	20
Hours per participant - overall (hr)	40	42	(2)	41
Direct costs per hour of continuing training (PPS)			(8)	9
Total costs per participant (PPS)			(5)	659
Total costs as a proportion of the labour costs of all enterprises (%)			(7)	0.8

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the nine candidate countries which participated in CVTS 2.

*** Data for 2001.

INDICATORS – LATVIA

Economic indicators

Per capita GDP (1999) (EU-15 = 100)	28.61
Real rate of growth of GDP (from 1998 to 1999 - change in per cent from the previous year)	2.84
Export ratio (2001) (as a percentage of GDP)	44.9
Labour costs per hour in €(2000)	2.42

Working population (1999)	Women	Men	Overall
Persons in gainful employment in millions			0.9****
Employment growth in %	-1.2	0.1	-0.5
Employment rate	54.0	64.6	59.1
Employment rate 55 to 64	26.6	50.1	36.6
Unemployment rate (unemployed persons as a proportion of the total working population)	13.6	14.3	14.0

Training and education (1999)	Women	Men	Overall
Proportion of persons (25-64 years old) which has completed college/university education	20.6	15.4	18.1****
Lifelong learning*	10.9	5.5	8.4***
Expenditure on training institutions as % of GDP			6.18

Continuing training in enterprises			Ran	Overa
CVTS (1999)	Women	Men	k**	ll
Training enterprises			(3)	53
Enterprises with training courses			(4)	26
Participants in training courses - overall	24	26	(7)	25
Hours per participant - overall (hr)	31	35	(5)	34
Direct costs per hour of continuing training (PPS)			(3)	15
Total costs per participant (PPS)			(4)	729
Total costs as a proportion of the			(5)	1.1

labour costs of all enterprises (%)

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the nine candidate countries which participated in CVTS 2.

*** Data for the year 2002.

**** Data for the year 2001.

INDICATORS – POLAND

Economic indicators

Per capita GDP (1999) (EU-15 = 100)				39.01
Real rate of growth of GDP (from 1998 to 1999 - change in per cent from the previous year)				4.05
Export ratio (2001) (as a percentage of GDP)				29.8
Labour costs per hour in €(2000)				4.48

Working population (1999)	Women	Men	Overall
Persons in gainful employment in millions			14.2****
Employment growth in %			-2.7
Employment rate	48.9	61.2	55.0***
Employment rate 55 to 64	21.4	36.7	28.4***
Unemployment rate (unemployed persons as a proportion of the total working population)	15.3	11.8	13.4

Training and education (1999)	Women	Men	Overall
Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)			13
Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)			70
Lifelong learning*	5.5	4.2	4.8****
Expenditure per pupil - secondary sector (US \$ PPP)			1.583
Expenditure per student - tertiary sector (US \$ PPP)			3.912
Expenditure on training institutions as % of GDP			5.18

Continuing training in enterprises	Women	Men	Ran k***	Overa ll
–				

CVTS (1999)

Training enterprises		(6)	39
Enterprises with training courses		(4)	26
Participants in training courses - overall	33	33 (3)	33
Hours per participant - overall (hr)	31	26 (7)	28
Direct costs per hour of continuing training (PPS)		(5)	14
Total costs per participant (PPS)		(7)	598
Total costs as a proportion of the labour costs of all enterprises (%)		(7)	0.8

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the nine candidate countries which participated in CVTS 2.

*** Data for the year 2000.

**** Data for the year 2001.

INDICATORS – ROMANIA

Economic indicators

Per capita GDP (1999) (EU-15 = 100)	23.85
Real rate of growth of GDP (from 1998 to 1999 - change in per cent from the previous year)	-1.15
Export ratio (2001) (as a percentage of GDP)	33.5
Labour costs per hour in €(2000)	1.51

Working population (1999)	Women	Men	Overall
Persons in gainful employment in millions			10.7***
Employment growth in %	-3.9	-5.0	-4.5
Employment rate	57.5	69.0	63.2
Employment rate 55 to 64	43.3	56.9	49.6
Unemployment rate (unemployed persons as a proportion of the total working population)	5.6	6.8	6.2

Training and education (1999)	Women	Men	Overall
Lifelong learning*	0.7	1.0	0.8
Expenditure on training institutions as % of GDP			3.37

Continuing training in enterprises			Ran	Overa
CVTS (1999)	Women	Men	k**	ll
Training enterprises			(9)	11
Enterprises with training courses			(9)	7
Participants in training courses - overall	20	20	(8)	20
Hours per participant - overall (hr)	46	40	(1)	42
Direct costs per hour of continuing training (PPS)			(9)	7
Total costs per participant (PPS)			(8)	541
Total costs as a proportion of the labour costs of all enterprises (%)			(9)	0.5

* Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the

4 weeks prior to the survey

** Rank within the nine candidate countries which participated in CVTS 2

*** Data for 2001.

INDICATORS – SLOVENIA

Economic indicators

Per capita GDP (1999) (EU-15 = 100)	68.56
Real rate of growth of GDP (from 1998 to 1999 - change in per cent from the previous year)	5.21
Export ratio (2001) (as a percentage of GDP)	60.1
Labour costs per hour in €(2000)	8.98

Working population (1999)	Women	Men	Overall
Persons in gainful employment in millions			0.9****
Employment growth in %	0.8	1.3	1.1
Employment rate	57.7	66.5	62.2
Employment rate 55 to 64	13.4	31.1	22.0
Unemployment rate (unemployed persons as a proportion of the total working population)	7.4	7.0	7.2

