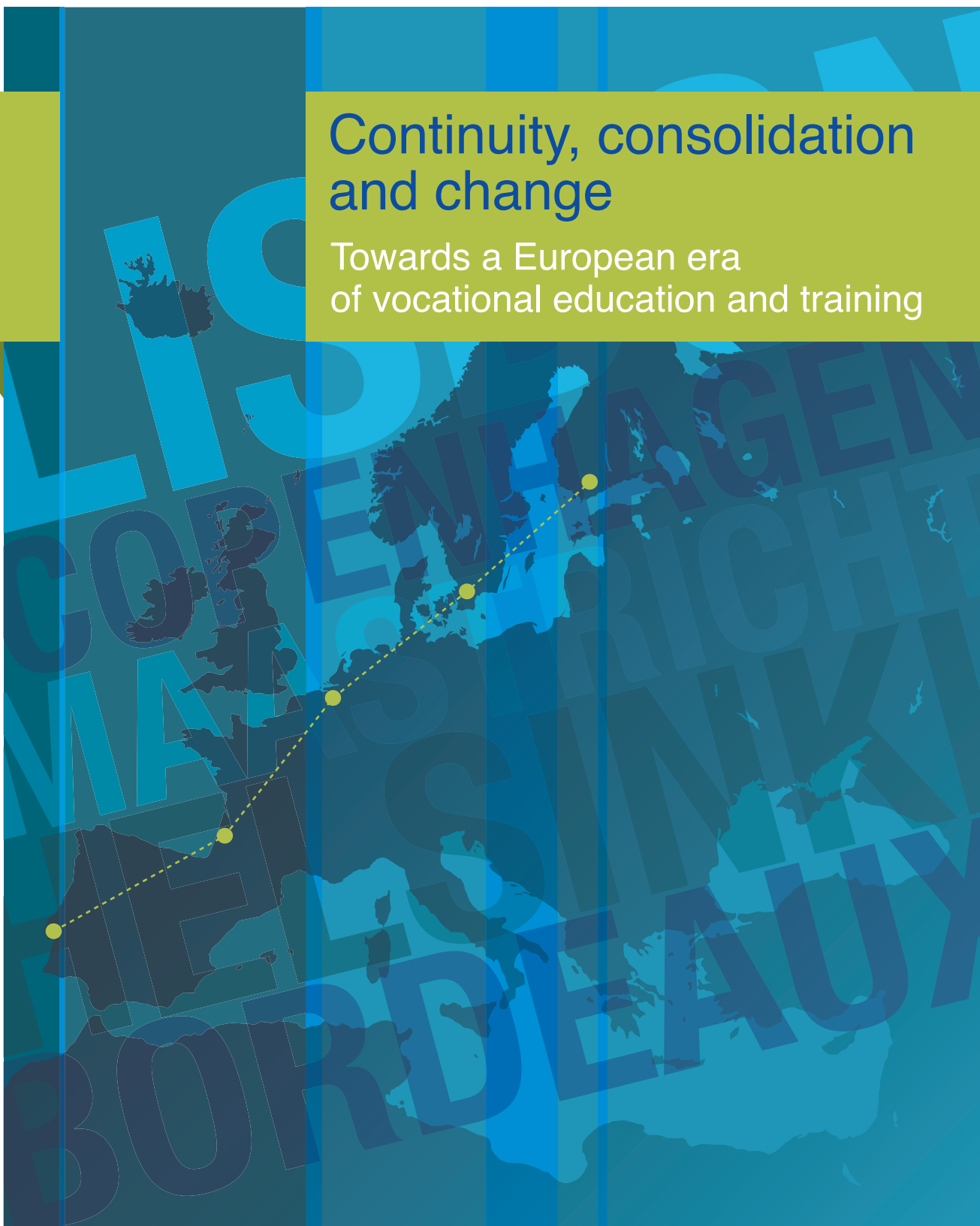




Continuity, consolidation and change

Towards a European era
of vocational education and training



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A great deal of additional information on the European Union
is available on the Internet.
It can be accessed through the Europa server (<http://europa.eu>).

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The **European Centre for the Development of Vocational Training** (Cedefop) is the European Union's reference centre for vocational education and training. We provide information on and analyses of vocational education and training systems, policies, research and practice. Cedefop was established in 1975 by Council Regulation (EEC) No 337/75.

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Foreword

Despite the current economic crisis, the skills of Europe's workforce remain crucial to its economic recovery. They are needed to respond to the new economic structures that will emerge. They are needed to fill the new jobs that will be created, to stimulate innovation and develop new goods and services. Economic uncertainties strengthen Europe's need to anticipate more effectively its future skill needs over the long, and not just the short term.

Beyond the current downturn, there remains strong evidence that by 2020 there will be more and different jobs in the EU than there were in 2006. However, the content and structure of these jobs may be very different. Many new jobs are expected to require the highest qualifications levels including those acquired through vocational education and training (VET). Most job opportunities, however, will be for those with medium level, especially vocational qualifications at upper and post-secondary level. In 1996, 31 % of jobs needed low level or no qualifications. By 2020, this proportion is expected to fall to around 18 %.

Europe already has too many unskilled people. Around 78 million – a third of its working age population – have no or only the lowest level of qualifications. At their meeting in Bordeaux in November 2008, ministers responsible for vocational education and training together with the European Commission and European social partners underlined that investment in skill development remains paramount. Consequently, this period should be seen as an opportunity not only to restructure the economy but also to find ways for people to renew their skills throughout their working lives.

Against this background, Cedefop has analysed the challenges and progress made in reforming VET systems in line with the mandate received in the Helsinki communiqué. On the eve of 2010, when the current Lisbon strategy will come to the end, this report also takes a brief look into the future.

VET is undergoing systemic change strongly supported by European policy cooperation. Work on common European tools and principles has advanced significantly. The recommendation on a European qualifications framework is a major step. As a main pillar of lifelong learning, VET has a crucial role to play in Europe's effort to raise the skills of its citizens.

In their efforts, Member States have been supported by the European Commission and social partners at all levels. Cedefop, too, has played its part collecting information and analysing progress made to provide evidence and insights to inform policy-making. This cooperation has made the objective of raising the skill levels of the workforce a truly European endeavour.

Recognising that common principles, tools, and policy learning help to tackle challenges they share, countries expressed their wish to continue their cooperation on VET, also beyond 2010 knowing there remains a long way to go. Barriers to lifelong learning for adults and older workers still need to be brought down. More people need to be attracted to VET. Demographic change points to a substantial fall in VET graduates, precisely the type of

people the labour market will need in the future. New financing methods are needed to increase investment in human resources through a fair sharing of costs. Guidance services need strengthening to support further learning, career management, smooth transitions between jobs and encourage labour market participation. Quality of VET needs to be improved and its links with the labour market strengthened.

With forthcoming recommendations on a European quality assurance framework and a credit system for VET, focus will shift to implementation. Ministers for Higher Education were invited to the meeting in Bordeaux to strengthen cooperation in VET.

Effective implementation requires high-quality analysis, information and expertise to support and complement action. Cedefop will continue to support the Copenhagen process in line with its mandate in the Bordeaux communiqué. In 2010, when the European Union devises its new priorities for the post-2010 Lisbon strategy and updated strategic framework on education and training, Cedefop will take stock of Copenhagen process achievements since 2002. This will be done in close cooperation with the Belgian Presidency, the European Commission, Cedefop's reference network (ReferNet), social partners and Directors-General for Vocational Education and Training.

Since launching the Copenhagen process in 2002, European VET policy cooperation has seen remarkable progress. However, much remains to be done.

Europe must continue to build up the skills of its people, consolidate progress made to date, and continue to modernise what, how, when and why we learn. As this report shows, Europe cannot afford to do otherwise.

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The main outcomes of the report – summarised in the flyer *In the finishing straight: from Copenhagen to Bordeaux* – were presented at the informal meeting of the European Ministers for Vocational Education and Training, Ministers for Higher Education, European Commission and European social partners, held on 26 November 2008 in Bordeaux. The final report was presented during Cedefop's Agora conference 'Continuity, consolidation and change: towards a European era for vocational education and training', held on 16 and 17 March 2009 in Thessaloniki.

Table of contents

Foreword	1
Acknowledgements	3
Executive summary	
Towards a European era of vocational education and training	11
CHAPTER 1	
Lisbon – Copenhagen – Bordeaux	17
1.1. Education and training key in policies for growth and jobs	17
1.2. Modernising VET: from commitment to implementation	18
1.2.1. Implementation under scrutiny	20
1.3. Paving the way to the future: an updated policy framework	20
1.4. Aligning national and European priorities	21
CHAPTER 2	
Main socioeconomic challenges	22
2.1. Changing skill needs	23
2.1.1. Future employment trends in sectors, occupations and qualifications	23
2.1.2. Skill mismatch in future labour markets	27
2.2. Demographic change	28
2.2.1. Decline and ageing of populations	28
2.2.2. Migration – Compensation for demographic decline	29
2.2.3. Fewer students and graduates in VET	31
2.2.4. The need to increase productivity and sustain competitiveness	34
2.3. Flexicurity – a response to globalisation, ageing and technological innovation	35
CHAPTER 3	
Reinforcing links with the labour market	38
3.1. Skills and employment – the current situation	38
3.1.1. Too many youngsters unemployed	39
3.1.2. Better integration of women into the labour market	41
3.2. Building systems for early identification and anticipation of skill needs	43
3.2.1. Methods, approaches and tools	43
3.2.2. Difficulties and obstacles in Member States	44
3.2.3. Towards a European approach	44
3.3. Strengthening the role of labour market actors in VET	45
3.3.1. Involving social partners in VET decision-making and administering	45
3.3.2. Involving companies in VET provision	46
3.3.3. The role of collective bargaining	48
3.3.4. Challenges	49

CHAPTER 4

Governance and financing of VET	50
4.1. Governance of VET systems	50
4.1.1. Institutional reforms providing legislative and institutional frameworks	50
4.1.2. Administrative and management reforms to improve efficiency	51
4.1.3. Focus on VET outcomes and accountability to improve quality	52
4.1.4. Cooperation and partnerships between stakeholders	52
4.2. VET financing	53
4.2.1. Public expenditure on education and training	53
4.2.2. Companies' expenditure on CVT courses	55
4.2.3. Financing arrangements and changes in funds allocation	56
4.2.4. Cost-sharing policies and mechanisms – raising additional resources	56
4.2.5. Innovative financing mechanisms – policies to improve efficiency and equity	58
4.3. Challenges and obstacles	60

CHAPTER 5

Raising the attractiveness of VET	61
5.1. Features and policies	61
5.2. Attractiveness of VET – trends and incentives	62
5.2.1. Participation in initial VET and access to higher education	62
5.2.2. Participation in and provision of continuing vocational training	65
5.2.3. Reasons why Europeans participate or not in lifelong learning	66
5.3. Incentives to increase attractiveness	69
5.3.1. Motivating people to participate in VET	69
5.3.2. Incentives to increase VET provision of employers	71

CHAPTER 6

Increasing access to VET by addressing equity	72
6.1. Opening new 'gates' for early school leavers	73
6.2. Low-skilled and older persons	74
6.2.1. Upskilling the low skilled	74
6.2.2. Addressing needs of older workers	75
6.3. Special initiatives for vulnerable groups	77
6.3.1. Students with special educational needs	77
6.3.2. Migrants	78
6.3.3. Ethnic minorities	78
6.3.4. Prisoners	79

CHAPTER 7

Lifelong learning through VET	80
7.1. Easing transfer between VET pathways	80
7.1.1. Strategic developments	80
7.1.2. Mobility of VET students	83

7.2.	Lifelong guidance	84
7.2.1.	Implementing lifelong guidance systems	85
7.2.2.	Broadening access to guidance	86
7.2.3.	Strengthening quality of guidance	87
7.2.4.	Supporting acquisition of learning and career management skills	87
7.2.5.	Strengthening structures for guidance policy and system development	88
7.3.	Validation of non-formal and informal learning	88
7.3.1.	Implementation and acceptance	89
7.3.2.	Challenges and the way forward	91
CHAPTER 8		
	Improving quality of VET	93
8.1.	Quality of VET – a <i>sine qua non</i>	93
8.1.1.	Systemic changes and strategies to improve quality of VET	93
8.1.2.	Different quality cultures in a common frame	93
8.1.3.	Assuring quality by defining expected outcomes	95
8.1.4.	Towards output-based steering	95
8.1.5.	Monitoring and evaluating performance: how and by whom	96
8.1.6.	Fostering evaluation cultures and common learning	98
8.1.7.	Quality assured certification	98
8.1.8.	Standards as a quality and steering tool	99
8.1.9.	Against the odds	99
8.2.	Teachers – Guarantors of quality	100
8.2.1.	VET teachers and trainers at the heart of VET reforms	101
8.2.2.	Towards a strategic vision of teachers’ and trainers’ roles and professional development requirements	101
8.2.3.	Raising qualification levels	102
8.2.4.	Towards a more consistent system for initial, induction and in-service training	103
8.2.5.	Making the teaching profession more attractive	103
8.2.6.	Addressing vocational and pedagogical skill mismatches	104
8.2.7.	Overcoming inertia	105
CHAPTER 9		
	Achieving EU goals and implementing European tools	106
9.1.	The shift to learning outcomes	106
9.2.	Europass and the role of national Europass centres	108
9.2.1.	Europass making a difference to individuals	109
9.2.2.	Europass: successful present, prominent future	109
9.3.	The European qualifications framework: towards national implementation	110
9.3.1.	Convergences and divergences in emerging national qualifications frameworks	110
9.3.2.	EQF beyond European borders	114
9.4.	European proposal for the European credit system for VET	114
9.4.1.	ECVET: opportunities and challenges	114
9.4.2.	Opening the way to ECVET	115
9.5.	Challenges and further steps	116

CHAPTER 10

Statistics and indicators – the way forward	118
10.1. Achievements at European level – Improving education and training statistics	118
10.2. Developments in the European statistical framework	119
10.2.1. Better use and improvement of statistical sources	119
10.2.2. New developments needed	119
10.3. Achievements in Member States	120
10.3.1. New political and statistical tools for VET statistics	120
10.3.2. Remaining gaps	121
10.4. Ways forward in VET statistics	121

CHAPTER 11

VET beyond 2010	123
11.1. Looking ahead beyond 2010	123
11.2. Perennial issues	123
11.3. Towards better use of evidence	125
11.4. Issues not on the menu	126
11.5. Research for future VET policy-making	126

List of abbreviations	128
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Annexes

1. Status of national qualification frameworks in 32 European countries	130
2. Performance in five EU benchmarks	135

References	136
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List of tables, figures and boxes

Tables

1. GDP, employment and labour productivity growth (annual averages, %)	34
2. Expenditure on CVT 1993-2005 (% of labour costs)	56
3. Strategies to facilitate transfer between VET pathways	81
4. Objectives of EU instruments	106
5. Europass instruments: statistics and practice	108
6. Types of emerging national qualifications frameworks	111
7. The added value of NQF/EQF developments: countries' points of view	112
8. Preconditions for successfully implementing EQF: countries' points of view	113

Figures

1. Employment trends by broad sectors, EU, Norway and Switzerland 1996-2020 (net change in millions)	24
2. Demand by broad occupational groups, EU, Norway and Switzerland, 2006-2020 (change in millions)	24
3. Qualification requirements by level of qualification, EU, Norway and Switzerland, 1996-2020 (millions and %)	25
4. Expansion and replacement demand by level of qualifications, EU, Norway and Switzerland, 2006-2020 (million jobs)	25
5. Employment trends by level of qualification and broad sectors, EU, Norway and Switzerland, 1996-2020 (million jobs)	26
6. Total requirement (in millions), 2006-2020, by broad occupational groups and level of qualification, EU, Norway and Switzerland (million jobs)	26
7. Growing median age (years) of the European population, baseline scenario, 2000, 2015 and 2030	29
8. Education level of recent third-country born migrants aged 25 to 64 by ISCED level, 2007 (%)	30
9. Education level of third-country-born (non-EU-born) migrants aged 25 to 64 by ISCED level, 2007, EU (%)	31
10. Projected number of students aged 15 to 24 in initial pre-/vocational and vocational streams, by ISCED level, EU-27, 2005-2030 (thousands)	32
11. Projected numbers of graduates aged 15 to 24 in pre-/vocational and vocational streams, by ISCED level, EU-27, 2005-2030 (thousands)	32
12. Ratio between the number of IVET graduates and employment in 2020 (horizontal axis) and 2030 (vertical axis), 2005=1	33
13. Change in Competitiveness indicator between 2004 and 2008	35
14. Employment rate of population aged 15 to 64 years, 2000 and 2007 (annual average in %)	38
15. Change in employment of population aged 25 to 64 years by highest education level, 2000 and 2007 (change in %)	39
16. Unemployment rates of young and older persons by highest education level, EU-27, 2000-2007 (%)	39
17. Unemployment rate of population aged less than 25 years by highest education level, 2007 (annual average in %)	40
18. Female employment rates aged 15 to 64, 2000 and 2007 compared with male employment rates, 2007 (%)	41

19.	Gender gap in the labour market by highest education level (people aged 25 to 64), 2007 (%)	42
20.	Training enterprises with an agreement on CVT, EU, by size (%)	48
21.	Total public expenditure on secondary education by programme orientation, 2005 (% of GDP)	54
22.	Expenditure on public and private educational institutions in secondary education, 2005 (EUR PPS per student)	54
23.	Expenditure on CVT courses as % of total labour costs (all enterprises), 1999 and 2005 (%)	55
24.	Expenditure on CVT courses by size class, EU, 1999 and 2005 (% of total labour costs; all enterprises)	55
25.	Students enrolled in vocationally oriented upper secondary education (ISCED 3), 2002 and 2006 (% of all students enrolled in upper secondary education)	63
26.	Growth in enrolments in education and training by programme orientation 1998-2006, EU-27	63
27.	Students enrolled in upper secondary education programmes giving access to both labour market and higher education (ISCED 3A and ISCED 3B programmes), 2006 (% of all students enrolled in ISCED 3 programmes)	64
28.	Employees (all enterprises) participating in CVT courses by gender, 2005 (% of all employees)	65
29.	Participation in continuing vocational training in Member States, 1999-2005 (% of employees in all enterprises)	65
30.	Ratio of enterprises providing CVT compared to all enterprises, 1999-2005 (%)	66
31.	Non training enterprises as % of all enterprises by reason for non training, EU- 27, 2005 (%)	67
32.	Distribution of reasons of participation in non-formal education and training by education level, EU*, 2007 (%)	67
33.	Selected reasons of participation in non formal education and training among medium skilled adults aged 25 to 64, 2007	68
34.	Participation of low skilled and older persons in lifelong learning, 2007 (%)	75
35.	Low-skilled adults as a percentage of total working age population (aged 25 to 64), 2007 (%)	75
36.	Participation of employees in CVT courses organized in enterprises by age group, 2005 (%)	76
37.	Number of students enrolled in initial VET participating in Leonardo da Vinci programme and total number of participants in Leonardo da Vinci programme, 2000-2007	83
Boxes		
1.	Opportunities, access and solidarity in 21st century Europe	18
2.	From Copenhagen to Bordeaux	19
3.	Global financial crisis	22
4.	Early identification of skill needs at European level	23
5.	Future skill needs for the 'green economy'	27
6.	Preparation for ageing for 2008-2012 – the Czech National Programme as an example	29
7.	Basic data on migration	30
8.	The Leitch review of skills in the UK	43
9.	Promoting apprenticeship – country examples	46-47
10.	Country examples: institutional reforms	50-51

11.	Country examples on innovative financing mechanisms	59
12.	Centres of vocational excellence in England	69
13.	The Skillnets approach – Ireland	71
14.	Opening up pathways and linking VET and higher education	82
15.	Globalisation and Australian VET	84
16.	Highlights of recent guidance studies in Europe	86
17.	Better quality as a driver of VET reforms – country example	93
18.	Building comprehensive quality assurance approaches based on CQAF	94
19.	Using sets of indicators to evaluate performance in IVET – country example	95
20.	Using targets and indicators as management tool in IVET – country example	96
21.	Towards an evaluation culture	97
22.	Critical friends from outside – External evaluation through peer review	97
23.	Better evidence for policy making	103
24.	Incentives to attract/retain VET teachers	104
25.	Making teachers and trainers technically and methodologically fit	104
26.	Building on the past	123
27.	Informing workforce training policies	124
28.	From ‘trial and error’ to sound evidence	125
29.	Five future issues for VET research	127

Executive summary

Towards a European era of vocational education and training

Vocational education and training (VET) is crucial to Europe's efforts to reposition itself in the global economy and respond to the challenges posed by ageing societies. To provide the knowledge and skills base for Europe to prosper, 31 European ministers responsible for VET, the European Commission and European social partners agreed a policy agenda for VET in the Copenhagen process in 2002. Cedefop's biennial reviews have monitored progress within the Copenhagen process. In line with the mandate received in the Maastricht and Helsinki communiqués 2004 and 2006, Cedefop presents this third review of progress in European VET. The report is based in particular on a survey of the Directors-General for Vocational Education and Training and country reports provided by Cedefop's network of reference and expertise (ReferNet).

Continuity

The need to continue enhanced cooperation

There is general agreement and commitment of countries to continue the enhanced cooperation in VET beyond 2010. While developments within the Copenhagen process have been rapid until this stage, some VET challenges contributing to the European target making lifelong learning a reality for all still lie ahead.

Success of the open method of coordination: national priorities are aligning with European priorities

Analysis has shown that the Copenhagen process led countries to focus on VET's quality, attractiveness, good governance, and efforts to

meet target dates to implement common European principles and tools. Countries have worked on these areas emphasising equity and relevance to the labour market, but also made efforts to increase excellence in VET. Cedefop's analysis and countries' self-assessment show a close alignment of national priorities and the European agenda. Although progress varies, a European VET area is emerging. This confirms that implementation of the open method of coordination in education and training to reach Lisbon targets is successful.

Securing adequate financial resources and ensuring efficiency, equity and sustainability

Securing adequate financial resources and ensuring their efficient allocation, equitable distribution and sustainability is a prerequisite for successful implementation of VET strategies. However, investment in VET is not always seen as a priority.

At secondary level of education, Member States spend more of their GDP on general programmes than VET. The third European continuing vocational training survey (CVTS3) revealed that companies' expenditure on CVT as a percentage of total labour costs even decreased from 1999 to 2005. Only eight Member States, one third of the countries participating in the survey, experienced an increase.

In view of limited public resources and a downward trend in companies' spending on CVT, countries continue to develop, experiment and implement various cost-sharing approaches, such as securing a certain level of investment in training through levies and providing financial incentives for companies: tax incentives, vouchers, learning accounts, saving schemes, low cost loans. These, in general, prove successful in raising provision of, as well as participation in, learning and encouraging demand-led behaviour. However, each of these financing mechanisms carries a risk of

deadweight effect and specific target groups might be difficult to reach. In response, countries adjust existing financing arrangements or introduce new schemes to target better groups; combine different financing instruments into a single model to reach a larger share of the population; or harmonise various financing instruments to ensure their complementarity and synergy.

Consolidation

Significant progress in developing European tools

Developing common European tools, principles and guidelines is central to the Copenhagen process. Since 2006 Member States have made remarkable progress in implementing them.

The European qualifications framework (EQF) is now broadly accepted by most countries. Almost all countries are rapidly developing national qualifications frameworks (NQFs) and link their qualifications to the EQF. Countries with established national frameworks are deepening their implementation and bringing them in line with the Bologna framework and EQF. Even outside the EU/EEA area, the EQF is increasingly regarded as a reference point.

Europass is now used in all 32 countries participating in the Copenhagen process, addressing half a billion citizens. Its success is demonstrated by its steadily increasing use. Cedefop's Europass website is now available in 26 languages (<http://europass.cedefop.europa.eu>). By December 2008, 4.2 million curricula vitae were completed online and another 5.7 million CV templates downloaded. Well above expectations.

Credit systems are not yet commonplace in European VET systems. Bringing the European credit system for VET (ECVET) to maturity still requires substantial work and investment. Promising results are expected from pilot projects testing this instrument.

Validation of non- and informal learning is a priority in almost all countries. In some, individuals can already have their learning experience identified, assessed and validated. Others are still in a discussion and planning phase.

The future success of European tools, among other factors, will much depend on the ability to sustain these initiatives and their permanence. One key issue for the period 2008-10 is to what extent framework developments in the Education and Training 2010 and Bologna processes can be better coordinated. Undoubtedly, Europass, EQF and ECVET foster policy learning and drive national change.

Launching reforms of education and training based on learning outcomes

Increasingly, European tools are part of a VET policy mix. As a result of the European initiatives on Europass, EQF and ECVET, general and comprehensive reforms of national education systems have intensified. These mainly focus on increased orientation towards learning outcomes. The shift to emphasising learning outcomes is influencing the content and organisation of education and training in Member States, including such areas as teacher training, or curricula student assessment.

Generally, there is an obvious trend towards output-based steering through educational and/or occupational standards, external exams and performance-based funding. However, this process is slow; in particular continuing vocational training still seems predominated by input-orientation.

Balancing excellence and equity to increase VET attractiveness

Social exclusion inhibits both social cohesion and economic growth. Many European policies and visions advocate a social role for VET. Countries have launched many initiatives easing access of various vulnerable groups to better and more appropriate education. Improving access to education for all is a guiding principle highlighted in national laws and strategic documents of all countries following the Lisbon and Copenhagen agendas.

Although there are some differences in levels and priorities of actions, the main issues addressed by Member States are fairly similar. Most new initiatives aim primarily at specific target groups, especially early school leavers and other youngsters not in education, employment or training (NEET), as well as low-skilled, older

workers and migrants. To ensure good accessibility of VET for all, thereby guaranteeing various pathways as well as individualisation and flexibility has gained in importance.

However, VET cannot be considered as a social panacea to combat all problems of exclusion or lack of social cohesion. Further, there is also a need to focus on more excellence in VET and attract more talent to this sector. To increase the attractiveness of VET, countries have put considerable emphasis on developing new vocational training and retraining courses, establishing well-equipped training centres, validation centres or external examination commissions; introducing higher educational and post-secondary programmes to reduce dead-ends and increase the level of qualifications; progressively developing counselling offices and organising networks.

Quality of VET among top priorities

Quality is an ingredient of accountability in decentralised governance schemes. Quality assurance is increasingly understood as an objective as well as a means to ensure that:

- VET programmes are more attractive and effective, equitable and efficient;
- learners, employers and education providers within a country and across borders trust in the value of learning outcomes – a prerequisite for common European tools and mechanisms to succeed.

Policy measures focus on:

- implementation and further development of quality assurance mechanisms in line with the common quality assurance framework;
- quality in VET as an objective and integral component of VET reforms and strategies.

However, developing coherent national approaches across educational sectors and levels that strike the right balance between trust and control is still a challenge for many countries. More holistic and systematic approaches towards quality assurance in VET will be necessary in the future. Little is known about quality assurance in particular in alternate training forms (apprenticeship).

VET teachers increasingly recognised as key agents of change and quality

Countries' policy priorities increasingly include competence development of VET teachers. There is a trend towards more strategic and coherent approaches which better integrate different forms of competence development (initial, induction, in-service training, and on-the-job learning). However, there is still room for improvement.

Despite differences in initial training of VET teachers and trainers, qualification requirements and opportunities for ongoing professional development, countries share a common concern: how to keep their technical competences and teaching skills updated. Competence frameworks, standards, certification and registration processes also impact on teachers' and trainers' competence and qualification requirements, and require speedy adjustment.

Although increased attention has recently been paid to in-company trainers, more needs to be done to support their professional development and fully equip them for their role as learning facilitators at the workplace. Strategies to improve their status require increased efforts to provide them with formal qualifications. Peer learning at policy level can help define how informally acquired competences through on-the-job learning can be transformed into a formal qualification.

Lifelong guidance – the need to bridge policy and practice

Member States have strengthened their commitment to establishing holistic lifelong guidance systems at national and regional levels across sectors with high equity, efficiency and quality. National lifelong guidance policy forums have been set up to improve policy- and decision-making, to build leadership capacity, to manage reform and innovation processes and to rethink demanding cross-sectoral cooperation arrangements.

However, the evidence base to support guidance policy- and decision-making is still rather weak and fragmented in most countries. The particular role of research in bridging policy and practice will have to be further reinforced. A future challenge will be to find ways to promote formal and informal dialogue and debate among all key

players and stakeholders on current and emerging issues related to lifelong guidance. Measures to involve citizens with diverse needs more systematically in design, evaluation and management of guidance services should also be developed. Further, the professionalisation of guidance practitioners will have to continue as they have a crucial role in guidance service delivery and development.

Governance and financing between decentralisation and a shift to output management

Through delegating responsibilities to regional or local levels and giving more autonomy to VET providers, countries aim to achieve more effective decision-making and better responsiveness of VET. There is a clear and continuing trend towards reinforcing regional and local networking and learning partnerships among stakeholders.

A range of new bodies have been set up and responsibilities of different VET actors (re)defined. Changes aim particularly at improving interministerial cooperation, strengthening institutional arrangements at regional, sectoral and local levels as well as broadening participation and increasing the role of various stakeholders in VET – social partners, business, non-governmental organisations, teachers and trainers, learners.

To ensure administrative efficiency and strengthen VET capacity some countries promote mergers of VET providers, such as school networks or combined labour market and training centres. This often results in high-quality, multifield units providing both initial and continuing VET, and serving specific groups (SMEs). To improve management of VET several countries try to reduce bureaucracy and steer the behaviour of lower level authorities and/or providers by results rather than complex rules. Policies often focus on output management.

For the future, countries recognise in particular the need to ensure better coordination of policies/practices developed by different bodies, greater stability of governance structures as well as continuity of policies.

More accurate evidence as an inevitable basis for monitoring of progress

The Council agreement on a coherent framework of indicators and benchmarks to follow up the Lisbon objectives in education and training has created favourable conditions for monitoring progress in education and training in the EU. However, work on development of its VET dimension considering its political weight needs to be speeded up.

European benchmarks for education and training are recognised as a powerful instrument contributing to fulfilment of European economic and social targets. Eleven Member States as well as Turkey, Iceland and Norway would be in favour of extending the current benchmarks or adding new ones specifically to cover VET.

Despite recent improvements of statistical sources, remaining shortcomings include data gaps (on, for example, mobility of VET students, finance, teachers and entrants), better exploitation and provision of data. The ongoing attempt to revise ISCED97 needs to be closely followed to support and ensure the correct and complete mapping of various dimensions of VET programmes.

Change

Increasing the role of VET in the present economic crisis

Education and training are seen more and more as important instruments which in the medium- to longer term are indispensable to contribute significantly to managing the present global crisis. They generate human capital with relevant skills and hereby improve competitiveness and adaptation to new demands. Research has provided clear evidence of the significant contribution of education and training to economic growth, productivity and social cohesion. Therefore, stronger investment in education and training becomes a *sine qua non*.

Changing skill needs – be more efficient by increasing skills match

The relaunched Lisbon strategy and other policy documents, most recently a Communication of the Commission on *New skills for new jobs* (European Commission, 2008i), stresses the need to anticipate changing skill needs and shortages in Europe. Cedefop's forecast shows that skill needs are increasing in all sectors and occupations. Further, replacement demand in the next decade will amount to a high number of job openings – particularly for people with intermediate and vocational qualifications. It is therefore necessary to raise overall skill levels and continue to anticipate emerging skill needs and skill gaps in European labour markets. Forward-planning mechanisms focusing on jobs and skills, identification and avoidance of skill mismatch, gaps and shortages and responding to future skill and competence needs have also been defined as a priority in the Bordeaux communiqué (European Commission, 2008a).

VET is fundamental for providing European citizens with the skills the labour market and more broadly the knowledge-based society needs. To respond to the needs in this area is one of the most important challenges for VET in the next decade. Early identification and anticipation of skills in a changing social and economic environment is a very important push factor.

New challenges of the labour market – how to manage turbulences

Involving stakeholders is crucial if VET is to respond effectively to labour market needs. Many countries have a longstanding tradition of cooperation with social partners. The others (in particular newer Member States) still face the challenge of improving the links with labour market actors.

In recent years, countries have implemented many measures to involve social partners, sectors and enterprises in VET decision-making, managing and provision. Several bodies have been established or enlarged and social partners' functions have been expanded. Social partners' participation ranged from formulating VET strategies and policies and anticipation of future labour market skills to assessment of learners' competences.

There is evidence that collective bargaining can play an important role in promoting CVT. Thus, fewer companies with collective agreements in the period 1999 to 2005 is of concern. To have more enterprises with collective agreements could increase CVT provision.

Many initiatives have been taken to improve cooperation between VET institutions and companies and encourage integration of learning with working, in particular apprenticeship. Nevertheless, some countries still have relatively weak links between labour market and education and face difficulty to involve employers in VET policy-making and securing work placements for students/apprentices.

Making lifelong learning a reality – why Europeans do not participate more in lifelong learning

Progress towards the European benchmark – 12.5 % of adults aged 25 to 64 participating in lifelong learning in the EU by 2010 – is slow, with stagnating or decreasing participation in some countries. In 2007, only 9.7 % of Europeans in this age group participated in lifelong learning.

Of enterprises, 40 % did not provide any training to their employees in 2005. Almost three quarters of them did not see any need for training. To meet their skill needs, non-training enterprises predominantly recruit people with the required skills and competences (54 % in the EU) rather than invest in CVT on their own. One in three European enterprises surveyed said that lack of time constituted an important reason why training was not provided.

In contrast, and according to the adult education survey (2007) the main reasons for adults to participate in non-formal education and training, including continuing vocational training, were to perform their job better and/or improve their career, to increase their knowledge/skills in an interesting subject and to acquire knowledge/skills useful for everyday life.

Further analysis is necessary to transfer these and other findings of two most recent Eurostat surveys into overarching lifelong learning strategies.

Imagine, create, innovate – a new shift of VET policies

The 2009 European year of creativity and innovation (EYCI) aims to raise awareness of the importance of creativity and innovation as key competences for personal, social and economic development. It has acquired a special meaning in the current economic slowdown – the message it should convey is that Europe should not react to the crisis by reducing investment in skills and innovation. The need to focus on development of innovation and creativity in VET strategies is a major VET challenge for the future.

VET cost-sharing mechanisms – an efficient policy tool to improve private financing and participation in VET

Further research into the functioning of VET cost-sharing approaches is needed. Better results could be achieved once the governance of VET cost-sharing mechanisms across countries improves and more evaluation and monitoring data become available.

The world economic crisis is likely to have negative impact on VET cost-sharing mechanisms as countries try to balance their public finances (particularly newer Member States). Some VET cost-sharing mechanisms in countries could be reduced or abandoned. However, reduced capacity to finance VET could stimulate greater attention to effectiveness, efficiency, quality and equity of cost-sharing schemes.

Lisbon – Copenhagen – Bordeaux

1.1. Education and training – key in policies for growth and jobs

A commitment to high quality, open and transparent VET systems – this marked the start of the Copenhagen process in 2002 (European Commission, 2002a). As a main pillar of the Education and training 2010 work programme (Section 1.2), it set out to contribute to the Lisbon agenda (Council of the EU, 2000). It is based on consensus that Europe's future competitiveness depends on knowledge-based growth, not in competing based on low labour costs (Potočník, 2008). Education and training was identified as one of the policy levers in the Lisbon strategy.

To achieve the objectives in areas that fall within their competence, such as employment, social protection, social inclusion, education and training and youth, Member States agreed to use an open method of coordination (OMC) and 'soft law' measures. They jointly identify and define objectives to be achieved, establish measuring instruments (statistics, indicators, guidelines), use benchmarking to compare performance and exchange best practices. The Commission has a surveillance role ⁽¹⁾.

After initial moderate results, the Lisbon strategy was relaunched in 2005. At the end of 2007, the European Council emphasised the need to keep up the pace of change despite progress, especially as global economic growth was expected to slow down (European Commission, 2007a and 2007i).

More and more recognised as a key driver in achieving Europe's economic, social and environmental objectives, education and training has moved to centre in the Lisbon strategy (Council of the EU, 2007c and 2007e). Businesses need proficient and creative people to research, innovate, grow and compete in globalised markets.

The European Commission's integrated guidelines for countries' national reform programmes for growth and jobs (European Commission, 2007e) stress the necessity to invest in human capital and to improve the skills, adaptability and employability of workers. The spring European Council 2008 (Council of the EU, 2008c) reiterates the need to invest more effectively in creativity and high quality education throughout people's lives based on sound assessment of Europe's future skills requirements. Considering the progress achieved in the Education and training 2010 work programme and the European Pact for Youth, (Council of the EU, 2008c, 2008e and 2008f), it calls for a more determined effort to:

- drastically reduce early school leaving and provide young people with adequate skills;
- improve achievements of learners from disadvantaged groups or with migrant backgrounds;
- attract more adults, notably low-skilled and older workers, into education and training.

The European Social Fund with its 2007-13 priority for human capital supports these objectives ⁽²⁾. To tackle areas where progress has been low, the renewed social agenda is combining competitiveness, solidarity and sustainability through common reinforcing policies (European Commission, 2008g).

The EU has also launched a comprehensive initiative to help design better employment, education and training policies and inform individual career choices. It includes a comprehensive assessment of skills requirements up to 2020, as requested by the 2008 Spring European Council, based on a Cedefop forecast (see Chapter 2). The effectiveness of the measures under this new initiative will be evaluated for the first time in 2010.

⁽¹⁾ See Europa – glossary: http://europa.eu/scadplus/glossary/open_method_coordination_en.htm [cited 16.1.2009].

⁽²⁾ See http://ec.europa.eu/employment_social/esf/fields/education_en.htm [cited 18.1.2009].

Box 1. Opportunities, access and solidarity in 21st century Europe

Europe's renewed social agenda – a package of 19 policy initiatives in seven priority areas:

- (a) children and youth – tomorrow's Europe;
- (b) investing in people: more and better jobs, new skills;
- (c) mobility;
- (d) longer and healthier lives;
- (e) combating poverty and social exclusion;
- (f) fighting discrimination and promoting gender equality;
- (g) opportunities, access and solidarity on the global scene.

Three interrelated goals that are equally important:

- creating opportunities: generating more and better jobs and facilitating mobility;
- providing access: all Europeans should have access to education and skills development throughout life;
- demonstrating solidarity: fostering social inclusion and integration.

Source: European Commission, 2008g.

As the 2008 global financial crisis also hit Europe, the European Commission developed an economic recovery plan (European Commission, 2008c). It calls for increased, not just maintained investment in research and development and in education and (re)training. The recovery plan complements a comprehensive set of policies and strategies which the EU and Member States agreed in 2008 (see Chapter 2).

In 2010, the current Lisbon strategy will come to an end. In the finishing straight, focus is on implementation of this policy package to improve the qualifications of European citizens (European Commission, 2007b and European Commission 2008g).

1.2. Modernising VET: from commitment to implementation

VET plays a key role in providing the skills, knowledge and competences needed in the labour market. Recognising its value, the ministers responsible for VET, the European Commission and the European social partners committed themselves to making Europe's VET the best in the world (Copenhagen declaration, European Commission, 2002a). They agreed to make the diverse VET systems and qualifications more transparent, effective and attractive through common priorities, cooperation and regular progress reviews. To create a European VET area, it was essential to improve quality, information and guidance and recognition of people's skills and competences. Common tools, reference levels, mechanisms and principles were seen as effective ways to achieve this goal.

As part of the Lisbon agenda, the European Council agreed a roadmap and five benchmarks to make Europe a reference for education and training through access for all to high quality systems which open up to the wider world (Council of the EU, 2001 and 2003b; European Commission, 2002b). Coherent and comprehensive lifelong learning strategies were to be in place by 2006. As a main part of the overall work programme, the Copenhagen process contributes to making lifelong learning a reality and promotes educational, occupational and geographical mobility.

Progress has been reviewed biennially. The 2004 review led to setting European and, for the first time, also national priorities. It was also agreed to take the social partners' 'framework of actions for the lifelong development of competences and qualifications' (UNICE ⁽⁹⁾ et al., 2002) into account.

The Maastricht communiqué (2004) and the joint interim report of the Commission and the Council (Council of the EU, 2004c) gave momentum to developing a European qualifications framework (EQF) and a credit system for VET (ECVET). It also underlined the

⁽⁹⁾ Now BusinessEurope.

need to ensure VET teachers' and trainers' competences as key for successful VET reforms and to improve the evidence base for VET policy-making. Countries agreed to make their VET pathways more flexible and responsive to learner and labour market needs, reinforce partnership approaches and improve investment in and incentives for VET.

Reaffirming the 2004 Maastricht priorities, the Helsinki communiqué in 2006 put particular emphasis on quality and attractiveness of VET and good governance. It set clear target dates (2010) for implementation of the agreed common tools. To keep momentum and ensure implementation, focus, continuity and reaching out to all involved in VET were identified as key.

As already evident from the Finnish Presidency's and Cedefop's 2006 review, the voluntary and bottom-up cooperation process triggered significant developments. Still rather diverse in 2004, two years later national progress in VET was aligning with the shared policy agenda. Strategic approaches were emerging to tackle interlinked VET policy areas. Stakeholders, notably social partners, were becoming increasingly involved in steering and governing VET. Progressively, countries used common tools and principles to support policy development. Already in 2006, NQFs were moving to the forefront of the debate in many countries.

The French Presidency's and Cedefop's 2008 review confirm this trend and point at the rapid development since 2005-06. The joint effort to develop an EQF based on learning outcomes is influencing governance and organisation of VET. The common tools and principles, which were developed with Cedefop's initiative and support, foster cooperation and coordination across sectors and policy areas. Adoption of the EQF (European Council and European Parliament, 2008) provides an opportunity to clarify the role of VET in relation to other forms of education and training.

The need to ensure the quality and relevance of education and training, to analyse and anticipate skill developments, to validate the knowledge, skills and competences people acquire outside formal education and training, notably at work, and to support (potential) learners through comprehensive lifelong guidance

approaches have become transversal themes, as the 2008 joint progress report of the 'Education and training 2010' work programme proves (Council of the EU, 2008d).

Box 2. From Copenhagen to Bordeaux

Copenhagen declaration 2002

- strengthen the European dimension;
- improve transparency, information and guidance systems;
- recognise competences and qualifications;
- promote quality assurance.

Maastricht communiqué 2004: national and EU-level priorities

- put Copenhagen tools into practice;
- improve public/private investments;
- address the needs of groups at risk;
- develop progression and individualised paths;
- strengthen planning and partnerships; identify skill needs;
- develop learning methods and environments;
- expand teachers' and trainers' competences;
- EQF, ECVET; improve VET statistics.

Helsinki communiqué 2006

- improve image, status, attractiveness of VET; good governance;
- develop further, test and implement common tools by 2010;
- more systematic mutual learning; more and better VET statistics;
- take all stakeholders on board.

Bordeaux communiqué 2008

- implement tools and mechanisms;
- raise quality and attractiveness;
- improve the links between VET and the labour market;
- strengthen cooperation arrangements.

Recognising the value of cooperation on common priorities, countries wish to continue their joint work through the open method of coordination. Acknowledging its value, the Bordeaux communiqué (2008) advocates increasing its efficiency and effectiveness and promotes improved links with other education

sectors. VET's value and achievements should be made more visible in the overall education and training framework.

The focus of the communiqué is on implementation. By 2010, countries should relate their national qualification systems to the EQF, as stated in the respective recommendation (European Council and European Parliament, 2008). The implementation period for the Council recommendations on ECVET (see Chapter 9) and a new European quality assurance reference framework (EQARF) (European Commission, 2008l and 2008m) is expected to be longer.

In areas where progress is lagging behind, efforts need reinforcing. VET needs to become more attractive and equitable. Its quality needs to be improved further, its links with the labour market need strengthening. All parties subscribing to the communiqué underlined the necessity to encourage investment in the 'down-time' (see Chapter 2).

Work on guidance and counselling which is to support citizens' more varied and flexible working and learning paths got new impetus (see Chapter 7). The new impulse to step up mobility for learners in VET is part of a large-scale initiative which aims at making learning abroad the rule rather than the exception (European Commission, 2008o; see Chapter 7) ⁽⁴⁾.

The communiqué also encourages the initiative of European universities to engage more in continuing training, open up to more diverse groups of learners and to adapt learning to the needs of adults (European University Association, 2008). To bring higher education and VET closer together, European ministers of both sectors, for the first time, met in Bordeaux.

The continued commitment to improve the capacity to forecast, anticipate and match skills and labour market needs, specifically supported by the UK jointly with Denmark, the Netherlands, Finland and Sweden, is a further step towards a concerted regular comprehensive assessment of future skill needs (see above and Chapters 2 and 3).

⁽⁴⁾ Several studies and projects on mobility in VET have been carried out upon initiatives by the European Parliament. See Cedefop; Lipińska, P. et al. (2007), Section 6.4. A report drafted by a high level group also includes quantitative targets: for VET these would be just over 1 % of VET trainees in 2012 and 3.5 % in 2020 (European Commission, 2008o).

1.2.1. 2010 – Implementation under scrutiny

Concluding, the Copenhagen process has been very successful so far. However, development in education and training takes time. Real impact and fruit of current reforms will be visible only in the medium to longer term. Continuity and consolidation of achievements so far are paramount in the coming years. But, in times of crisis, it is important not to lose sight of the long-term objectives but to keep the course and proactively drive the change towards recovery.

In 2010, implementation will be under scrutiny. This year will mark the end of the 2000-10 Lisbon strategy for growth and jobs. A large-scale evaluation is to be expected, as the EU will need to devise its new strategy for Europe.

Also the current work programme for education and training and, as one of its major strands, the Copenhagen process, will come to an end. At the 2010 ministerial meeting in Bruges, where the first initiative for the Copenhagen process was taken, its effectiveness will be put to the test.

1.3. Paving the way to the future: an updated policy framework

With its communication on an *updated strategic framework for European cooperation in education and training* (European Commission, 2008h), the European Commission has taken an initiative to bridge current and future policy cooperation. It suggests combining:

- a limited set of long-term strategic challenges to be addressed from the lifelong learning perspective in all education and training sectors in the period up to 2020; with
- more specific objectives to focus on in shorter-term blocks.

The proposal also includes revised and new benchmarks. The framework should be flexible to allow work to continue and adjust to future emerging issues and future strategy for Europe. Policy cooperation might therefore focus on the following priorities:

- make lifelong learning and learner mobility a reality;

- improve the quality and efficiency of provisions and outcomes;
- promote equity and active citizenship;
- improve innovation and creativity, including entrepreneurship.