Training and education (1999)	Women	Men	Overall
Proportion of persons (25-64 years old) which has completed college/university education	16.2	11.0	14.1****
Lifelong learning*	4.6	3.8	4.2***
Expenditure on training institutions as % of GDP			6*****

Continuing training in enterprises

CVTS (1999)	Women	Men	Ran k**	Overa ll
Training enterprises			(4)	48
Enterprises with training courses			(3)	33
Participants in training courses - overall	47	46	(2)	46
Hours per participant - overall (hr)	21	27	(9)	24
Direct costs per hour of continuing training (PPS)			(6)	13
Total costs per participant (PPS)			(9)	515
Total costs as a proportion of the labour costs of all enterprises (%)			(3)	1.3

- * Percentage of the population (25-64 years old) participating in (continuing) training or education measures in the
4 weeks prior to the survey
- ** Rank within the nine candidate countries which participated in CVTS 2.
- *** Data for the year 2000.
- **** Data for the year 2001.
- ***** Data for the year 1998, estimate

INDICATORS – SOURCES

Economic indicators

	Eurostat structural indicators (Annex to the Report of the European Commission for the Spring Meeting of the European Council on 21.03.2003)
Per capita GDP in PPS (1999) (EU-15 = 100)	http://europa.eu.int/comm/eurostat/structuralindicators
Real rate of growth of GDP (from 1998 to 1999 - change in per cent from the previous year)	Eurostat structural indicators Eurostat cited in accordance with the Statistics Portal of the Austrian Chamber of Commerce - http://wko.at/statistik/eu/eu.htm and in accordance with <i>Arbeitsgemeinschaft Wirtschaft und Schule: Der österreichische Außenhandel 2000</i> , Vienna 2001
Export ratio (2001) (as a percentage of GDP)	Accession countries: EU Commission: [German-language] 2002 Regular report on [name of country]'s progress towards accession – Statistical annex
Labour productivity per hour (1999) (EU-15 = 100)	Eurostat structural indicators 'Labour cost survey 2000 – Member States'. – in: Eurostat - <i>Statistics in Focus. Theme 3 – 7/2003</i> , 2; and 'Labour cost survey 2000 – Candidate countries'. – in: Eurostat <i>Statistics in focus. Theme 3 – 3/2002</i> , p. 2.
Labour costs per hour in €(2000) -> NACE sectors C-K	

Working population (1999)

	International data (Chapter: Employment and the Labour Market) in: Statistik Austria (ed.): <i>Österreichisches Statistisches Jahrbuch 2003</i> . p. 518.
Total number of economically active persons (millions)	http://www.statistik.at/jahrbuch/pdf/k42.pdf
Candidate countries:	Statistisches Bundesamt [German Federal Statistical Office] (2003):
Persons in gainful employment overall (in millions)	<i>Beitrittsländer der EU 2003</i>
Employment growth in %	Eurostat structural indicators
Employment rate	Eurostat structural indicators
Employment rate 55 to 64	Eurostat structural indicators

Unemployment rate (unemployed persons as a proportion of the total working population)

Eurostat structural indicators

Enterprises (1999)

Microenterprises (up to 9)
Small enterprises (10-49)
Medium-sized enterprises (50-249)
Large enterprises, 250 or more

‘Enterprises in Europe – does size matter?’ – in: Eurostat, *Statistics in focus. Theme 4* – 39/2002, p. 2

Training and education (1999)

Proportion of working population (25 to 64 years old) which has completed tertiary education (ISCED 5+6)

Education at a glance. OECD indicators 2001. p. 44.

Proportion of working population (25 to 64 years old) which has completed upper secondary education (ISCED 3+4)

Education at a glance. OECD indicators 2001. p. 44.

Proportion of persons (25-64 years old) which has completed college/university education

Eurostat (2002), *Important structural data on the ten accession countries* (Eurostat press release 143/2002)

Lifelong learning*

Eurostat structural indicators

Expenditure per pupil - secondary sector

Education at a glance. OECD indicators 2001. p. 176.

(US \$ PPP)

Expenditure per student - tertiary sector

Education at a glance. OECD indicators 2001. p. 176.

(US \$ PPP)

Eurostat structural indicators

Expenditure on training institutions as % of GDP

Slovenia: ETF (2001): ‘Vocational Education and Training in Slovenia’, fact sheet

Continuing training in enterprises – CVTS (1999)

Training enterprises

Eurostat – *European social statistics: Continuing vocational training survey (CVTS2) – Data 1999* (2002 edition)

Enterprises with training courses
Participants in training courses - overall

Eurostat – *Continuing Vocational Training Survey (CVTS2)*

Eurostat – *Continuing Vocational Training Survey (CVTS2)*

Hours per participant - overall (hr)

Eurostat – *Continuing Vocational Training Survey (CVTS2)*

Direct costs per hour of continuing training (PPS)

Eurostat – *Continuing Vocational Training Survey (CVTS2)*

Total costs per participant (PPS)
Total costs as a proportion of the
labour costs of all enterprises (%)

Eurostat – *Continuing Vocational
Training Survey (CVTS2)*
Eurostat – *Continuing Vocational
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Further information and publications:

http://europa.eu.int/comm/education/programmes/leonardo/old/leonardood/stat/trainingstatis/areas/area5_en.html

<http://europa.eu.int/comm/eurostat/Public/datashop/print-catalogue/EN?catalogue=Eurostat>