The Bordeaux communiqué is consistent with this framework. Both aim to develop excellence and ensure all learners can develop the key competences needed. Both accentuate the need to foster creativity and innovation, promote entrepreneurship and language learning in VET. They also share the goal to improve policy cooperation and strengthen common learning.

1.4. Aligning national and European priorities

In Cedefop's survey, Directors-General for VET were asked to assess progress in the priority areas as they saw it. Most reported progress in quality assurance since 2006, a third claim to have advanced significantly since then. This strong emphasis is also reflected in countries' policy priorities as reported by the Directors-General and Cedefop's ReferNet (2008).

In two thirds of the countries, assuring quality in VET is among the top policy priorities. The proposed recommendation on a European quality assurance reference framework in vocational education (EQARF) ties in with this increasing focus. This goes hand in hand with growing attention on teachers and trainers. Interestingly, however, the self-assessment indicates significant progress only in some countries.

A third claim to have progressed considerably is making VET more relevant to labour market needs. As the detailed analysis confirms (Chapters 3 and 4), stakeholders have been involved on a broader level and measures to improve information on countries' skill needs have been stepped up. Analysis of policy priorities also indicates that reinforcing the links between VET and the labour market is top of the agenda.

Guidance and counselling has received much attention, as countries are aiming to establish more holistic approaches. In many national contexts, work on guidance, together with validation of prior learning is linked to an increasing emphasis on access to lifelong learning, mainly for adults and, in particular, disadvantaged groups. Validation and access are high on the policy agenda in all countries.

More and more, countries are using comprehensive approaches and different policy mixes to address challenges. Increasingly, European tools and principles are part of these policy mixes. They are thus both a policy priority in their own right and a method to tackle other challenges. In some cases, work on national qualifications frameworks (NQFs) is also presented as a method to improve access to lifelong learning, or to promote validation of non-formally acquired competences. Although nearly all countries are working on NQFs, these were not necessarily included in the priority list; most likely, because the survey included a specific section on progress in implementing EQF/NQFs.

Countries' current priorities are aligning with the priorities established in Maastricht and Helsinki. While the Directors-General reports tend to be very closely aligned to the Copenhagen priorities, ReferNet country reports present a somewhat more differentiated picture. The first usually focus more on the strategic objectives, while the latter often provide deeper insight into the specific objectives, the measures taken to achieve them and the obstacles which hamper progress.

Main socioeconomic challenges

The scale of current economic and social change, the strategic goal of transition to a knowledge-based society requiring higher and different kinds of skills, globalisation, demographic pressures resulting from an ageing population, climate change and its consequences for all spheres of life are all challenges which require a new approach to VET as an integral part of the European lifelong learning strategy.

These persisting challenges are currently overshadowed by a global financial crisis turning into a severe economic crisis, affecting production, trade, consumption, and in consequence labour markets and prosperity.

Education and training are seen as more and more important instruments which in the medium to longer term are indispensable to contribute significantly to managing the present global crisis

Box 3. Global financial crisis

The crisis that started in the US at the end of 2007 has sent shock waves around the globe and spread very rapidly to the world economy and financial markets, including European ones.

Inevitably, the financial crisis is increasingly affecting the 'real' economy – with impacts on individuals, households and businesses. Economic growth has slowed sharply and in some EU Member States, unemployment has begun to increase for the first time in several years.

Recent economic forecasts expect zero growth and risks of contraction for the EU economy in 2009, with unemployment rising by some 2.7 million in the next two years, assuming that no corrective actions are taken or are successful. Also, in future, financial market conditions will remain fragile, and are likely to be tighter for longer than expected. The euro area and several Member States were already in recession in 2008.

The turmoil has prompted action at many levels, by national governments, the European Central Bank and the Commission. All have been working closely together to protect savings, maintain a flow of affordable credit for businesses and households and put in place a better governance system for the future.

On 26 November 2008, the European Commission responded to this situation by proposing *A European economic recovery plan* (European Commission, 2008c) which has two key pillars and is based on one underlying principle.

The first pillar is a major injection of purchasing power into the economy, to boost demand and stimulate confidence. The Commission proposed to Member States

and the EU to agree on an immediate budgetary impulse amounting to EUR 200 billion (1.5 % of GDP), to boost demand in full respect of the Stability and Growth Pact.

The second pillar rests on the need to direct short-term action to reinforce Europe's competitiveness in the long term. The plan sets out a comprehensive programme to direct action to 'smart' investment. Smart investment means investing in the right skills for tomorrow's needs.

The fundamental principle of this plan is solidarity and social justice. It is stressed that EU action must be geared to help those most in need, to work to protect jobs through action on social charges and to immediately address the long-term job prospects of those losing their jobs, including addressing the needs of those who cannot yet use the Internet as a tool to connect.

Issues of the economic and financial situation also dominated the European Council meeting in autumn 2008. Moreover, global actions were undertaken, on top of the G 20 Summit (Washington, 15 November 2008) to address the problem.

As a response to the financial crisis, Member States are increasingly using the possibilities offered by the recently revised EU State aid rules. Over the past 25 years, the overall level of EU State aid has fallen from more than 2 % of GDP in the 1980s to around 0.5 % in 2007. But the financial crisis may reverse the trend. EU governments already rushed to spend billions of euros in emergency aid in 2008 to save troubled banks and companies, and they are also prepared to spend more on stimulus packages.

by generating human capital with relevant skills and thereby improving competitiveness and adaptation to new demands. Most recently, this was explicitly stressed in the communication on *New skills for new jobs* which also calls for better anticipation of changing skill needs (European Commission, 2008i).

2.1. Changing skill needs

As already mentioned in Chapter 1, identification and anticipation of skill needs is high on the European political agenda. Forward-planning mechanisms focusing on jobs and skills, identification and avoidance of skill mismatch, gaps and shortages and responding to future skill and competence needs have been defined as a priority area in the Bordeaux communiqué (2008). Similarly, *Integrated guidelines for growth and jobs 2008-10* (European Commission, 2007c) identified anticipation of skill needs and mismatch as crucial to ensure inclusive labour markets and matching their needs. This need has also been reflected by the EU Council in its resolution on *New skills for new jobs* (November 2007; Council of the EU, 2007d). As follow-up, the European Commission presented a communication on *New skills for new jobs* in December 2008 (European Commission, 2008e), which provides a comprehensive overview and proposals for action to anticipate future skill needs at European and national levels.

2.1.1. Future employment trends in sectors, occupations and qualifications

Europe has experienced considerable structural change over past decades resulting in continuing shifts away from the primary sector (mainly agriculture) and traditional manufacturing towards services and knowledge-intensive jobs. Although carried out before the economic crisis, Cedefop's first pan-European forecast⁽⁵⁾ of occupational skill needs for 2006-20 suggests this structural change will remain a key feature in the coming decade (Cedefop, 2008i).

Box 4. Early identification of skill needs at European level

In the recent past, some new activities and initiatives on early identification of skill needs were carried out at European level. Cedefop developed a first pan-European forecast of skill needs and will present a complementary forecast of skill supply to identify potential labour-market imbalances in the course of 2009. This is accompanied by a broader assessment of different types of skill mismatch. Another Cedefop initiative explores the possibility to use employers' surveys as a tool for identification of skill needs in Europe. The Directorate-General for Employment launched a comprehensive sectoral analysis of emerging competences and economic activities in the EU covering 16 sectors sensitive to restructuring and skill needs. The new Commission initiative 'New skills for new jobs' introduced within the renewed social agenda (European Commission, 2008g) called for further steps to anticipate future needs at European level. Cedefop, supported by experts of its network Skillsnet, has played an active role by supporting the European Commission and Member States in this endeavour from the very beginning.

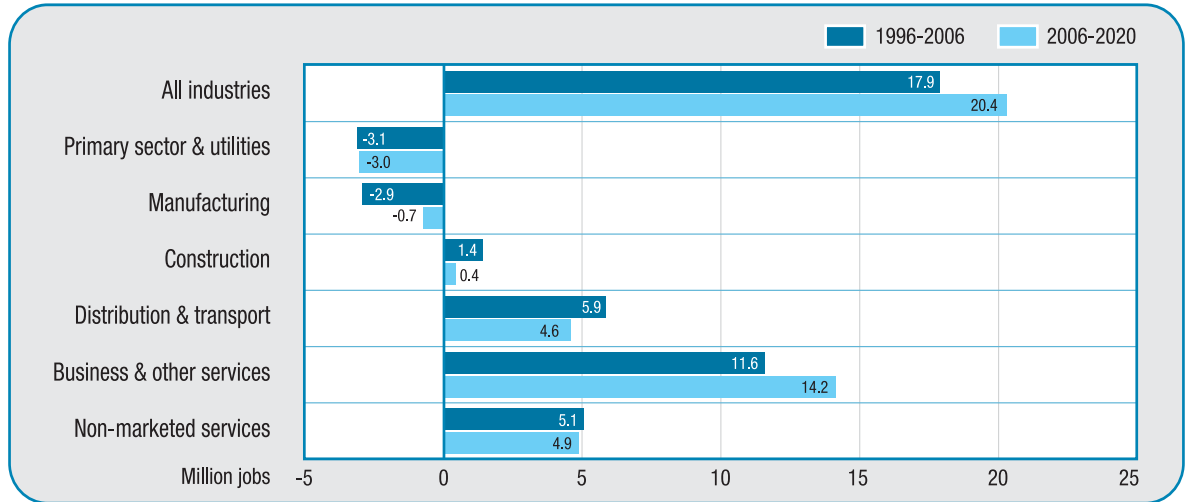
In the reference scenario, European countries expect almost 20 million jobs to be created between 2006 and 2020. This is despite losing almost three million jobs in the primary sector and 800 000 in manufacturing. The distribution and transport sector, including hotels and catering, will create more than 4.5 million additional jobs; employment in non-marketed services, including health and education, is projected to grow at a similar rate. The best prospects for employment lie in business and related services with more than 14 million jobs being created by 2020 (Figure 1).

Despite a significant decrease in employment, the primary sector (with a total of almost 8.7 million jobs) and manufacturing (more than 33 million jobs) will remain in 2020 important areas of employment and crucial components of the economy. However, skill requirements for jobs in these and the other sectors will change.

In 2006, almost 77 million of the 204 million employed people in Europe performed high-skilled non-manual jobs such as management,

⁽⁵⁾ The forecast covers EU Member States (except Bulgaria and Romania), Norway and Switzerland.

Figure 1. **Employment trends by broad sector, EU, Norway and Switzerland, 1996-2020 (net change in millions)**

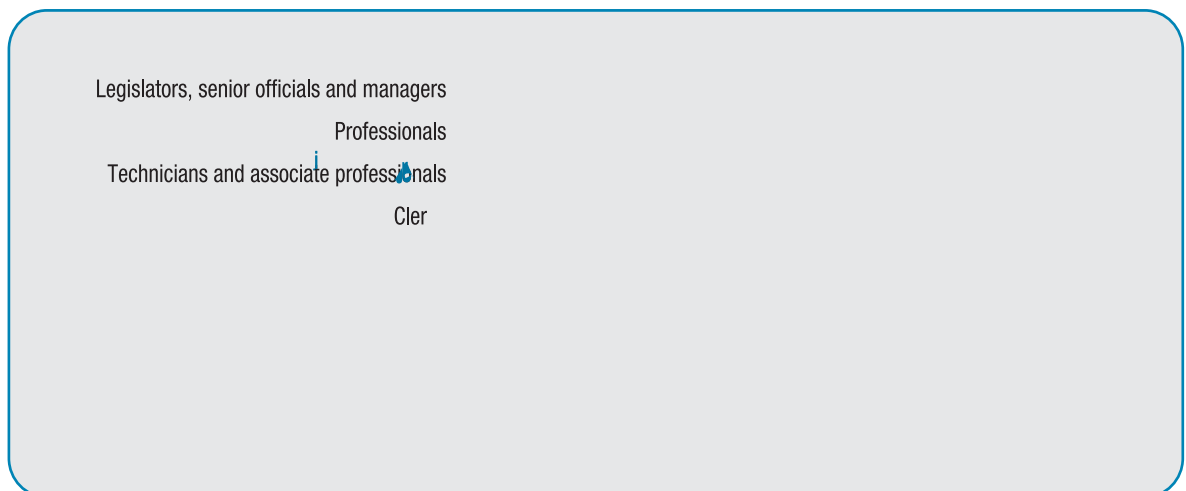


NB: EU without Bulgaria and Romania. Sectors according to NACE.
Source: Cedefop, 2008i.

professional work or technical support of those activities. Demand in these occupations is expected to increase further. This is also true for elementary occupations. However, even in areas where employment is expected to fall there will still be significant numbers of job openings, thus creating a need to provide adequate education and training. This is reflected in estimates of replacement demand by occupation (Figure 2).

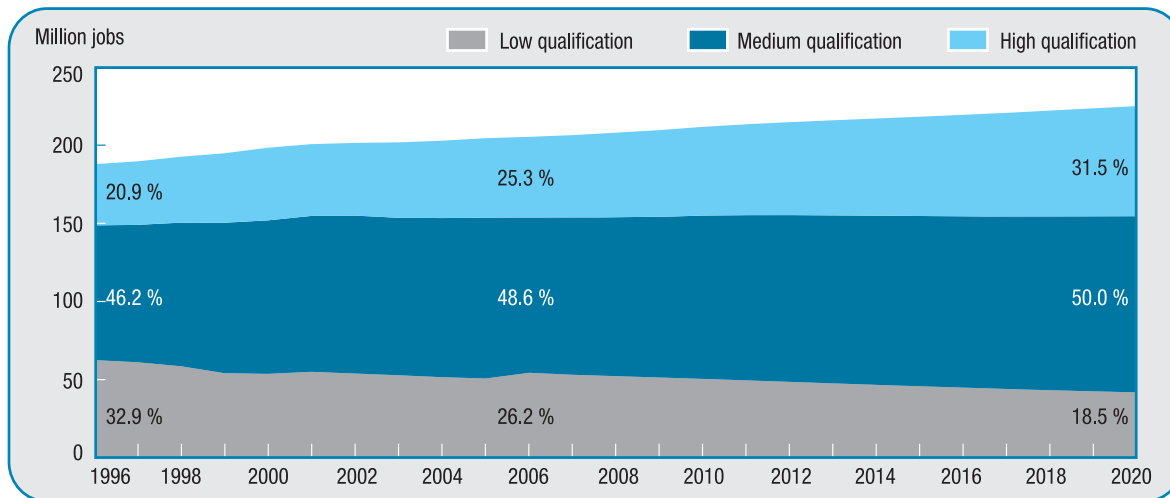
While the projection suggests job losses for several occupational categories, in particular for clerks and some skilled manual occupations, in all cases these losses are more than offset by the estimated need to replace most of those retiring or leaving the labour market for other reasons. Of course, the nature of those jobs and their skills requirements is changing.

Figure 2. **Demand by broad occupational groups, EU, Norway and Switzerland, 2006-2020 (change in millions)**



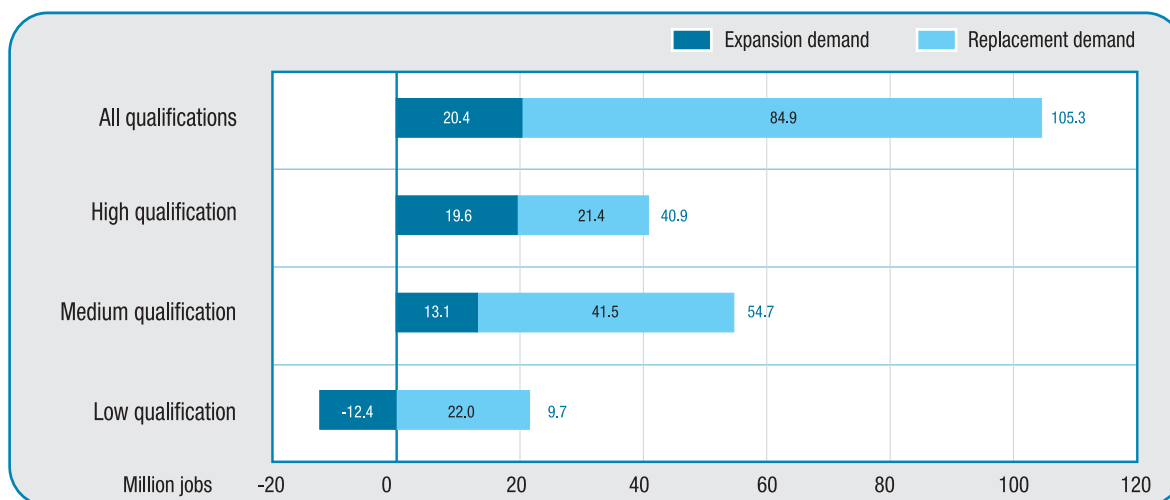
NB: EU without Bulgaria and Romania. Occupations according to ISCO.
Source: Cedefop, 2008i.

Figure 3. **Qualification requirements by level of qualification, EU, Norway and Switzerland, 1996-2020 (million jobs and %)**



NB: EU without Bulgaria and Romania. Qualification according to ISCED.
Source: Cedefop, 2008i.

Figure 4. **Expansion and replacement demand by level of qualifications, EU, Norway and Switzerland, 2006-2020 (million jobs)**



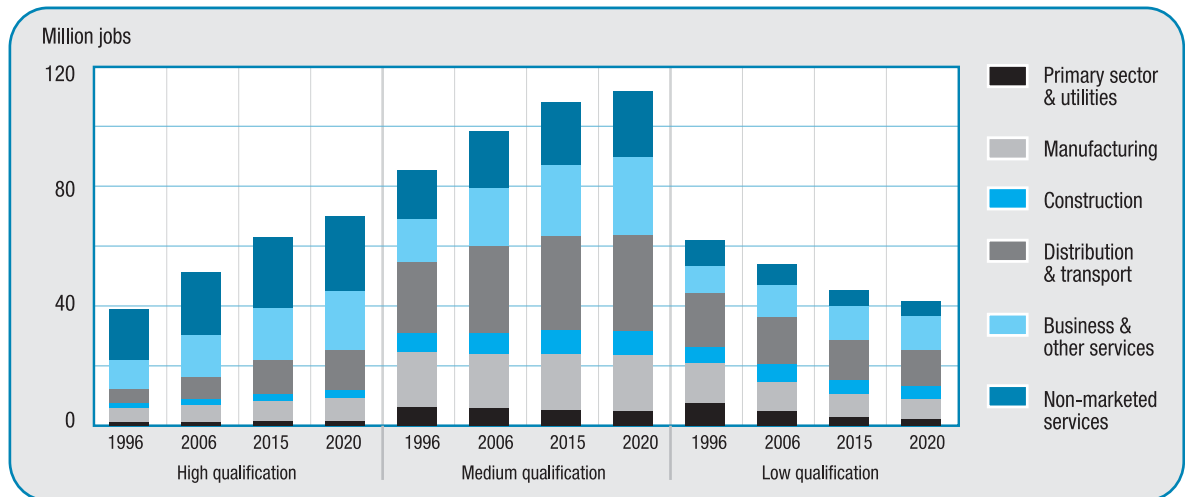
NB: EU without Bulgaria and Romania.
Source: Cedefop, 2008i.

Qualification requirements ⁽⁶⁾ of most jobs will experience a dramatic increase. The total net increase of employment (expansion demand) in Europe between 2006 and 2020 comprises around 20 million additional jobs at the highest

qualification level and, further, 13 million jobs at medium level, which are mostly vocational qualifications. On the contrary, the number of jobs for those with low qualifications will fall by more than 12 million. In 2020, 31 % of jobs will need high qualifications, and 50 % medium qualifications. The demand for low qualifications will fall from a third in 1996 to less than 19 % in 2020 (Figure 3).

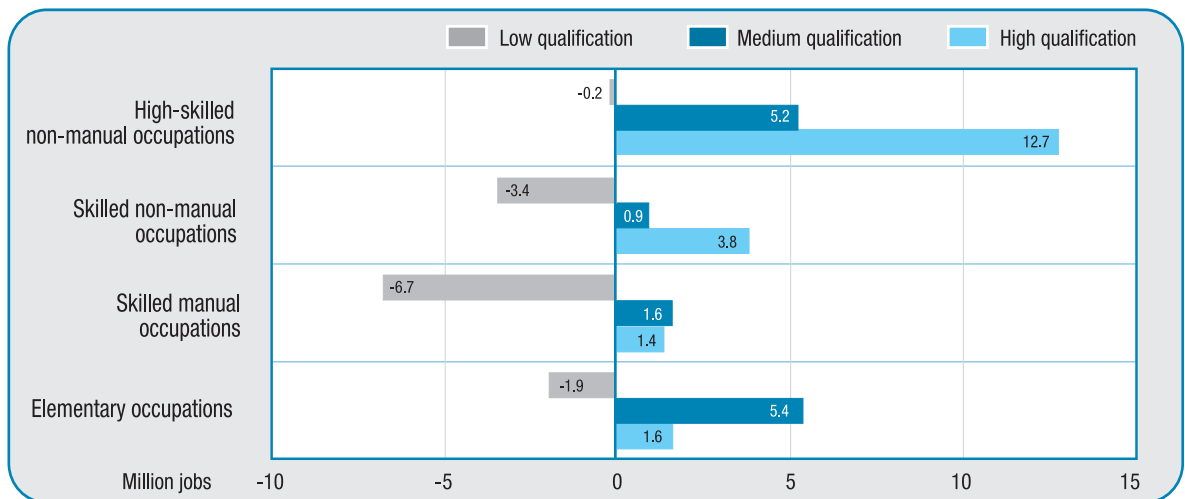
⁽⁶⁾ Educational attainment/formal qualification according to ISCED. Low = ISCED 0-2; medium = ISCED 3+4; high = ISCED 5+6.

Figure 5. **Employment trends by level of qualification and broad sectors, EU, Norway and Switzerland, 1996-2020 (million jobs)**



NB: EU without Bulgaria and Romania.
Source: Cedefop, 2008i.

Figure 6. **Total requirement by broad occupational groups and level of qualification, EU, Norway and Switzerland, 2006-2020 (million jobs)**



NB: EU without Bulgaria and Romania.
Source: Cedefop, 2008i.

In addition to new jobs created, over the period 2006-20 around 85 million jobs will become available to replace jobholders leaving the labour market for retirement or other reasons. This replacement demand will accelerate due to demographic change and will involve all qualifications. Almost half of all these jobs (almost 42 million) are expected to require medium-level qualifications, which traditionally include vocational qualifications.

For another 21 million jobs high qualifications will be necessary to replace those leaving the labour market.

Total job openings – expansion and replacement demands taken together – will amount to around 55 million for medium qualifications – 52 % of the total 105 million job openings – requiring in particular vocational qualifications. Another 41 million job openings are expected to require higher

qualifications. As many of the leavers with low qualifications will not be replaced, total job openings for this group will amount to less than 10 million (Figure 4).

Cedefop's forecast has shown that high-level qualifications will be mostly required in the service sector, while medium qualifications will be highly represented in all sectors – increasingly in the service sector. The number of jobs with low qualification requirements will be decreasing rather evenly across all sectors except for some service sectors (Figure 5).

Similar developments are expected for qualifications required in occupational fields. However, formal qualification requirements are also expected to increase in elementary occupations (Figure 6). Further analysis is needed on the underlying reasons, such as whether this is really due to rising skill requirements in these 'simple' jobs, or whether it reflects a certain degree of 'overqualification'.

Box 5. Future skill needs for the 'green economy'

Which generic and specific skills are new and emerging in 'green jobs'? How to develop and make education and training systems responsive to continuously changing requirements? These are some of the questions in the context of education and training policies needed to cope with climate change and sustainable development ^(e).

Climate change and sustainable development are increasingly seen as a major issue by policy-makers, social partners and society at large. Adaptation and mitigation of climate change has remained top priority – also in times of the financial crisis. It brings new challenges for educational systems and labour market requirements. Shortages of skilled workers in this area are apparent in several key sectors including energy, construction, manufacturing and transport. The challenge for training systems is not so much to identify new professions in this field but rather to redefine existing job profiles across numerous – if not all – sectors and occupations of the economy, and the skills required, for example, for increasing energy efficiency, renewable energy implementation, reduction of carbon dioxide emissions and protection of biodiversity.

^(e) Cedefop started, in 2008, work on investigating new skills in 'green' jobs.

Cedefop also calculated alternative scenarios – a negative and a more positive one – to encapsulate different likely paths of economic and structural developments. Which of these scenarios will become more likely – in particular given the current financial crisis and the expected economic recession in the next few years – cannot yet be answered ^(f).

2.1.2. Skill mismatch in future labour markets

Skill mismatch is both a complex and a pervasive problem in Europe. Research shows that for the majority of workers in Europe, some imbalance between the skills they possess and the skills demanded in the workplace exists. It is important to recognise that not all skill imbalances represent real problems. Overeducation occurring early in the career, if it does not persist, may be seen as a natural part of the matching process which is remedied by mobility to better matching jobs. For other groups on the labour market, however, there are more serious consequences. The combination of rapid change in technology and workplace organisation and insufficient updating of skills for ageing low-skilled workers contributes to skills obsolescence, putting these workers at risk of job loss and social exclusion. High-skilled migrants may find themselves trapped in situations where their skills are not fully utilised. Skill mismatch not only has detrimental effects on job satisfaction and motivation, but also implies that societies are wasting valuable human resources. More research on these issues can provide policy-makers with valuable insights into shaping and implementing innovative policies and measures aimed at preventing or addressing skill mismatch problems ^(g).

Given the trends towards increasing skill requirements in all sectors and occupations, there are concerns about potential mismatches between labour force education and skill levels on the one hand, and job requirements in the labour market on the other. Workers are

^(f) Cedefop intends to update its forecasts every two years, starting in 2009. These updates foresee inclusion of new data, improvement of specific methods and the subsequent gradual prolongation of the forecast period.

^(g) To contribute to a better understanding of skill mismatch, Cedefop has recently launched a new four-year research programme.

increasingly more likely to perform different tasks and jobs during their working lives. Consequently, they need to be supported to cope with these transitions by a series of measures, including continuing training and guidance.

At present, some regulatory barriers to realising a single European labour market exist, such as insufficient comparability and recognition of qualifications and restrictions on the transfer of pensions and social benefits. This does not allow for an efficient matching of labour market needs and hampers effective solutions to resolve skill gap problems. Removing these obstacles will complement Member States' efforts to promote better use of skills and contribute to alleviate and prevent skill mismatches.

In response to identified needs and policy priorities, the European Commission in its communication of 26 November 2008 *New skills for new jobs: better matching and anticipating labour market needs*, which is closely linked to the package of measures for growth and jobs and which complements the *European economic recovery plan*, proposed a series of actions to match skills with vacancies, organise skills assessments on a permanent basis, pool the efforts of Member States and other international organisations, and develop better information on future needs.

The new skills for new jobs agenda aims to improve monitoring of short-term trends and to develop tools for better matching of skills and job vacancies on the European labour market, including better information on needs in the EU in the medium and long term, with regularly updated projections of future labour market trends (done by Cedefop) and analysis of skills needs by sector. Moreover, the Commission will help Member States and regions and all actors involved in upgrading and matching skills by mobilising existing Community policies and funds, especially the European Social Fund (European Commission, 2008e).

Concluding, education and labour market policies will face enormous challenges to cope with structural change, and occupational and sectoral mobility needs. This includes adapting workforces and skills to new requirements by retraining and continuing training – in particular of adults and people at risk of unemployment and

those in precarious sectors and occupations. Implementation of lifelong learning strategies and policies to reconcile flexibility and security take on a new dimension. To improve human capital and employability upgrading skills will be essential especially with the financial crisis adding exceptional unpredictability to the future of the world economy (European Commission, 2008e).

2.2. Demographic change

As a result of changing demographic features of the EU population, and in particular the baby boomers moving to retirement age, working age populations will decline considerably in the coming years and decades.

From a worldwide perspective, Europe will be the first continent to face a population decline and severe population ageing in the near future compared to other continents. But other continents and non-European countries will follow similar paths in the longer term, some even at higher speed (Tessaring, forthcoming).

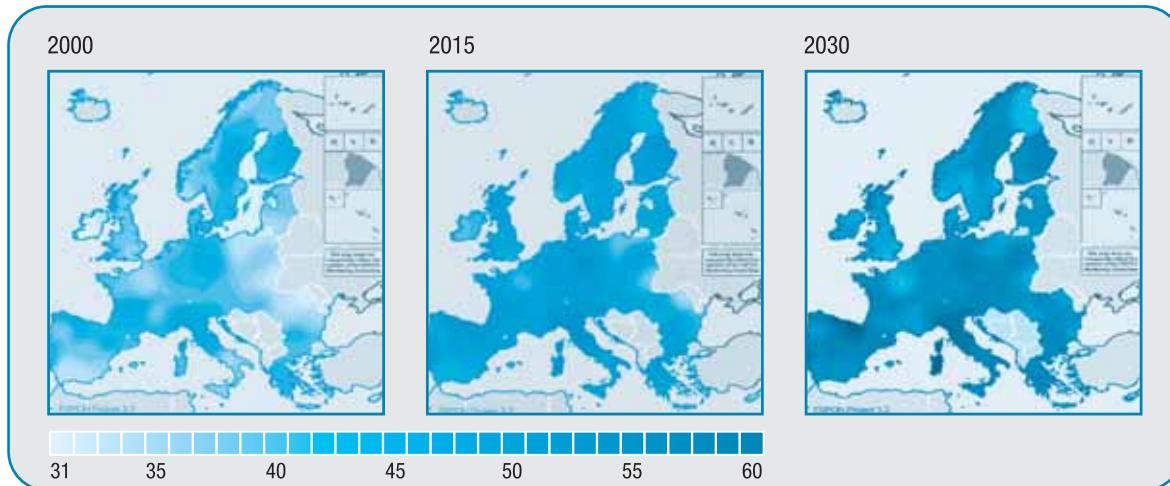
2.2.1. Decline and ageing of populations

Although age structures differ between countries, the demographic challenge is apparent everywhere. In the next 40 years, the average age will increase all over Europe and despite increasing participation rates, labour supply will decrease.

According to recent Eurostat forecasts (2008b), the EU–27 population is projected to increase from 495 million on 1 January 2008 to 521 million in 2035, and thereafter gradually decline to 506 million in 2060⁽⁹⁾. From 2015 onwards, deaths will outnumber births, and hence natural population growth will cease. From this point onwards, positive net migration will be the only source of population growth. However, from 2035 positive net migration will no longer be able to compensate for negative natural demographic change, and the population is projected to start falling.

⁽⁹⁾ Eurostat's Europop2008 'convergence scenario' is based on the population on 1 January 2008 and on the assumption that fertility, mortality and net migration will progressively converge between Member States in the long run. Alternative assumptions in a different conceptual framework would yield different results.

Figure 7. **Growing median age (years) of the European population, baseline scenario, 2000, 2015 and 2030**



Source: ESPON project 3.2, spatial scenarios and orientations in relation to the ESDP and cohesion policy, October 2006.

Further and due to persistently low fertility rates and increasing longevity, the EU-27 population will continue to grow older. The share of the population aged 65 years and older will rise from 17.1 % to 30.0 % in 2060.

The aging process, however, will not affect all countries in the same way. Spatial scenarios show considerable demographic variations not only from one country to another but also within single countries. Figure 7 shows that, by 2030, regions with the highest median age will be found in northern Spain and Italy, Portugal, and central Europe.

On working age population (age 15-64), Eurostat forecasts are even more pessimistic. By 2060, the working age population (15-64) of the EU will fall by almost 50 million even if net

immigration continues similar to historical levels. Without immigration, the working age population in 2060 would be around 110 million lower than today. Given the increasing number of people aged 65 and older, old-age dependency will increase: employed persons will have to finance a larger number of elderly people.

Against this backdrop, migration has become a major determinant of demographic evolution in the EU to compensate natural demographic decline (Eurostat, 2008a).

2.2.2. Migration – Compensation for demographic decline

Immigration will continue to play an important role in addressing labour market needs and skills shortages. Demand for migrants, particularly

Box 6. Preparation for ageing for 2008-12 – the Czech national programme as an example

In January 2008, the Czech government adopted the strategic document on national preparation for ageing *Quality of life in old age* (Ministry of Labour and Social Affairs, 2008). This document specifies and further develops measures stated in the national programme of preparation for ageing for 2003-07. Educational measures are included in several strategic priorities. The document works out measures to increase lifelong learning opportunities and availability, including special retraining programmes and counselling and guidance for older people. ESF funds should be used for expanding lifelong learning opportunities in the schools network. Promoting the development of individual further education in ICT and foreign language competences should be implemented.

Source: ESPON project 3.2, spatial scenarios and orientations in relation to the ESDP and cohesion policy, October 2006.

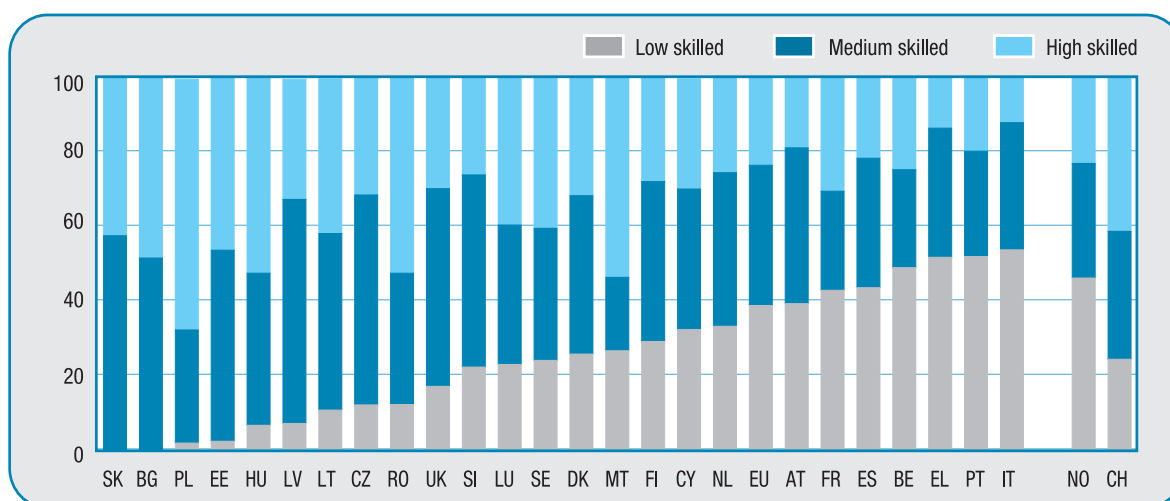
Box 7. Basic data on migration

On 1 January 2006 the total population of EU-27 was close to 493 million. Of these, 18.5 million were third-country nationals, equivalent to 3.8 % of the total population ^(e). The most important groups of third-country nationals come from Albania, Algeria, Morocco, Serbia and Turkey. These figures of course exclude immigrants and their descendants who have been naturalised in the past.

Statistics on the stock of irregular migrants are difficult to obtain. However, data on refusals at the border, apprehensions in the territory and deportations provide some information of irregular migration. While refusals at the border and deportations have decreased between 2003 and 2006, apprehensions have increased by 20 %. Further, at least 3.75 million immigrants have been regularised since the early 1980s.

^(e) This is likely to be an understatement of migrant population, as many third-country nationals have obtained nationality of their new countries of residence. Analysis of migrants is severely hampered by scarcity of relevant data, as many sources provide no information on country of birth. Source: European Commission, 2008d.

Figure 8. Educational attainment of recent third-country born migrants aged 25 to 64 by ISCED level, 2007 (%)



NB: Third-country born (non EU) migrants residing in a European country less than 10 years.
Source: Eurostat, EU labour force survey (LFS), 2007, date of extraction: 18.12.2008.

those with specific skills, is likely to increase with demographic change. Currently, net migration is generally less than 1 % of total population per year, with, however, large differences between individual Member States. In Ireland, Spain, Italy and Austria, migration has doubled recently, while in the Netherlands net migration has decreased dramatically and has been negative since 2004.

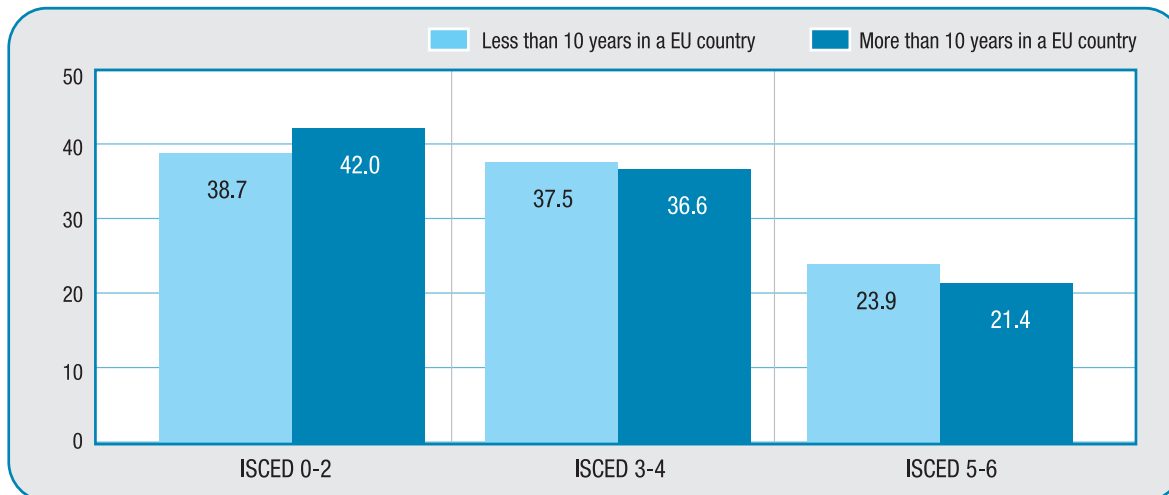
Overall, the EU ⁽¹⁰⁾ tends to attract mainly less

skilled immigrants. Although the proportion of migrants with tertiary-level education tends to be very similar among EU born and non-EU born, third country working-age migrants have more often lower levels of skills (45 % are low-skilled), whereas the largest share (45 %) of EU-born migrants have medium skills. This partly reflects past labour demand for low-skilled workers in the manufacturing sector. Only one in five is high skilled (2008 employment report).

Recent migrants are generally higher qualified than migrants which came to the EU earlier (Figure 9).

⁽¹⁰⁾ EU-27 excluding Bulgaria, Germany, Ireland and the UK (also excluded due to incomplete coding of foreign qualifications).

Figure 9. **Education level of third-country born (non-EU born) migrants aged 25 to 64 by ISCED level, 2007, EU (%)**



Source: Eurostat, EU labour force survey (LFS) 2007, date of extraction: 18.12.2008.

In particular, upskilling lower skilled immigrants and their successful integration into the labour market and society, also in their second generation, is one of the most important challenges for VET (see Chapter 6).

Post-war migration flows in western European countries have created substantial foreign origin or ethnic minority populations in many countries. However, in the majority of countries, residential segregation and lack of integration into the social and economic system has persisted into the second generation.

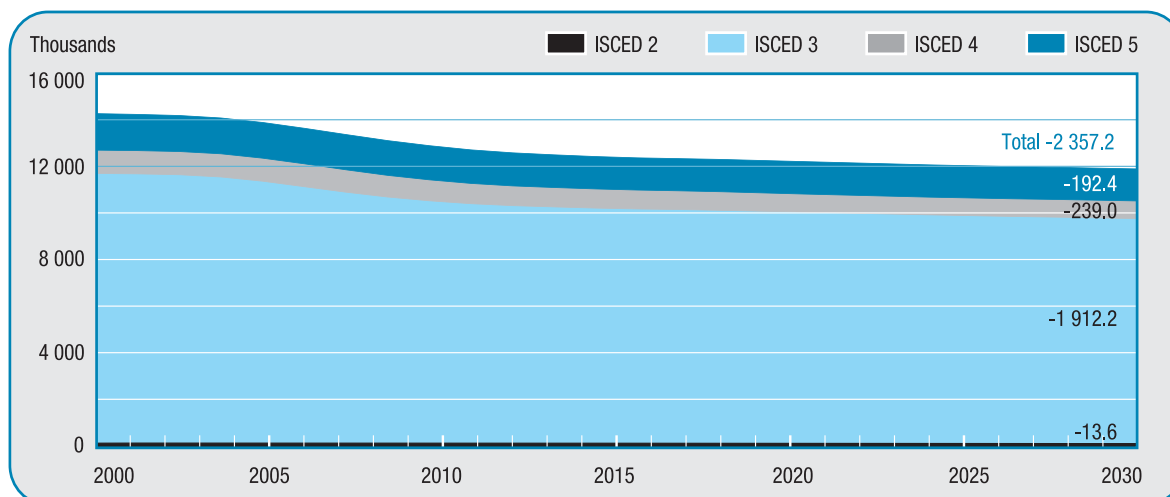
Considering developments during the past decade, the need for a common, comprehensive immigration policy has been increasingly recognised in the EU. As a result, the Commission proposed in 2008 concrete principles and measures – accompanied by a new strategy on immigration governance – which could be a base for further development of the common immigration policy over coming years. The communications *A common immigration policy for Europe: principles, actions and tools* and *Policy plan on asylum – an integrated approach to protection across the EU* set out several initiatives designed to ensure that economic migration is well managed in partnership with Member States based on commonly agreed principles grouped around issues of prosperity, solidarity and security. Integration is one of the key principles (European Commission, 2008d and f).

2.2.3. Fewer students and graduates in VET

Projections reveal that demographic change will lead to declining numbers of VET students and graduates (Cedefop, 2008i). The overall demographic downturn and increasing skill requirements indicate potential and increasing shortages and skill mismatch. This section demonstrates which impact demographic change alone will have on the future numbers of VET students and graduates. At this stage, the question remains open which change in participation rates (in VET and correspondingly in other educational pathways) will be likely or necessary to compensate for the effects of demographic decline ⁽¹¹⁾.

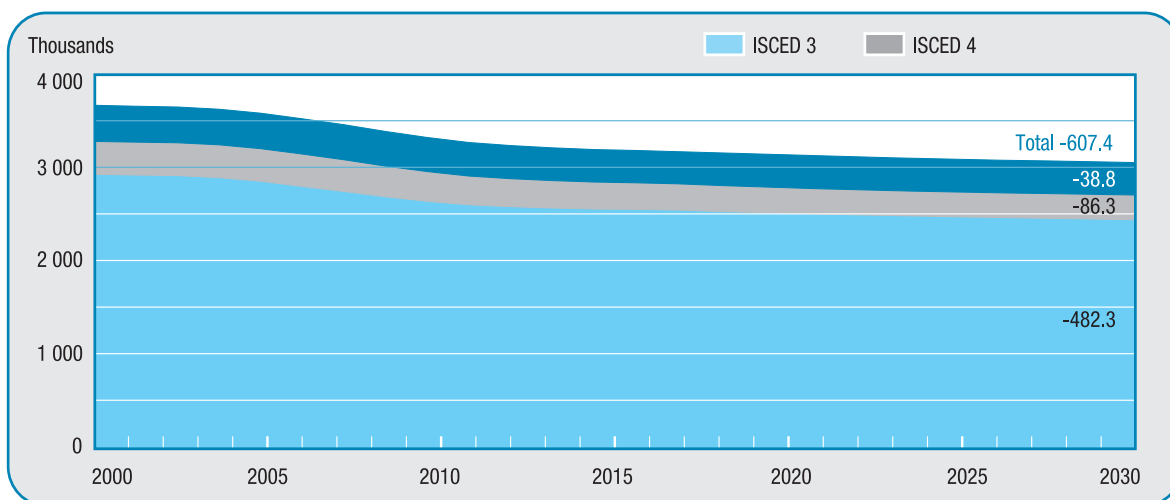
⁽¹¹⁾ The analysis concentrates on the impact of pure demographic trends. The projection model – participation ratio method – combines the 2006 Eurostat population projection (baseline variant) with observed VET participation and graduation rates. The data on VET are primarily derived from the Eurostat database. Calculations were made separately for two age groups (15-19 and 20-24). Since VET participation rates are not equal in these age groups, the future number of VET students and graduates depends on the future sizes of the population in these age groups. Observed participation rates, averaged by (single) age, gender, ISCED level and programme orientation (prevocational and vocational) over the period 1998-2004 (for which historical time series are available) are kept constant over the whole projection period. The reason was that past time series did not show clear trends - possibly due to a short observation period - and did not allow extrapolating historical trends of educational participation (see Section 5.2.1).

Figure 10. **Projected number of students aged 15 to 24 in initial pre-/vocational streams, by ISCED level, EU-27, 2005-2030 (thousands)**



Source: Cedefop, 2008i, based on Eurostat, 2006 (baseline variant; constant participation rates 2006).

Figure 11. **Projected numbers of graduates aged 15 to 24 in pre-/vocational streams, by ISCED level, EU-27, 2005-2030 (thousands)**



Source: Cedefop, 2008i, based on Eurostat (baseline variant; constant graduation rates 2006).

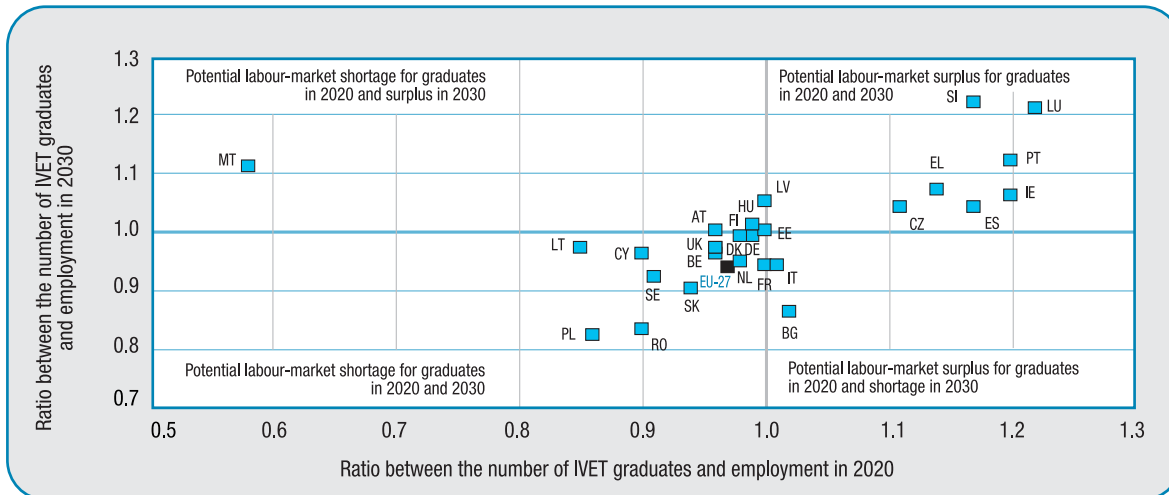
If pure demographic change is considered as the only factor of influence, the number of students in prevocational and vocational streams at ISCED 2-5 levels is expected to decrease from 14 million in 2005 to less than 12 million in 2030 – a decline of 17 %, according to the 2004 Eurostat baseline variant. In Eurostat’s high and low population variants the number of students will fall to 13.7 and 10.2 million respectively.

The number of VET students is expected to decrease particularly at upper secondary level

(ISCED 3), from 11.5 million in 2005 to 9.6 million in 2030 – a decline of almost 2 million (Figure 10).

To keep the number of students at current levels – thus preventing potential contraction of the current VET system capacity – would require a 20 % increase of participation rates in initial VET by 2030 (baseline scenario). Since education participation rates are already rather high, particularly in age group 15-19, this would mean a substantial shift of enrolment from general to prevocational and vocational streams.

Figure 12. Ratio between the number of IVET graduates and employment in 2020 (horizontal axis) and 2030 (vertical axis), 2005=1



Source: Cedefop, Fourth VET research report, forthcoming (c).

Demographic change will similarly result in a decreasing number of graduates of initial VET. The scenario based on Eurostat’s baseline variant for 2030 expects more than 600 000 graduates (at ISCED 3-5 levels) less than in 2005, of these almost 500 000 at ISCED 3 alone (Figure 11).

Smaller future numbers of VET graduates mean fewer entrants with VET qualifications into the labour market. However, as shown earlier, more graduates with ISCED 3 and higher qualifications will be required in European labour markets until 2020, due to new jobs created and high replacement demands.

Figure 12 gives an overview of possible labour shortages and surpluses by presenting the ratio between standardised number of VET graduates (2005=1) and standardised employment for younger workers (2005=1) for 2020 (horizontal axis) and 2030 (vertical axis)⁽¹²⁾. For the EU as a whole and 11 Member States individually, potential labour-market shortages for both 2020 and 2030 are projected. The potential labour-market shortage is most pronounced in Poland, Romania, Slovakia and Sweden. In the Czech Republic, Ireland, Greece, Spain, Luxembourg, Portugal and Slovenia both in 2020 and 2030, labour-market surpluses might occur. Only a few

Member States (Italy, Bulgaria) go from a potential surplus in 2020 to a potential shortage in 2030 or vice versa.

Concluding, the impact of demographic change on the size of the labour force cannot be easily overcome. Basically, there are only few options, such as increasing birth rates, increasing immigration and increasing labour-force participation as well as increasing productivity.

Of the available policy options, current evidence suggests that increasing birth rates is the most unlikely scenario. Also increasing immigration could not be a panacea for ageing: migration flows would need to be very large and come from outside Europe if the current age structure is to be maintained.

However, migration could serve as a policy option aiming at balancing short-term skill or labour shortages by aligning skill needs to newcomers’ capacities. Since immigrants are generally found to have lower employment and higher unemployment rates than the native population, often due to lack of adequate skills and language proficiency, there is a key role for VET to support them in their upskilling and provide tailored guidance and counselling and training opportunities.

⁽¹²⁾ When the index is smaller than 1, there is potential labour-market shortage for graduates; an index greater than 1 indicates a potential labour-market surplus of graduates.

Table 1. **GDP, employment and labour productivity growth (annual averages, %)**

	1997-2000		2001-03		2004-06	
	EU-27	US	EU-27	US	EU-27	US
1. GDP	3.1	4.2	1.5	1.6	2.4	3.2
2. Employment	1.1	2.1	0.3	0.0	1.1	1.6
3. Labour productivity (per worker)	2.2	2.1	1.1	2.0	1.5	2.1
4. Hourly labour productivity		2.1	1.6	2.7	1.4	2.3

Source: Council of the EU (EPSCO), 2008 (Employment report).

Increasing participation in employment is therefore the most adequate way to compensate (at least partly) for demographic decline. This refers particularly to women and older people, but could also be triggered by increasing skill requirements: as skilled and higher skilled people have higher participation rates (if sufficient jobs are available), the expected increase in skill needs (see above) *per se* could have a positive effect on overall employment rates.

As the population is getting older, the relevance of continuing VET in developing adults' skills and flexibility to remain active longer and to be able to switch between professional pathways is increasing.

It is important to note that demographic change should not be seen as a threat or risk but might yield new opportunities. Budget relief caused by reduced numbers of students could be used to improve quality and effectiveness of VET systems. This might include increased and targeted learner support, lower student/teacher ratios, more and better continuing training and competence development of teachers and trainers throughout their careers, better buildings and technological equipment. In addition, more targeted training could be provided to specific disadvantaged groups, underrepresented in training and/or employment participation. Thus, demographic change offers an attractive opportunity to deepen rather than widen investment in human capital. Ways should be sought and constructive policies designed to use the impact of negative demographic trends for positive actions.

2.2.4. The need to increase productivity and sustain competitiveness

Another option to bridge population decline and ageing is productivity increase. However, this seems to be an efficient and realistic option mainly in the manufacturing and agricultural sectors, but harder to achieve in labour-intensive service sectors (Berkhout et al., 2007).

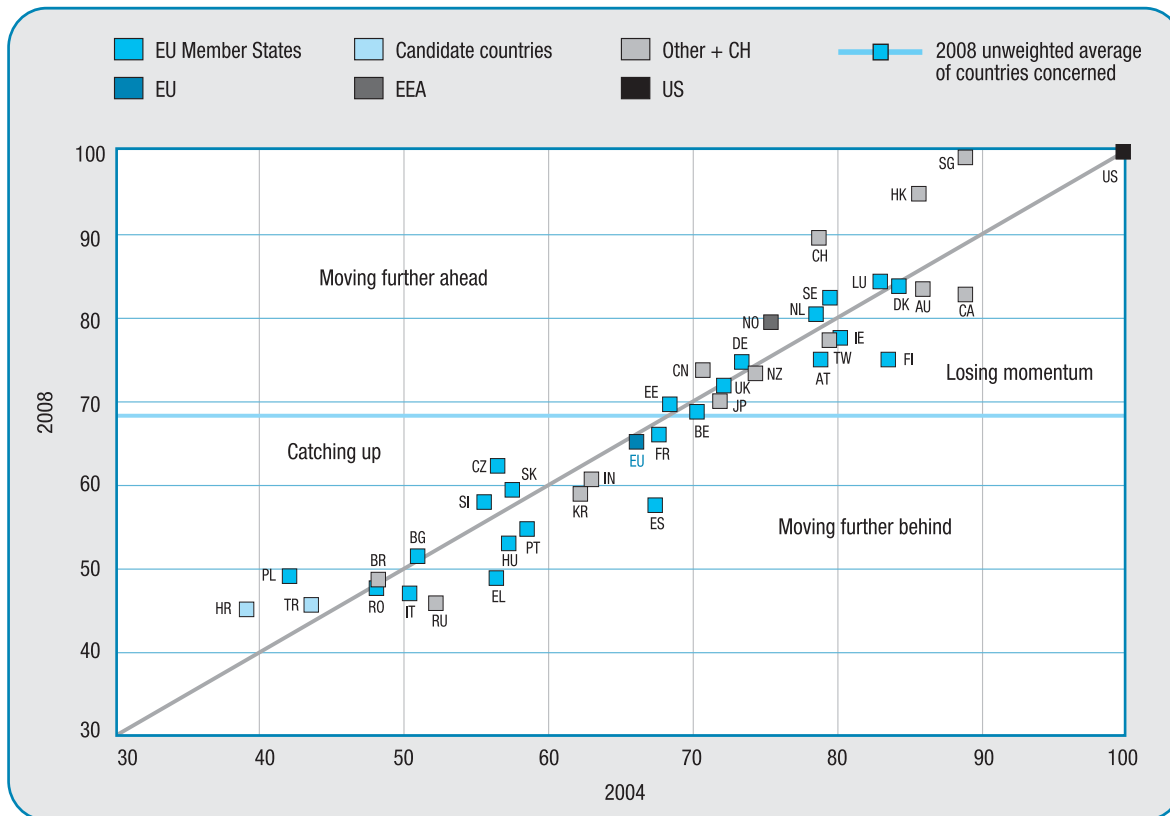
Since the 1980s, average labour productivity growth in the EU has been decreasing from around 2 % per year in the second half of the 1990s, to around 1 % between 2001 and 2003. Over the same time the US has sustained productivity growth rates of some 2 % on average. Since 2003 however, decline in productivity growth in Europe was reversed (Table 1).

One important means of improving labour productivity is investment in human capital, in particular increasing skill levels. This is also in line with Cedefop's skill needs forecast (see above).

Skills and R&D are crucial for competitiveness. Figure 13 ranks European countries and some major competitors according to a composite competitiveness indicator, based on economic performance, government efficiency, business efficiency and infrastructure in the years 2004 and 2008 (IMD, 2008) ⁽¹³⁾.

⁽¹³⁾ The IMD indicator is based on more than 300 criteria which are revised regularly as new research and data become available. Therefore criteria used in 2008 may, to a certain extent, be different from those used in 2004. Countries' composite competitiveness score is calculated against the US score (US=100).

Figure 13. **Change in competitiveness indicator between 2004 and 2008**



* EU score is an unweighted average of EU Member States concerned (not including Cyprus, Latvia, Lithuania and Malta).
NB: Countries' scores are calculated against US=100; Bulgaria's and Croatia's score in 2006 is used instead of 2004.
Source: IMD, World competitiveness yearbook, 2004 and 2008.

There are substantial differences in performance and progress between European countries. Some countries have proved to be able to sustain (Denmark, and, to a lesser extent the UK) or improve their competitive position (the Netherlands, Luxembourg, Norway, Sweden and to a lesser extent Germany), while other countries in southern Europe (Greece, Spain, Italy, Portugal, Romania) as well as Hungary declined from their already comparatively weak positions over the period concerned. The Czech Republic and Poland and, to a lesser extent Slovenia and Slovakia are clearly improving their competitive position and are quickly catching up. Estonia continues to be the most competitive country among the newer Member States, and stands well above the EU (unweighted) average and close to Japan. However important competitor countries like China, Hong Kong, Singapore and Switzerland, are also improving their competitiveness position, whereas others like

Australia, Canada and Taiwan, despite a decline in their relative position still remain far more competitive than most EU Member States.

2.3. Flexicurity – a response to globalisation, ageing and technological innovation

Overall, globalisation and technological innovation are beneficial for growth and employment, but the change they bring requires rapid responses from enterprises and workers. In this situation, mastering new skills becomes ever more important. Workers are increasingly likely to perform various tasks, and work for various employers, during their longer working lives.

The European concept of flexicurity is a response to this situation. It is an attempt to combine the need of companies continuously to

adapt their production methods and workforce to face globalisation and increasing competitiveness and the need of workers for new kinds of security that help them remain in employment while ensuring safe transitions into new jobs.

Flexicurity, an integrated strategy to improve simultaneously flexibility and security in the labour market, is now also a key priority for implementing the new integrated guidelines for 2008-10.

Four components of flexicurity have been identified at European level and endorsed by the European Council in December 2007:

- (a) flexible and reliable contractual arrangements from the perspective of the employer and the employee, of 'insiders' and 'outsiders';
- (b) comprehensive lifelong learning strategies to ensure the continual adaptability and employability of workers;
- (c) effective active labour market policies that help people cope with rapid change, reduce unemployment spells and ease transitions to new jobs;
- (d) modern social security systems that provide adequate income support, encourage employment and facilitate labour market mobility (European Commission, 2007d).

However, still more needs to be done within comprehensive flexicurity approaches to improve the functioning of European labour markets and to ease transitions with the aim of eliminating barriers to employment. Most Member States have now developed or are developing comprehensive flexicurity approaches. In particular, labour market segmentation remains a significant problem in many Member States, even though many Member States are starting to reform existing mainstream labour legislation.

For the first time, Member States have been requested to report on their flexicurity policies in the Lisbon national reform programmes, considering their different national contexts. In particular, the crucial role of the social partners and social dialogue in implementing national flexicurity pathways has been underlined by all Member States in their 2008 reports ⁽¹⁴⁾.

(a) The government of *the Netherlands* is promoting entrepreneurship by making it easier to change from being an employee to becoming an entrepreneur and vice versa. To support employability of the worker the government wants to achieve a 'climate of training' in which it is considered normal to take training. In addition, the cabinet has plans to shape the principle 'from work to work' by concluding working agreements with employers and employees.

(b) The *French* approach to flexicurity is based on the concept of career paths and on measures to secure them, making a key connection between reform of employment contracts and reform of employment services and the vocational training system.

Different instruments put in place which aim at securing transitions in the labour market, such as the individual right to continued learning, improving the new public employment service and reforming termination of employment contracts (negotiated termination of employment contracts) are important elements of the French flexicurity approach. Reform measures in vocational training and unemployment insurance will or have already (such as the concept of 'reasonable job offering') been put in line with the flexicurity concept.

Some detailed measures are: creation of a new non-renewable fixed-term contract (18 to 36 months) for engineers and executives, interprofessional negotiations on the forward-looking career and skills management system; upcoming negotiations on 'employment careers' – a system which governs the triangular employment relationship between the customer company, the employment career and the independent contractor (on a temporary contract).

⁽¹⁴⁾ Source: Lisbon national reform programmes 2008.

- (c) For job-seekers in *Belgium*, more emphasis has been put on the importance of having professional experience: several measures have a stronger onsite training component than before, and some have become more concentrated on different at-risk groups. On-the-job training is encouraged by the social partners' agreement to devote 1.9 % of the wage bill to it (though much effort is still needed to reach the target), and by providing training vouchers.
- (d) The *Slovakian* government strives, through active labour market policies, to create conditions which will support the process of modifying the skills and knowledge of the labour force to the changing needs of the economy. At the same time, they will create preconditions for finding other work (external flexibility) and conditions for working time flexibility (internal flexibility).

The government will create conditions for operating a unified system of lifelong career counselling so citizens can acquire comprehensive information on the possibilities of education and employment throughout their lives. The system will guide individuals in their selection of the type and level of education in relation to the job.

To implement this goal, a database of information for citizens and institutions providing counselling services will be created.

Measured development of one-stops aims at full introduction of the one-stop shop system for start-up companies. Entrepreneurial education will be introduced by acquiring basic knowledge of business and economics at secondary schools.

Reinforcing links with the labour market

3.1. Skills and employment – the current situation

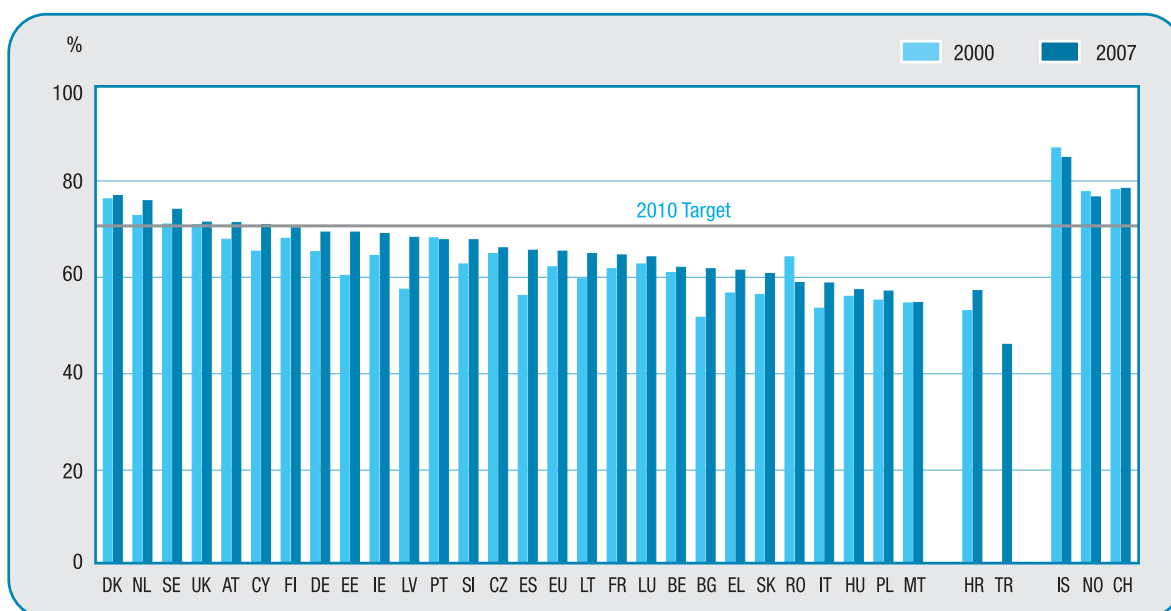
Supported by strong economic expansion in recent years, employment growth recorded the strongest increase since the 1990s with nearly four million jobs being created in 2006 and the overall employment rate climbing to 64.5 %. In 2007, the employment rate increased further by 0.9 % and reached 65.4 %. Employment expansion took place in an environment of accelerating productivity growth. Progress has been widespread but was in particular driven by a handful of Member States. The 2010 objective of a 70 % employment rate was already achieved by Denmark, Cyprus, the Netherlands, Austria, Finland, Sweden and the UK (Figure 14).

Generally, the educational level of employees is increasing. As shown in Figure 15, from 2000 to 2007, employment of low skilled decreased in the EU by about 5 %; the decrease occurred in

all European countries, except Denmark, Latvia and Norway. As regards the medium skilled, including traditional vocational qualifications, their employment at EU average slightly increased; however, it also decreased in nine countries. In all countries, more persons with high qualifications at working age were employed in 2007 compared to 2000. The increase in employment of high skilled was in particular significant in Ireland, Estonia, Luxembourg, Malta and Poland (more than 5 %). These data clearly confirm that the labour market needs or is able to absorb workers with higher qualifications and that the younger generation of employees is higher qualified than older workers.

However, it can be expected that the present global financial crisis and the subsequent recession will have a negative impact on future employment. Some data published by Eurostat or at national level already confirm this presumption.

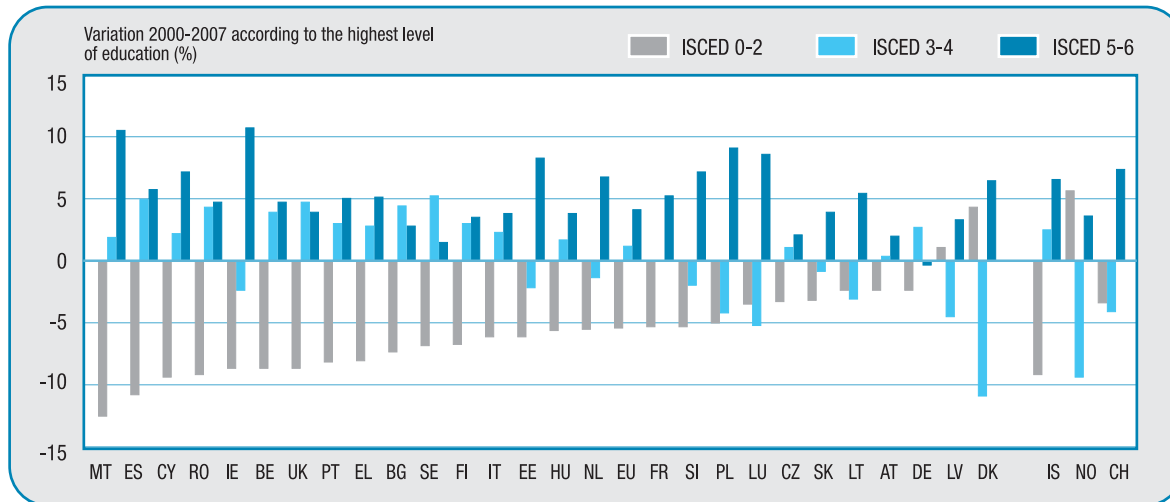
Figure 14. **Employment rate of population aged 15 to 64, 2000 and 2007**
(annual average in %)



NB: Croatia – 2002 data instead of 2000; no 2000 data for Turkey.

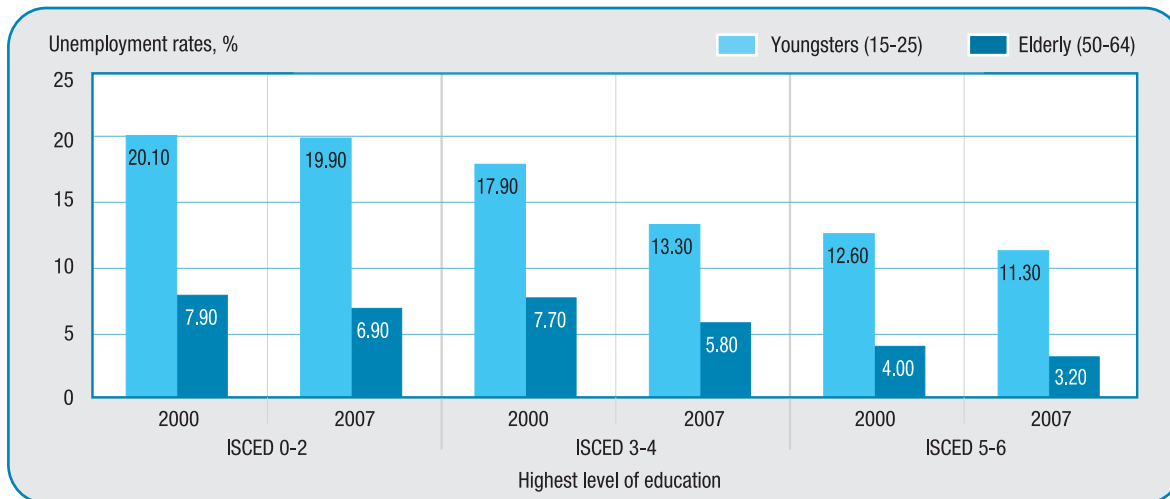
Source: Eurostat, *EU labour force survey (LFS)*, 2007, date of extraction: 9.12.2008.

Figure 15. **Change in employment of population aged 25 to 64 by highest education level, 2000 and 2007 (%)**



NB: Lithuania – 2001 data instead of 2000.
Source: Eurostat, *EU labour force survey (LFS)*, 2007, date of extraction: 9.12.2008.

Figure 16. **Unemployment rates of young and older persons by highest education level, EU-27, 2000-2007 (%)**



Source: Eurostat, *EU labour force survey (LFS)*, 2007, date of extraction: 7.1.2009.

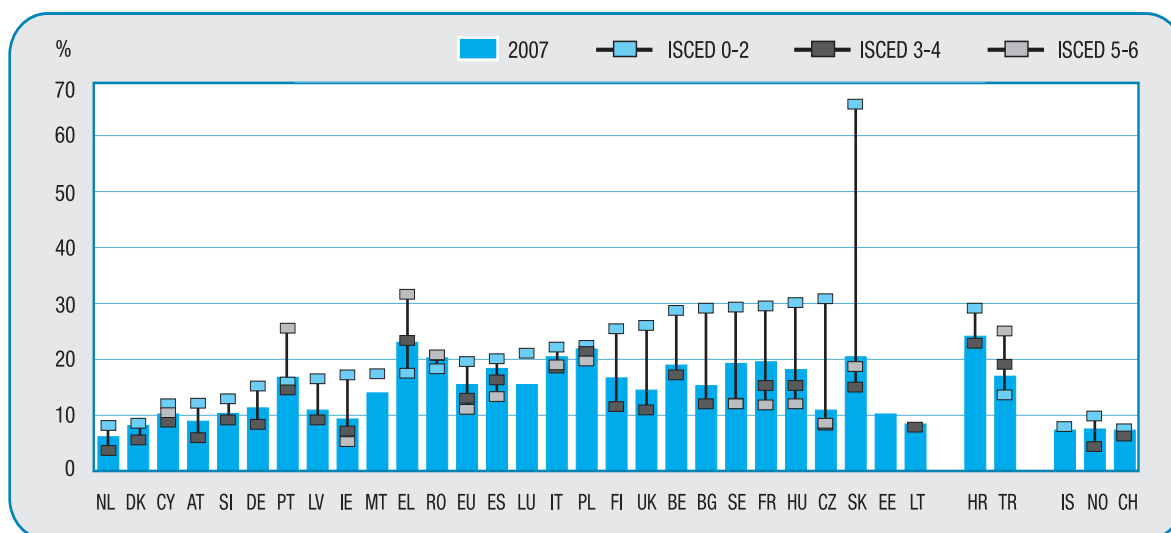
3.1.1. Too many youngsters unemployed

Youth unemployment – EU-27: 15.3 % of young persons aged 15 to 24 in 2007 – remains a problem in many Member States. Although the youth unemployment rate decreased by 2.8 % between 2000 and 2007, it is still almost three times higher than the unemployment rate of the older workforce. Young people are therefore one of the biggest groups of the population at risk to be unemployed.

Figure 16 displays the extent to which the gap between unemployment rates of younger and older persons has changed from 2000 to 2007 considering the highest education level attained.

As regards the low-skilled, the unemployment gap between younger and older people has slightly increased in favour of older workers. On the other hand, unemployment among the medium skilled has clearly decreased for both age groups, although for the most part among

Figure 17. **Unemployment rate of population aged less than 25 years by highest education level, 2007 (annual average in %)**



NB: Croatia – 2002 data instead of 2000.

Source: Eurostat, *EU labour force survey (LFS)*, 2007, date of extraction: 7.12.009.

youngsters (-4.6 %). This led to a narrowing gap of unemployment levels. For highly-skilled people, unemployment rates have slightly decreased for both age groups, but the gap has remained substantially unchanged.

The situation in individual countries differs significantly (Figure 17). So far, young people have not benefited enough from the favourable economic environment until recently; in general they remain more than twice as exposed to unemployment as the overall workforce. Figure 17 also shows that, as a general rule, young people with a low level of educational attainment (ISCED 0-2) are more likely to be unemployed in the majority of countries. Although this is a long-standing trend, significant differences exist between the various countries. There are four countries in particular (Greece, Portugal, Turkey, and to a lesser extent, Romania), where highly-skilled youngsters are currently facing more difficulties in entering the labour market than their lower skilled peers. This feature is most likely the consequence of an underdeveloped labour market, but also a warning sign of a considerable mismatch between the high education system and the skills needed to meet the changing demand of highly-skilled professional profiles.

Finally, many Member States still fall short of the new activation targets and the Lisbon priority

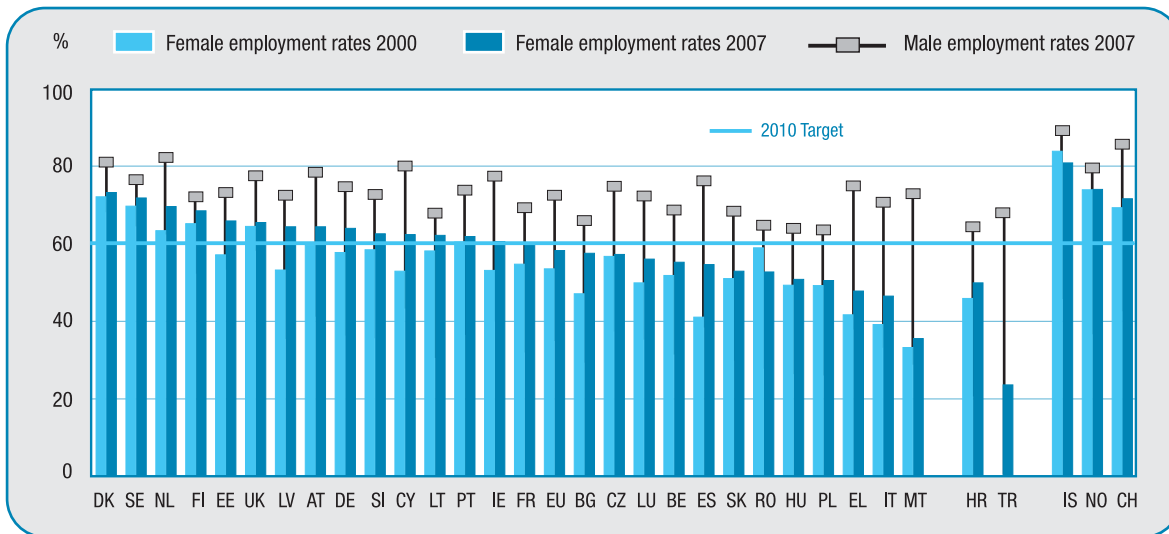
since 2006. Given the importance of the young generations in the context of future demographic decline Europe cannot afford any longer to waste its human resources.

Only about half the Member States have seen an improvement in youth unemployment in past years. The pattern changed significantly: several (mostly newer) Member States with extremely high rates in 2000 – which in some cases exceeded 30 % – decreased their rates to percentages below EU average. This could also be influenced by the fact that demographic decrease in youth age cohorts 15-24 was sharper in most Member States which joined the EU recently. However, in the majority of older Member States, youth unemployment rates have increased, partly significantly.

To reduce youth unemployment, countries have reported several categories of policy measures (ReferNet, 2008):

- (a) a frequent measure is linked to education and training, in particular to improve VET pathways (Belgium, Estonia, Luxembourg and Austria); creation of employment pathways (Malta) specific guidance for at-risk school leavers (Belgium, Germany, France, Luxembourg and Slovenia); specific contract schemes with a training component (Luxembourg) and tax promotion for apprenticeship places (France, Austria);

Figure 18. Female employment rates aged 15 to 64, 2000 and 2007 compared to male employment rates, 2007 (%)



NB: UK – provisional data for 2000; Croatia – 2002 data instead of 2000; no 2000 data for Turkey.
Source: Eurostat, *EU labour force survey (LFS)*, 2007, date of extraction: 7.1.2009.

- (b) another group of measures is focused on intensified and personalised guidance and job-search support (Portugal) and specific guidance for at-risk school leavers (Belgium, Germany, France, Luxembourg and Slovenia);
- (c) other measures (for all unemployed) include reduction of employers' social security contributions (Belgium, Spain, Hungary, Sweden); and wage support for recruitment of long-term unemployed (Germany). This measure is partially linked to education. The Czech Republic, for example, strengthened the conditions for social or unemployment benefits, and France reduced taxation of students' jobs (Council of the EU (EPSCO), 2008).

3.1.2. Better integration of women into the labour market

During past decades, female labour force participation (aged 15 to 64) has risen in most European countries. The Lisbon target for 2010 is to reach an employment level of 60 % for females, on average.

In 2007, the female employment rate stood at 58.3 %. In the past three years, annual growth was exceptionally high – female participation has risen by 1 % each year.

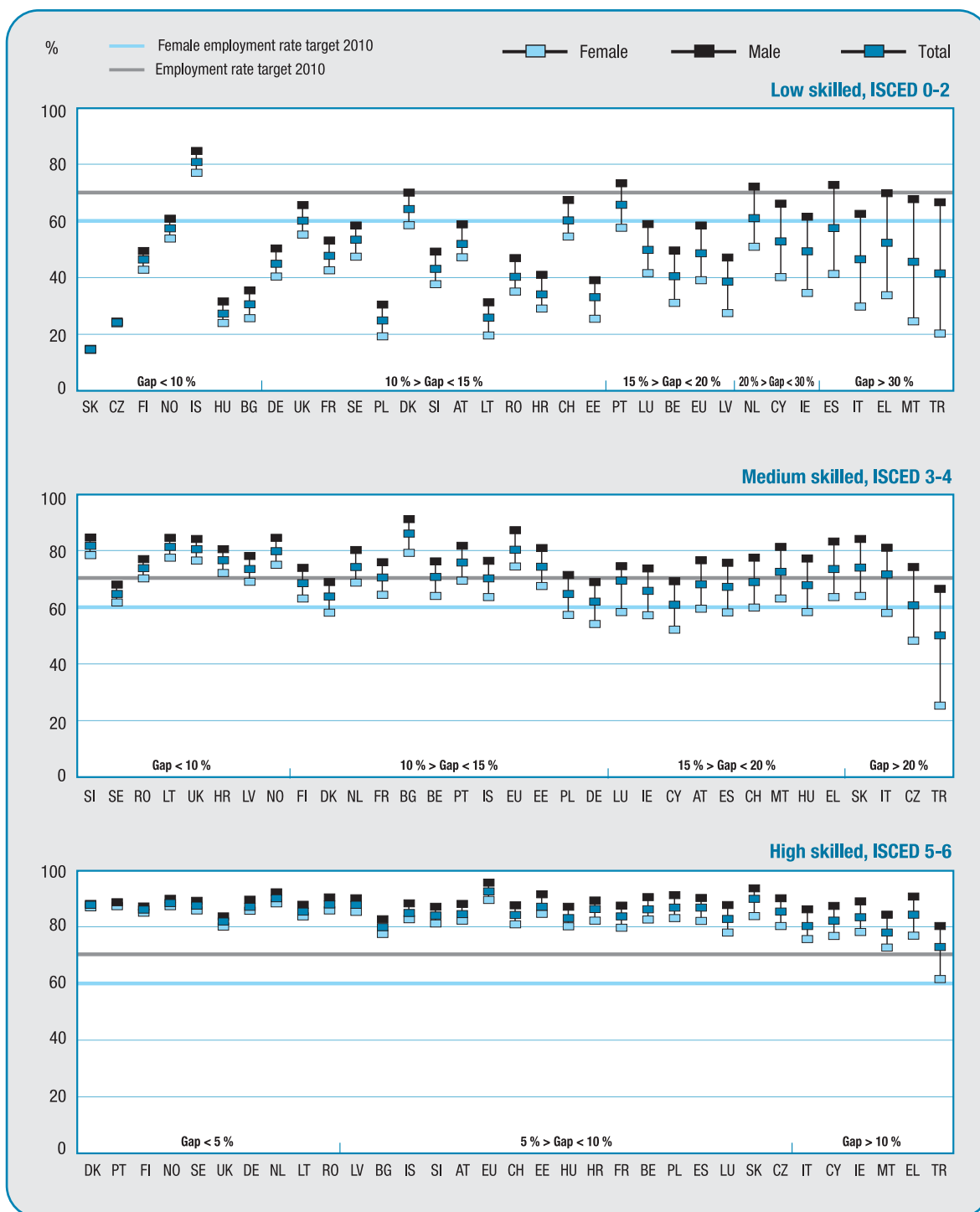
In Europe, there are structural differences in

female labour markets (Figure 18). In most countries, female employment rates are 10-15 percentage points lower than male employment rates; in Turkey, Malta, Greece, Cyprus, Italy, Spain and Ireland, the 'gender gap' is much larger. Female employment is still highest in Denmark and Sweden at 73.2 % – even higher than male employment rates in several other Member States.

Figure 19 shows male and female employment rates by highest level of educational attainment. The message is clear. The lower the (formal) qualification, the larger the gender gap in terms of active participation in the labour market.

- (a) As far as low-skilled people are concerned, there are countries where the gap is comparatively narrow (Slovakia, the Czech Republic – where the low-skilled population is very small – and the Nordic countries except Sweden). On the other hand, in a considerable number of countries the gender gap is far above 15 percentage points and in some cases even exceeds 30 percentage points (Spain, Italy, Greece, Malta and Turkey).
- (b) For medium-skilled people the gender gap appears narrower, although there is a group of countries where the gap is beyond 20 percentage points (Ireland, Malta, Greece and Turkey).

Figure 19. Gender gap in the labour market by highest education level, (people aged 25 to 64), 2007 (%)



Source: Eurostat, EU labour force survey (LFS), 2007, date of extraction: 2.12.2008.

(c) The gender gap for high-skilled people is well below five percentage points in a considerable number of countries (Slovenia, Romania, Lithuania, Latvia, the UK, Croatia

and Nordic countries). However, there is a group of countries where the gap exceeds 10 percentage points (Hungary, Slovakia, the Czech Republic, Italy, Greece and Turkey).

3.2. Building systems for early identification and anticipation of skill needs

Recent economic developments, decreasing supply of skills and increasingly felt shortage of workforce in many Member States have become an important push factor in developing systems for identification and anticipation of skill needs. The recent EU-level resolutions and initiatives and national programmes for implementation of the Lisbon strategy have triggered development of such systems. In several countries identification of skill needs has been incorporated into legislation and national development strategies.

There is a clear trend across Europe towards a holistic approach in identifying skill needs. Various methods are being combined to deliver robust and reliable information on the kind of skills required and the changes of job contents in different occupations. This is the case in Germany, France, the Netherlands, Austria, Sweden and the UK while the Czech Republic, Estonia, Italy and Poland are on the way to develop such approaches. Developing more sophisticated and complex approaches have encouraged sharing information (often through ICT), cooperation and networking between different institutions and experts at sectoral, regional and national levels. Consequently, awareness of different research activities and methods increased.

3.2.1. Methods, approaches and tools

Methods for identifying skill needs vary across Europe; each has its advantages and disadvantages. The following approaches can be distinguished [Cedefop, 2008m (working paper 1)]:

- quantitative and semi-quantitative – econometric forecasting models, surveys among employers, skills audits;
- qualitative – Delphi method, case studies, focus groups, sector scouting and determining qualification requirements among trendsetting companies;
- combined/holistic approaches – foresights, shared diagnosis, scenarios, observatories (sector, regional);

- others – sector studies, alumni surveys and monitors, specific branch/type of activity/occupation/field of qualification studies, studies on skill requirements for specific target groups (unemployed, disabled, low/non-qualified, ethnic minorities, foreign workers).

Vocational qualification focused research is predominant in Germany and Austria. Scenarios and strategies are used more frequently in Anglo-Saxon and sometimes Nordic countries, while observatories (sectoral and regional) using (semi-) qualitative surveys and involving several different actors are frequent in France and southern Europe.

Quantitative econometric forecasting combined with elements of qualitative research and sector studies are typical for the Netherlands, where elaborate forecasting produced by the Research Centre for Education and the Labour Market

Box 8. The Leitch review of skills in the UK

The UK Government commissioned Lord Leitch in 2004 to undertake an independent review of the UK's long-term skills needs. In particular, the review was asked to examine the UK's optimum skills mix to maximise economic growth and productivity, and consider the different trajectories of skill level the UK might pursue. The final report of the Leitch review of skills, *Prosperity for all in the global economy – world class skills*, was published on 5 December 2006 drawing on evidence from many sources (a call for evidence was sent to over 250 organisations, including employers and their representatives, unions and organisations providing education and training). The review team worked with key stakeholders, including government, agencies, education and training providers, businesses and trade unions.

The review sets out a compelling vision for the UK. It shows that the UK must urgently raise achievements at all levels of skills and recommends that it commit to becoming a world leader in skills by 2020, benchmarked against the upper quartile of the OECD. This means doubling attainment at most levels of education. It also recognises that responsibility for achieving ambitions must be shared between government, employers and individuals.

Source: Leitch (2006).

(*Research centrum voor onderwijs en arbeidsmarkt*: ROA) now incorporates spatial disaggregation to meet regional information needs. Results of national forecasts published as labour-market indicators adjusted to users' needs are disseminated through the career guidance and vocational counselling system.

A more policy-oriented approach has been recently adopted in the UK where the government commissioned a special review of skills (the Leitch review) to identify the UK's optimal skills mix in 2020 to maximise economic growth, productivity and social justice, and to consider the policy implications of achieving the level of change required (Box 8).

Newer Member States use various methods but they are mostly in a developing and testing phase. Methods are often developed in cooperation with some older Member States and thus some features of the 'host' system are 'borrowed'. Research into identifying skill needs in these countries is often developed around standards, updating curricula and setting up qualification frameworks.

In several countries, a permanent monitoring system of labour-market needs is linked to online provision of results, sometimes interactively (planned in Italy; Austria's skills barometer). In some cases, efforts are made to provide online information on jobs and occupations on the labour market – used also in career guidance – e.g. integrated system of typical working positions in the Czech Republic. In Slovakia a similar system is also in progress, based on Czech know-how.

Each national system combines features of several types. Therefore, allocating countries to a particular type is tentative and depicts only a predominant line of current development:

- (a) *decentralised system*. The system is developed mostly at trade, sector or local levels. Systematic anticipation of skill needs at national level is not very pronounced (Denmark, Greece, Spain, Latvia, Lithuania, Hungary, Portugal, Slovenia, Slovakia);
- (b) *coordinated non-holistic system*. The system is well-developed around quantitative forecasting which is a major building block of the system, although some qualitative elements are incorporated into the forecast and qualitative surveys are conducted in parallel (Ireland, Cyprus, Finland);

- (c) *building a coordinated holistic system*. The system is mostly based on medium-term macro-level quantitative forecasting which incorporates some qualitative elements of sectoral and/or other trend projections (Austria, the Czech Republic, Estonia, Italy, Poland). These countries attempt permanent skill needs monitoring;
- (d) *coordinated holistic system*. This applies to countries with very well-developed and long-established systems based on medium and/or short-term macro level forecasts, system of sectoral studies, regular questionnaire skills surveys among employers, regular regional surveys on employment, and with an efficient system of dissemination and application of findings to policy and practice (Germany, France, the Netherlands, Sweden, the UK).

3.2.2. Difficulties and obstacles in Member States

Several problems are reported by Member States. These include:

- lack of coordination of different activities; there are still very few collaborative teams/networks which have access to various information sources and use diverse tools and methods;
- time lag between producing analyses (detailed and robust) and incorporating the knowledge into VET courses;
- insufficient flexibility and capacities in education and training institutions to transfer the information on labour market needs into study programmes;
- inadequate funding (although ESF contributes significantly);
- insufficient human resources and expertise (particularly in newer Member States);
- insufficient statistics collection and database development;
- resistance and inactivity of employers (mainly SMEs) in identifying skill needs.

3.2.3. Towards a European approach

Despite similarities in features and development trends, systems for anticipating skill needs still differ considerably between countries. Diverse methodologies lead to results which cannot be compared at European level.

With greater mobility of labour in Europe, knowledge on future skills demand of the

European labour market is essential. A European system of early identification of skill needs with an adequate capacity to produce robust, reliable and regular information at European level is needed. Such a system requires continuous input from Member States and a holistic approach, combining quantitative and qualitative surveys at European level. More cooperation among European institutions and larger investments would be required to achieve the aim.

As evident from DGVT responses (2008), Member States are rather positive about developing a common approach or a common European tool for anticipating skill needs. As a main problem most countries mention the diversity and differences in current methods, tools, statistics, definitions, but also different stages of economic development. Such a common approach should complement rather than substitute national activities as well as represent added value for Member States by pulling together existing analyses and research.

3.3. Strengthening the role of labour market actors in VET

Dynamic and close cooperation with social partners/sectors/enterprises is a prerequisite if VET is to respond effectively to labour market needs. Many countries, and in particular those with dual VET systems, have a longstanding tradition of such cooperation (Austria, Denmark, Germany, Finland, France, Ireland, Luxembourg, the Netherlands, Norway). Nevertheless, they take continuous actions to improve collaboration with relevant stakeholders to respond to rapidly changing labour market requirements. Newer Member States used to have their VET systems strongly linked to industry but, as a result of transformation of their economies in the 1990s, these links were severely weakened/cut. Reestablishing cooperation with labour market actors is one of the major challenges those countries face.

As evident from DGVT and ReferNet reports, Member States have put much effort into increasing involvement of representatives of the world of work in developing VET. The measures

introduced aimed at strengthening the role of labour market actors in VET decision-making, VET administering/managing and VET provision.

3.3.1. Involving social partners in VET decision-making and administering

There is a clear trend of increasing the role of social partners in VET development at all levels: national, regional, sectoral and local. In some countries, recently introduced new or amended VET legislation (laws, acts, regulations, tripartite or bipartite agreements) laid the foundation and provided mechanisms for further strengthening social partners' involvement (the Czech Republic, Estonia, Lithuania, Poland, Portugal).

Several new bodies have been established or enlarged and social partners' functions have been expanded (see Chapter 4).

- In the Czech Republic, sector councils – based on the UK model, composed of experts nominated by employers and their organisations in close cooperation with 'central administration authorities' – are being gradually established.
- In Finland, in 2007, national education and training committees were set up (required in vocational upper secondary, adult and higher education) to promote interaction between training and the labour market. They comprise representatives of the national education and training administration, teachers, employers and employees. The committees can be sector- or qualification/ programme-specific.
- In Sweden, as of 2010, programme councils for all upper-secondary education and training will be introduced to improve its relevance and increase completion rates. Programme councils will be created at national and local levels and will have to include representatives of employers and employees (and other experts).
- In Hungary, the role of the chambers of commerce and industry in VET decision-making has been improving considerably since 2002. Following the agreements of 2006 and 2007 the chambers took on some tasks which had previously been the responsibility of ministerial administration (delegating the president to examination boards in selected vocational qualifications, management and coordination of national competition 'outstanding student of the trade').

- In Spain, General Council of the National Employment System was created in 2008, composed of public authorities and social partners. It is an advisory body for employment policy, thus also for training for employment.
- The UK Commission for Employment and Skills, established in 2008, plays an advisory role to the government.
- In 2008, in Estonia, further to amending the Vocational Education Institutions Act in 2006, the board of VET institutions needs to have over 50 % participants among social partners. Thus, social partners have a considerable influence on running VET institutions.

Other examples of recent increased social partners involvement include establishment of skills academies (UK), national reference centres (Spain), ESF monitoring committees (newer Member States), VET (polytechnic) institute operated by social partners (Iceland).

Through consultation or direct involvement in tripartite decision-making, social partners are increasingly involved in shaping VET. They participate in a wide range of activities: formulating VET strategies, policies and planning documents;

designing and assessment of VET programmes; planning students admission; development and validation of qualifications and standards; assessment of learners' skills and competences (examination commissions); guidance and information; quality assurance; anticipation of labour market skills and competence needs; managing training funds, financing VET.

3.3.2. Involving companies in VET provision

Many initiatives have been taken to improve cooperation between VET institutions and companies, encouraging integration of learning and working. Increasing emphasis is put on promoting workplace training and apprenticeship. The latter takes the form of introducing incentives for employers to recruit apprentices, modernising existing apprenticeship systems or developing new (innovative) apprenticeship models/ schemes. The measures aim at increasing attractiveness of VET (for both, individuals and employers), addressing specific groups (e.g. dropouts, older workers, SMEs) and promoting excellence of VET (e.g. developing apprenticeship at tertiary level).

Box 9. Promoting apprenticeship – country examples

- In Austria, experts from companies (and also research institutes) are continuously involved in development of apprenticeship. Since 2000, some 30 new apprenticeships have been set up. In 2006, the Vocational Training Act was amended, providing a legal basis for modularising apprenticeship which aims at making VET system more flexible (better linking IVET and CVET) and responsive to sectoral needs as well as increasing the number of training enterprises. Modular apprenticeship consists of a basic module as well as main and specialised modules, allowing acquisition of qualifications according to special production modes and services of particular sectors. To attract new training providers, apprenticeship advisors have also been employed and a nationwide network comprising a total of 18 apprentices' advisors was set up in 2004, whose task consists of opening up additional company-based training slots by establishing relevant contacts and conducting targeted acquisition activities. This provision was very well received by companies: until September 2006, more than 13 000 companies were

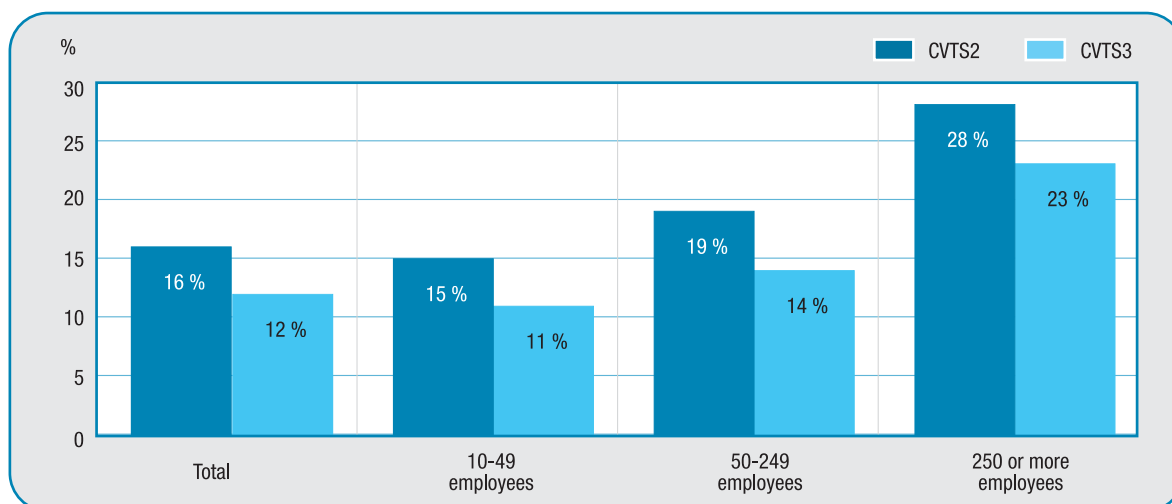
contacted and about 5 700 commitments for admission of apprentices obtained.

- In Cyprus, due to low attractiveness of apprenticeship (steady reduction in the number of trainees, low completion rates – around 60 %, limited number of specialisations, lack of interest of teachers/instructors and employers) upgrading of the apprenticeship system has been a policy priority since 2004. Short-term measures (developed in 2008, cofinanced by the ESF) include revising curricula, reviewing analytical programmes, training teaching staff, acquiring software and improving administration and management of the system. In the long run, a new, modern apprenticeship system will be introduced, with changes in the philosophy, structures and processes. The proposal was approved by the Council of Ministers in 2007 and the new scheme will become fully operational in 2010. As of 2011, post-secondary apprenticeship will be incorporated into the system.
- In Denmark, in 2006, new apprenticeship was introduced as an alternative pathway into IVET and is

a part of government's strategy for reducing dropouts. Students will typically spend the first year of their education receiving practical training in an enterprise. The initiative is aimed in particular at students who may struggle or lack motivation to complete more theoretical school-based education without first gaining a practical insight into the field. New apprenticeship has been introduced within all areas of IVET. The school and the enterprise, along with the student, are responsible for planning and organising the form and content of practical training and developing the student's personal education plan.

- In Estonia, two pilot projects were implemented to introduce apprenticeship (Phare 2002 and ESF 2005-08). Some 16 VET institutions and around 180 enterprises were involved. The evaluation study reveals that particularly small enterprises value the project: 83 % of enterprises with up to four employees and 67 % of enterprises with 5-10 employees consider it 'extremely necessary'. The legal basis to regulate apprenticeship as a new form of study in VET institutions was passed in 2006 and 2007.
- In France, the government aims at increasing the number of young people in apprenticeship. The target was set of 500 000 apprentices in 2009. Modernisation of apprenticeship takes the form of financial incentives (tax exemptions for individuals and employers), developing apprenticeship in the services sector and higher education. Professionalisation of training programmes provided at universities was at the centre of debate in 2006.
- In Germany, to attract new companies to engage in IVET and to maintain the attractiveness of dual system, the Federal Government began to implement an innovation package for VET:
 - (a) in consultation with social partners and Länder, approximately 340 training occupations have been consolidated into occupational groups, common core skills have been identified, and on this basis opportunities and routes for specialisation have been created;
 - (b) CVT and IVET will be dovetailed more effectively to enable high-achieving young people to advance more rapidly;
 - (c) a sector-specific early identification of skill needs initiative will enable transfer of labour market requirements into VET provision;
 - (d) training programmes abroad in VET will be doubled by 2015.
- In Ireland, FAS (*Foras Aiseanna Saothair*: Irish Training and Employment Authority) has recently revised its curricula for all apprenticeship trades and has agreed three additional ones. Under the national development plan 2007-13, apprenticeships in further occupations will be introduced. The national partnership agreement 'Towards 2016' has recommended that measures should be introduced to promote take-up of apprenticeship by older workers. To progress links between apprenticeship and higher education, an innovative six-month science challenge intern programme was introduced. The interns (including apprentices at phase 5 on the apprenticeship programme) will have the opportunity to work in world-class institutions and private sector companies in the USA. The science challenge up-skilling programme for graduate apprentices who have a minimum of three years work experience offers theoretical and on-the-job training with leading US companies for qualified crafts people.
- In Italy, 'high apprenticeship' was experimented between 2004 and 2008. It is targeted at individuals aged 18-29 and allowed them to obtain a university degree, higher training qualifications or higher technical specialisation. The innovative element is involving training institutions in defining training programmes and issuing certificates.
- In Portugal, the 'Vocational apprenticeship programme' was subject to adjustments in 2005. The programme was designed for people aged 16-30 having a higher or intermediate level qualification, who were: (a) unemployed looking for their first job, not performing a professional activity for more than one year, (b) unemployed looking for a new job, who have in the meantime acquired a qualification but did not have any professional experience in this field for more than one year. Over 85 000 individuals were covered by the programme between 2000 and 2006. The programme was included in active labour market policies and lasted nine months. The programme INOV-JOVEM supports apprenticeship in SMEs and is targeted at young people (up to 35) with higher qualifications in innovation and management in SMEs. It lasts 12 months.
- In Sweden, the government launched apprenticeship in 2008 as a pilot project. Schools that want to participate need to establish a local advisory board with social partners and education representatives as a quality assurance body. The government intends to create a similar advisory body at national level.

Figure 20. Training enterprises with an agreement on CVT, EU, by size (%)



NB: EU does not include Bulgaria and Romania.

Source: Eurostat, CVTS2 and CVTS 3, 1999 and 2005, date of extraction: 19.12.2008.

3.3.3. The role of collective bargaining

Collective bargaining both at sectoral and company levels plays an important role in VET/CVT promotion. Collective agreements can include principles of equal access to learning and thus contribute to achieving the Council benchmark of 12.5 % of adult participation in lifelong learning by 2010. The positive impact of collective agreements in terms of participation in training and training duration was confirmed by a European survey carried out in 1999 (CVTS). However, comparison of the results of the surveys in 1999 and 2005 shows that the share of enterprises with collective agreements (as percentage of all training enterprises) decreased from 16 % to 12 % on EU average. The downward trend concerns each company size (Figure 20).

In general, countries having decentralised bargaining over CVT or a recently established CVT systems seem to confer a wider role to company-level good practices. The key issues are an inclusive approach to older and less qualified employees, joint development of CVT programmes with employees' representatives, paid leave and a strategic approach to increase competitiveness.

The degree of centralisation of collective bargaining on CVT is affected, for example, by the national legal framework and the profile of sectors leading collective bargaining. Four

national settings of bilateral CVT bargaining can be distinguished (planned Eurofound-Cedefop study), with sometimes several models existing in one country:

- CVT bargaining is almost absent. This is the case for Cyprus and Poland. However, both countries foresee some funds at national level (Cyprus) or at company level (Poland) where they are unilaterally managed by the employer;
- decentralised model, where company bargaining is prevalent or sometimes exclusive. This is the case in Germany, Ireland, Hungary, Malta, Austria, Slovakia, Finland, Sweden, the UK and Baltic countries. This group is rather heterogeneous: on the one hand there is Malta and the UK with a voluntary industrial-relations system where collective bargaining is decentralised at company level. On the other hand, there are countries (such as Austria and Finland), with a dominant and tripartite regulation on CVT in national labour contracts. In these countries, CVT is a matter of regular consultations rather than bargaining at company level;
- national labour contracts, which could regulate company-level bargaining and CVT activities. Examples are Bulgaria, the Czech Republic, Denmark, Norway, Portugal, Romania and Slovenia. In Luxembourg, four sectoral contracts foresee CVT activities, with joint committees at company level;

- national labour contracts and bilateral training funds in Belgium, Denmark, Greece, Spain, Italy, Luxembourg and the Netherlands (since 2007). These countries allow for company-level bargaining on CVT and differ on its extent and on the array of training action set at national level.

3.3.4. Challenges

Member States have recently introduced many initiatives to involve labour market actors more in VET development. Still, some further actions are needed to consider the challenges and obstacles countries report on:

- insufficient work placement and training of students (the Czech Republic);
- need for more trained workplace instructors (Estonia, Finland);
- unwillingness of employers to pay for training their workers or release workers to acquire VET (Ireland), poor incentives for companies;
- insufficient human resources, expertise (Estonia, Latvia);
- conflicting interests: industry might protect its interest rather than contribute to changes in curricula, i.e. abolishing/amending programmes (Denmark);
- unclear division of responsibilities (for apprenticeship in the Netherlands);
- difficulty to involve employers due to institutional changes (new law) and insufficient financial resources (Slovenia).

Governance and financing of VET

Improving quality, efficiency and effectiveness of VET and making it more responsive to labour market needs are countries' main motives for reforming governance and financing of VET.

4.1. Governance of VET systems

4.1.1. Institutional reforms providing legislative and institutional frameworks

In the period 2006-08, many countries developed or amended legislation which provided the basis for (broad) VET reforms. Examples include new laws/acts on VET (Lithuania, Hungary, Slovenia, Finland); on education, where VET is an integral

part (Slovakia); on adult education, which involves CVT (Belgium); on adult training (Hungary), on validation and recognition of outcomes of CVT (the Czech Republic) or on State budget, which had implications on VET funding (Bulgaria).

New legislative frameworks in countries gave impulses for changes in VET structures, curriculum development, improving VET funding arrangements or strengthening the role of VET in regional development. Some legislative changes allowed streamlining of VET. For example, in Denmark, agricultural, social and health care programmes were included in the Act on VET in 2007, creating coherence in programmes and institutional regulation.

Box 10. Country examples: institutional reforms

Inter-ministerial cooperation

In Ireland, an interdepartmental committee, chaired by the Minister for LLL, was established in 2008 for coordinated implementation of a national skills strategy. Additionally, a high level interdepartmental group was set up to examine the needs of different groups experiencing social exclusion and to carry out a fundamental review of training and employment measures. The group includes representatives from ministerial departments of enterprise, trade and employment, social and family affairs and FAS (Ireland's National Training and Employment Authority).

Consolidation under one ministry

In Hungary, since 2006, vocational training and adult training have been (re)assigned to the same ministry, the Ministry of Social Affairs and Labour. Consequently, the National Vocational Training Council and the National Adult Training Council, which previously functioned as consultative bodies for the two competent ministers were replaced by the National Vocational and Adult Training Council. The number of employer representatives in the Council increased from six to nine.

Transfer of decision-making

In Portugal, as a result of a tripartite agreement, a National Qualifications Agency was created in 2007 to coordinate and execute VET policies, develop and manage a system of competences validation and certification (authorising creation of new opportunity centres, regulating the condition for their operation and carrying out their evaluation and supervision).

Strengthening institutional arrangements at regional level

In Hungary, from 2008, regional development and training committees will coordinate VET capacities at regional level and decide on distribution of financial resources from the training fund – 'development funds'.

Establishing new consultative bodies at national level

In Lithuania, a Vocational Guidance Council (advisory institution) was established in 2006 to assist the Ministries of Education and Science and Social Security and Labour in developing a vocational guidance system. The council is composed of representatives of State institutions,

municipalities, VET and general education schools, employers' and employees' organisations, learners (youth, adults) and non-governmental organisations.

Strengthening the role of stakeholders

In the Czech Republic since 2005, it has become mandatory for every school to set up its school council (based on the School Act 2004). The council allows different stakeholders to participate in school governance. One third of the members are appointed by the founder of the school (who decides on the total number of members), one third are elected by pedagogical staff

and one third by students and parents. The council approves the annual report of the school, discusses its budget proposal, comments on the management report and submits proposals for improvement. It also comments on proposed education programmes, approves the rules evaluating results of education of students, approves the school rules and scholarship rules and discusses inspection reports. In 2007, the councils were set up in 98 % of schools.

As reported by countries, some further changes in legislation are foreseen. For example, Latvia, Croatia and Poland are preparing a new version of the law on VET; the Netherlands is to review the law on VET and adult education to introduce competence-based education from 2010 and allow experiments in VET; the Slovakian Ministry of Education decided to complement a new Education Act (2008) with a new act on VET, which should prove an excellent opportunity to address specific needs of VET.

Institutional reforms involved setting up a range of new bodies and (re)defining responsibilities of different VET actors to modernise and strengthen the role of VET (Box 10). The changes concern:

- improving interministerial cooperation in VET;
- consolidating different types of VET under one body (ministry);
- horizontally transferring decision-making powers/management in specific VET areas to (non-ministerial) agency;
- establishing new consultative bodies at national level;
- strengthening institutional arrangements at regional, sectoral and local levels (regional councils/committees, sectoral councils/committees, school boards/councils);
- broadening participation and strengthening the role of various stakeholders in VET (including social partners, business, non-governmental organisations, teachers and trainers, learners).

4.1.2. Administrative and management reforms to improve efficiency

4.1.2.1. Decentralisation and autonomy

Seeking greater efficiency, countries alter administrative structures of VET systems. Delegating responsibilities (staff, budget, curriculum) to regional/local level, following the principle that regionally/locally-based decision-making is more effective and tailored to regional/local needs, has been one of the most dominant changes in VET governance in past years. Currently, many countries have (highly) decentralised VET systems, which in some cases is a result of recent reforms in the early 2000s (Bulgaria, the Czech Republic, Romania). In some Member States, the process is still going on (Lithuania, Austria, Slovakia).

A further common pattern, related to decentralisation, is a trend towards institutional autonomy of VET providers. While the State defines the overall education/VET strategy and provides broad guidelines – through legislation, funding, curricula and qualification frameworks – individual VET providers are given discretion on the practical arrangements for VET provision, such as training offer/content including development of new pathways, tailor-made courses, selection of target groups or staff recruitment. In some countries, institutional autonomy involves also funding (Bulgaria, Germany, Austria) where VET providers can increasingly take independent budgetary decisions. They are granted more flexibility in generating own funding and in allocating funds

according to their specific needs. Some are in an initial stage of planning and debate on autonomy process (Cyprus).

4.1.2.2. *Mergers*

To ensure administrative efficiency, and strengthen VET's capacity and responsiveness, some countries promote mergers of VET providers. Estonia, Lithuania, Latvia and Slovakia have merged State-owned VET schools to optimise financial and human resources as well as to increase quality of and accessibility to VET. To reduce large-scale fragmentation of IVET structure, the government of Hungary offered financial support to voluntary emerging VET-development associations and societies. The initiative launched a massive process of capacity integration: altogether 100-150 regional integrated vocational training centres are expected to be set up by 2010. In Denmark vocational colleges and labour market training centres were encouraged to merge to improve interaction with local and regional business and strengthen the dialogue among training providers and end-users, including both VET learners and business. In Northern Ireland, further education colleges were consolidated to provide high quality customer-focused education and training, able to meet the needs of individuals and employers. Finnish development plans (2003-08 and 2007-12) aim at strengthening VET providers networks, removing overlaps and supporting high-quality units. The new merged structures are often turned into multifield regional centres, providing both IVET and CVT and serving SMEs.

4.1.2.3. *Reducing administrative burdens – debureaucratisation*

In several countries, reducing bureaucracy is a policy option to improve administration and management of VET (Denmark, Estonia, Austria, Poland Slovenia, Finland, the UK). In Denmark, a committee for 'debureaucratisation' was set up in 2007 to simplify rules and procedures. The committee provided recommendations in four areas: organisation of VET programmes and teaching; quality assurance and evaluation; budgeting, financial reporting and administration; ad hoc reporting and analyses. A new law (2007) in Poland makes the rules for pedagogical

supervision less bureaucratic. The UK introduced a lighter inspection regime (colleges' own assessment) and more streamlined planning and funding, the benefits of which can be already felt. Overall, it can be observed that governments tend to steer the behaviour of lower level authorities and/or providers by results rather than complex rules.

4.1.3. **Focus on VET outcomes and accountability to improve quality**

Delegating decision-making power to lower levels calls for quality assurance. Danish policy focuses on 'output management', regulating the results and quality of VET provision through quality management and incentive structures. Austria aims at improving efficiency of school inspection and considers introducing peer reviews and external evaluation. The UK government is working with colleges to develop accountability frameworks. Finland intends to increase the proportion of performance-based funding in core VET financing ⁽¹⁵⁾ and develop further relevant indicators and performance measurement methods; from 2009, performance-based funding is also to be applied to CVT (development plan for education and training 2007-12). The importance of quality assurance when delegating decision-making powers is particularly highlighted by the Slovakian example. The country reports that 'positive effects of decentralisation and per-capita funding have been harmed by failure to introduce strict quality checking to prevent deteriorating quality of graduates and long lasting low investment in education' (ReferNet Slovakia, 2008).

4.1.4. **Cooperation and partnerships between stakeholders**

The success of VET requires active involvement of all VET actors at EU, national, regional, sectoral and provider levels. As reported by some countries (Belgium, the Czech Republic, Austria) implementation of major national VET/educational policy objectives and guidelines inspired/initiated by the EU – such as development of NQF (in line with the EQF), elaboration of a national LLL

⁽¹⁵⁾ Currently 2 % of the total amount of VET funding is allocated based on performance criteria, measured by graduation rates and placement of qualification-holders in employment and further studies.

strategy, consultation process on ECVET – has fostered partnerships and brought various stakeholders together in recent years.

There are many institutionalised working arrangements between different ministries (mainly education, labour and social affairs, but also finance), different governmental bodies, social partners and other actors. Many countries have a long tradition of involving social partners, often based on tripartite cooperation principles. Several newer Member States have more recently introduced a law or set up arrangements strengthening responsibilities of social partners in VET development (Bulgaria, Estonia, Lithuania, Latvia, Poland).

Sometimes cooperation between actors concerns part of a VET system. Increasing emphasis is put on promoting CVT/adult learning. In Denmark, government and social partners agreed (2007) on the overall objective in adult learning and CVT and will jointly monitor developments. Belgium, from 2006, has promoted cooperation between public education and training organisations for adults, focusing on CVT. The tripartite agreement between the Ministry of Labour, regions and social partners in Italy (2007) calls for creating a national continuing training system that is progressively organised, non-competitive, but integrated, thus promoting coherence and synergy of different (funding) approaches and instruments in CVT.

In line with progressive decentralisation of VET systems and autonomy of VET providers, there is a clear trend towards strengthening regional and local networking and learning partnerships. The German programme Learning regions – providing support for networks (2001-08) supports establishing and expanding networks at regional level across different institutions and areas of education and training systems to develop, test and implement innovative and integrated services for LLL. At the moment, the programme involves 76 regions. Wide differences among regions in Slovakia caused the government to launch a national programme for learning regions (2007) the objective of which is to link better LLL to local and regional labour market needs. The initiative involves schools of all levels, institutions of continuing education, employers, self-government, professional associations and

chambers. It aims at developing regional innovation strategies for closer cooperation between key players and provision of tailored educational programmes. Similarly, in the UK, regional skills partnerships bring together government agencies, employers and education and training providers to develop coherent approaches to skill changes in the regions. Locally, the initiative Aimhigher partnerships – where trade unions play a prominent role – seeks to widen participation in higher education, including vocational routes.

4.2. VET financing

4.2.1. Public expenditure on education and training

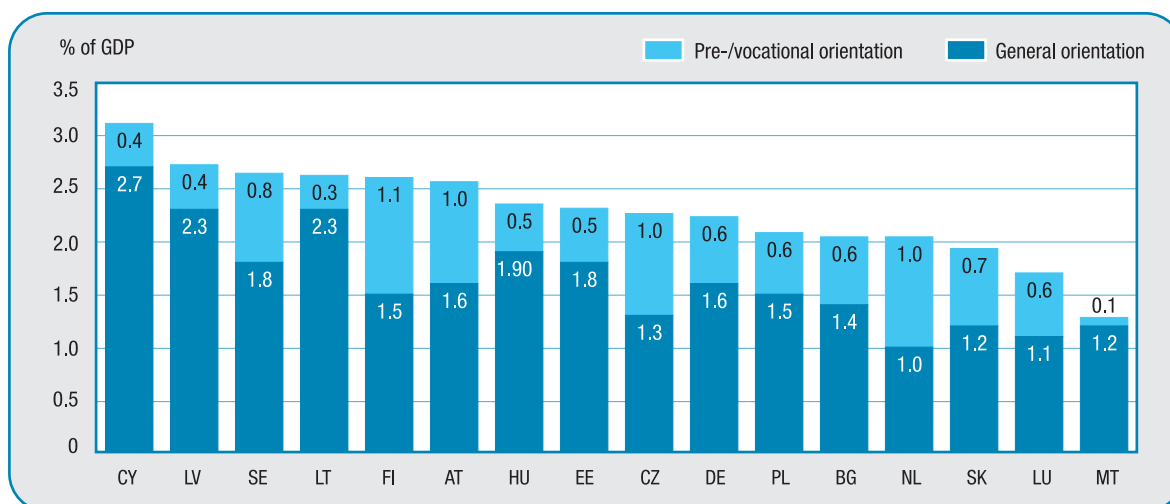
Public expenditure on education and training as percentage of GDP increased from 4.9 % in 2000 to 5.0 % in 2005 in EU-27.

There are significant differences between countries. In 2005, Denmark had the highest expenditure (8.3 % of GDP), followed by Sweden and Cyprus as well as Iceland and Norway with around 7 %. In Greece, Luxembourg, Romania and Slovakia expenditure was (slightly) below 4 %. Considering both, the level and growth of expenditure on education and training as a percentage of GDP, Estonia, Lithuania, Italy, Slovakia, Spain and Germany are falling behind the EU average while Cyprus, Finland, Hungary, the Netherlands, Poland and the UK are the countries moving ahead.

In 2005, public expenditure on educational institutions as percentage of total expenditure reached around 88 % on EU average. Private funding accounted for 12 % and was estimated at 0.7 % of GDP. In Germany, private expenditure on educational institutions was close to and in Cyprus and the UK exceeded 1 % of GDP.

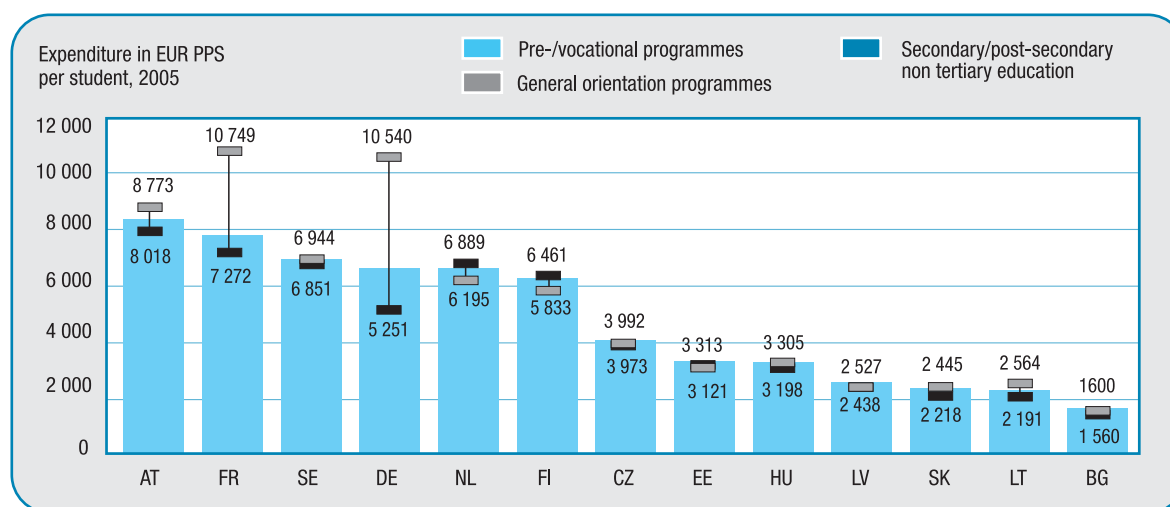
Concerning secondary education (lower-, upper-, and post-secondary levels, ISCED 2-4), all Member States for which data were available in 2005 spent more on general programmes than on pre-/vocational programmes, except the Netherlands where the respective spending was equal (Figure 21). Expenditure on general programmes varied from 1 % in the Netherlands to 2.7 % in Cyprus, whereas expenditure on

Figure 21. **Total public expenditure on secondary education by programme orientation, 2005 (% of GDP)**



Source: Eurostat, UOE data collection, date of extraction: June 2008.

Figure 22. **Expenditure on public and private educational institutions in secondary education, 2005 (EUR PPS per student)**



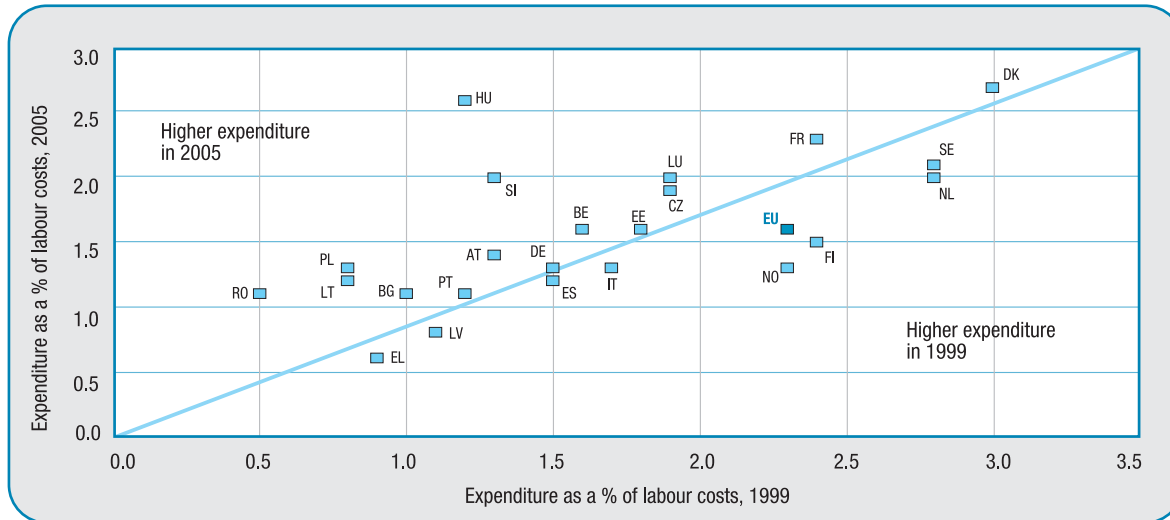
Source: Eurostat, UOE data collection, date of extraction: June 2008.

pre-/vocational programmes ranged between 0.1 % in Malta and 1.1 % of GDP in Finland. The Czech Republic, the Netherlands and Austria allocated 1 % of GDP to pre-/vocational programmes.

Concerning expenditure per student (EUR, in PPS), eight of 13 countries for which data are available in 2005, spent a higher amount per pupil in pre-/vocational than general programmes (Figure 22). The difference was exceptionally

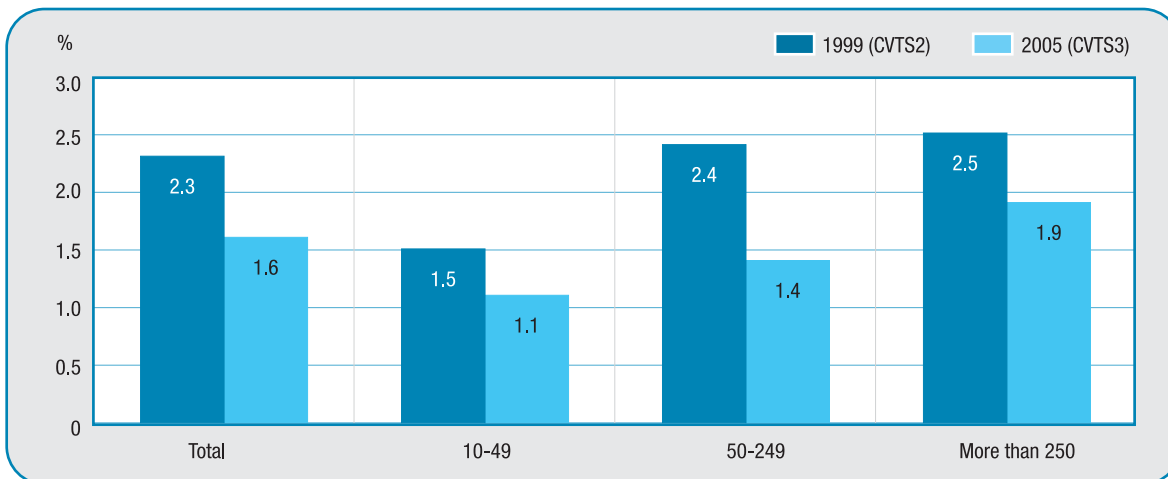
high in Germany, where expenditure per pupil in pre-/vocational programmes was double the expenditure per pupil in general programmes, and in France which had the highest expenditure per pupil in pre-/vocational programmes, at around EUR 10 750. Bulgaria had the lowest spending per pupil in pre-/vocational programmes, at EUR 1 600.

Figure 23. Expenditure on CVT courses as % of total labour costs (all enterprises), 1999 and 2005 (%)



Source: Eurostat, CVTS2 and CVTS3, date of extraction: 22.12.2008.

Figure 24. Expenditure on CVT courses by size class, EU, 1999 and 2005 (% of total labour costs; all enterprises)



NB: EU does not include Bulgaria and Romania.

Source: Eurostat, CVTS2 and CVTS3, date of extraction: 22.12.2008.

4.2.2. Companies' expenditure on CVT courses

Companies' expenditure on CVT courses in percentage of the total labour costs decreased from 2.3 % in 1999 to 1.6 % in 2005 on EU average ⁽¹⁶⁾. In 2005, CVT expenditure varied from 0.6 % in Greece to 2.7 % in Denmark. Only

in one-third (8) of the countries participating in the CVT survey, mostly newer Member States, the share of the costs of CVT courses in total labour costs did increase. Hungary experienced the highest increase: from 1.2 % to 2.6 %. Companies' expenditure fell sharply in Finland, the Netherlands, Norway and Sweden – even below EU average (Figure 23).

Expenditure on CVT courses as percentage of labour costs decreased for all company sizes

⁽¹⁶⁾ Eurostat's second and third continuing vocational training survey, CVTS2, CVTS3.

Table 2. **Expenditure on CVT 1993-2005 (% of labour costs)**

	EU27	BE	DK	DE	IE	EL	ES	FR	IT	LU	NL	PT	UK
1993	:	1.4	1.3	1.2	1.5	1.1	1.0	2.0	0.8	1.3	1.8	0.7	2.7
1999	2.3	1.6	3.0	1.5	2.4	0.9	1.5	2.4	1.7	1.9	2.8	1.2	3.6*
2005	1.6	1.6	2.7	1.3	:	0.6	1.2	2.3	1.3	2.0	2.0	1.1	1.3

(:) Missing or not available.

(*) UK data for 1999 are not comparable with other countries due to the omission of indirect cost in the total labour cost.

Source: Eurostat (CVTS), date of extraction: June 2008.

but the biggest drop, from 2.4 % to 1.4 %, was in medium-sized companies (Figure 24). In 1999, the difference between respective expenditure of medium and large companies was relatively small at 0.1 %; in 2005 the difference widened to 0.5 %.

Comparison of the results of CVT surveys carried out by Eurostat in 1993 (CVTS 1), 1999 (CVTS2) and 2005 (CVTS 3) reveals that in all countries participating in all three surveys (12 Member States), except Greece, companies' expenditure on CVT courses increased from 1993 to 1999 (Table 2). This positive trend did not continue in the countries concerned in the period 1999-2005 ⁽¹⁷⁾.

4.2.3. Financing arrangements and changes in funds allocation

Some countries (ReferNet, 2008) reported there have been no major changes in their VET financing arrangements/structures, particularly in the period 2006-08 (Austria, Croatia, the Czech Republic, Denmark for IVET, Greece, Hungary, Ireland, the Netherlands).

Some countries have changed the mechanism for allocating resources for VET. In the past few years, several newer Member States have introduced per capita funding (Bulgaria, Latvia, Lithuania, Poland, Slovakia), often differentiated by type of school and professional field. Since 2004, Slovenia has carried out pilot projects to develop per capita funding. At present the scheme is based mainly on inputs but a long-term goal is to focus on outcomes by performance indicators. The scheme is being implemented voluntarily. It is planned that by the end of 2008, all schools (including higher vocational) will apply the new financing model.

⁽¹⁷⁾ Progress report 2008.

Estonia is continuously increasing its expenditure per student in VET – the ratio in funding vocational versus general education is currently 1.4:1 (formerly 1:1, target: 1.5:1). Since 2007, State-funded study places are approved for the next three years instead of one year to increase flexibility and autonomy of Estonian VET schools, which have been granted the right to decide on the number of the new applicants. At the same time, schools are obliged to fill all the state-funded study places. The aim of this measure is to encourage schools' responsibility for drop-outs. The Netherlands is currently working on a second counting of students (in February, apart from October) to make funding more accurate.

4.2.4. Cost-sharing policies and mechanisms – raising additional resources

Analysis of country reports provided by ReferNet (2008) reveals that increased emphasis is put on adult learning. Many Member States report on greater investment in this area (Austria, Belgium, Bulgaria, Denmark, Estonia, Germany, Hungary, Iceland, Ireland, Lithuania, Latvia, Poland). To ensure an adequate level of investment, private contributions are needed in view of limited public resources. Meanwhile, however, there has been a downward trend in the level of companies' expenditure on CVT courses (Section 4.2.2). To address this, countries continue developing various cost-sharing approaches ⁽¹⁸⁾, such as:

⁽¹⁸⁾ For further details refer to <http://agora.cedefop.europa.eu/vetfinancing2008/> (Cedefop's conference on VET financing); www.cedefop.europa.eu/index.asp?section=3&read=2900 (Cedefop seminar on individual learning accounts).

- securing certain level of private investment in training by companies through levies;
- providing financial incentives for companies and individuals to invest in learning, such as tax incentives, vouchers, (individual) learning accounts, saving schemes, (low cost) loans;
- promoting apprenticeship/ workplace training, through subsidies, tax relief for companies offering places.

(a) Levies are the main source of income of training funds which are set up in several countries at national or, voluntarily, at sectoral level (Belgium, Bulgaria, Cyprus, Denmark, France, Germany, Greece, Hungary, Iceland, Italy, the Netherlands, Poland, Romania, Spain and the UK). Social partners play an important role here, by financing training (contribution of companies varies between 0.1-2.5 % of payroll) and managing, sometimes in cooperation with governments, on a tripartite basis, (multi) sectoral training funds.

As a Cedefop study (Cedefop, 2008k) shows, training funds contribute to reinforcing social dialogue, increasing awareness of the importance of training and strengthening commitment to training. Sectoral training funds proved helpful to improve the quantity and quality of training supply by aligning it to specific sector needs. Mutualisation of financial resources in training funds solves several potential training market failures that may cause underinvestment. These include the risk of poaching skilled workers and reduced availability of training opportunities for specific groups. The weak point of training funds is red tape, which can deter SMEs from using the funds. The focus on sector-specific needs rather than transversal skills, though most likely to be beneficial for a company, may hamper mobility of workers.

(b) Tax incentives can be offered to individuals or companies requesting training, but also to training providers. Tax incentives are present in the majority of Member States and take the form of tax allowances/credit/exemptions/deferrals or rate relief.

Evidence – evaluation of tax deductions in the Netherlands – shows that tax incentives for individuals can have a positive net effect on training participation. Tax incentives

targeted at companies carry a risk of substitution effect. In the Netherlands, preferential tax treatment of expenses for training of employees over 40 resulted in less training being offered to those under 40. Thus, instead of generating more training, the financial measure caused one group replacing another. An advantage of tax incentives is little additional administrative costs as the scheme is mainly based on existing institutional arrangements.

Available data shows that tax expenditure in education and training activities (defined as the loss of public revenue as a consequence of introducing the incentives) are not the backbone of public education and training policies. In fact, they account for a very small percentage of total public expenditure on education and training, as most EU Member States opt for direct funding and provision of these services. A planned report by Cedefop shows that tax policies are largely unconnected with education and training policies. However, in the past few years, increasing attention has been devoted to the role that tax policies can play as a tool to influence and support enterprises and individuals' investments in education and training. In this sense, experiences from some countries show that tax incentives are considered more effective where they are used in concert with other policy measures rather than on their own. Some countries (Germany, the Netherlands, Austria) have developed special tax incentives that favour not only training required for current jobs but also activities preparing people for future occupational changes, always from a long-term employability perspective.

Despite important differences among analysed countries, tax incentives show many strong points and are appreciated by employers and enterprises, particularly for effectively reducing education and training costs and for their low levels of red tape. However, tax incentives are often criticised for their high deadweight effect, especially among large enterprises and highly qualified individuals. They often have perverse redistribution consequences as they end up favouring groups already with best

access to education/training. In this sense, it is argued that public authorities should try to introduce specific and well thought out incentives for groups which benefit less (small enterprises and their employees, low-income people, low-skilled workers, etc).

- (c) Vouchers/learning accounts are direct, fixed government payments where (one-off) copayment by beneficiaries may be required. The amounts of government funding vary, but mostly are relatively small. The measure is usually for individuals (total adult population or specific groups), but can also apply to companies. Vouchers/learning accounts are implemented in several countries [Belgium, Germany, Ireland, Spain (Basque country), Italy, the Netherlands, Austria, the UK (England, Scotland, Wales)], but often experimentally – many schemes are pilot projects.

In the former Yugoslav Republic of Macedonia, the agency for the promotion of entrepreneurship through its regional network has been running a voucher system which provides SMEs with access to training and advisory services free of charge or on a cost-sharing basis.

Vouchers learning accounts enable beneficiaries to choose the training that they want. This positively influences attitude, motivation, personal development and participation in training. By promoting investment in subjects prioritised by learners, vouchers and learning accounts are considered to bring the greatest advantage to learners and respond well to labour market needs.

Although the measure allows a more targeted approach, it may not be effective for all disadvantaged groups. Experience in the Italian regions Piedmont and Alto Adige shows that vouchers helped to increase training participation of some groups, in particular women, workers with temporary/atypical contracts and small enterprise employees while low-educated, aged over 40 and blue collar workers remained underrepresented. Information and counselling as well as marketing and communication are particularly important.

- (d) Saving schemes and loans. Saving schemes involve regularly setting money aside over a longer period of time. Individual savings may be matched by contributions from government,

employer or both (Austria). Savings may also concern working time (apart from financial resources). This entails accumulating hours which can be spent on training over a certain period (France).

Loans for adult learning are less frequent than for IVET participants. Sometimes, loans are provided by commercial financial institutions rather than the public sector. However, they can be subsidised by government, in the form of a guarantee in case of default or payment of interest rate over a certain period (the UK).

Both saving schemes and loans appear more successful for those with a high level of education/income and less used by low educated/ low income people although the measure should provide support for those who lack financial resources. They seem more suitable for financing higher education and expensive CVT courses rather than short-term or less expensive ones.

Without additional incentive, savings may have a relatively low take-up for training purposes due to competition between different motivations to save (e.g. retirement). However, they can be more effective when combined with other financial incentives promoting learning, such as loans or vouchers.

4.2.5. Innovative financing mechanisms – policies to improve efficiency and equity

Cost sharing policies/mechanisms are being increasingly promoted, experimented and implemented in European countries to raise participation in learning and encourage demand-led behaviour. However, as evidence shows, their cost-efficiency and net impact are difficult to assess as the results differ across schemes. Each mechanism discussed above carries a risk of deadweight effect and specific target groups might be difficult to reach. In response, countries adjust existing financing instruments (often based on evaluations) or introduce new schemes to target groups better (Belgium, Ireland, Cyprus, the UK) or combine different financing instruments into a single model to reach a larger share of the population and various groups (Germany,

Box 11. Country examples on innovative financing mechanisms**Targeting groups**

- In Belgium (Flemish community) in 2002, ‘training vouchers for employers’ were introduced. In the beginning the measure was addressed to all companies. To reduce deadweight effect (which could reach up to 80 %), vouchers were replaced in 2006 by the ‘budget for economic advice’ targeted at SMEs. Support can be provided for training, counselling, and tutorage for talented entrepreneurs and knowledge transfer. Every two years, SMEs can receive a total maximum subsidy of max EUR 5 000 (35 % of the costs). The amount for training is limited to EUR 2 500. Obligatory training (regulated by law) is not eligible for support.
 - In Ireland, since 2007, State support for training people in employment has focused particularly on low-skilled and SMEs. The ‘back to education’ initiative, under which government provides funds for part-time learning and community-based education and for childcare, was amended as a financial barrier for the low-skilled persisted. Free tuition was introduced for any adult with less than upper secondary education.
 - In the UK, since 2005, there has been a switch in public funding from general provision for adults to provision for young people and major government priority programmes for adults. Measures have been taken to increase private contributions to fees where learners are not undertaking priority courses. Private share will increase from 32.5 % in 2006/07 to 42.5% in 2008/09. It is expected that by 2010/11, non-entitlement groups of learners/employers will be contributing 50 %.
- From 2008/09, three new funding models will be introduced: (a) for 16-18 year-olds; (b) ‘adult learner responsive model’; (c) ‘employer responsive model’. This includes introduction of a diploma for those aged 16-18, expansion of apprenticeship and making funding more demand-led for adults. Through the ‘adult learner responsive model’ the government will

invest GBP 1.5 billion in each of the next three years in learning below level 2 and progression learning, to support low-skilled and unemployed adults. Skills accounts will be introduced putting purchasing power in the hands of the learner. The ‘employer responsive model’ is directed at learners who are employed. Support is provided for apprenticeships, basic literacy and numeracy skills, full levels 2 and 3. Increased funding will be channelled through the train to gain programme where employers are involved.

Combining different financing instruments

- In Austria, a saving scheme for education and training has been in place since 2005. If an individual saves for six years, a government bonus of EUR 210 is offered, in addition to the interest rate. It is possible to receive a loan at a preferential rate of interest, maximum 6 %. No repayment during learning is required; it starts six months after graduation/completion. To make the instrument more attractive, it is proposed to raise the government bonus or offset repayment against tax.
- In Germany, a new model to finance CVT was agreed by the federal government in April 2008, for implementation from October 2008. The model encompasses three components: (a) State subsidy (maximum EUR 154) granted to each beneficiary, conditional upon their contribution in equal amount (to finance participation fee); (b) facility to withdraw savings deposits for CVT purposes before the end of a lock-in period without losing the employee saving bonus, by amending the Capital Formation Act. Under the saving scheme, it is possible to build up a deposit of EUR 3 500-4 000; (c) loan at preferential interest rate, after an obligatory guidance consultation but without any individual credit check. The model will run initially for three years, with no regional limitation. EUR 45 million are available for the initial phase.

Austria). While continuously stimulating private contributions (particularly from those who can afford it), governments direct available public funding to areas of demonstrated market failure/priority areas. This often involves free tuition fees for training specific groups (young people, the low-skilled). Some countries make particular efforts to harmonise different

(co)financing instruments to ensure their complementarity and synergy, thus to improve effectiveness of VET financing (Italy, Austria).

As a planned Cedefop study shows, VET cost sharing mechanisms are a good policy tool to improve private financing and participation in VET. Further research into how VET cost-sharing approaches function is needed. Better results

could be achieved once governance of VET cost-sharing mechanisms across countries (in particular newer Member States) improves and more evaluation and monitoring data become available.

The world economic crisis of 2008 is likely to have a negative impact on VET cost-sharing mechanisms as countries try to balance their public finances (particularly newer Member States). As a result, some VET cost-sharing mechanisms in some countries could be reduced or abandoned. On the positive side, the worsening capacity to finance VET could stimulate greater attention to effectiveness, efficiency and equity of cost-sharing schemes.

4.3. Challenges and obstacles

Some Member States report positive effects from the changes they have introduced in governance and financing of their VET systems, which resulted in increased efficiency, quality and/or accessibility of VET provision. Some indicated that the impact of the policies and initiatives they reported on cannot be assessed as the measures are too recent. Irrespective of this, further efforts are needed to improve VET governance and funding since many countries face important challenges. These include (ReferNet, 2008):

- lacking or out-of-date legislation on VET (Bulgaria, Croatia, Latvia);
- unsatisfactory coordination of policies/practices developed by different governance bodies/ VET actors, often at different levels (France, Italy, Slovakia);

- instability of governance structures and discontinuity of policies (Estonia, the UK);
- insufficient motivation and participation of employers/social partners in development of VET/cooperating with VET institutions/organising practical training (Bulgaria, the Czech Republic, Romania);
- lacking financial and/or human resources (expertise) to implement broader VET policies/specific initiatives, to ensure adequate capital investment (Estonia, Latvia, Lithuania, Hungary, Malta, Poland, Slovakia, Romania);
- (foreseen) decrease in investment in VET due to downward demographic trends (Poland, Slovakia) or restrictive government fiscal policies – reducing/preventing public deficit, such as in view of joining Eurozone (Hungary, Slovakia);
- lacking or insufficient incentives for private investment (Slovakia, the Czech Republic);
- law awareness of newly introduced financing mechanisms (Lithuania, Poland);
- difficulty in reaching specific target groups through financing incentives in place.

Countries plan to implement corrective measures. Some declare that they will introduce changes based on evaluations, which in itself is a positive outcome in the wish to achieve more evidence-based policy-making.

Raising the attractiveness of VET

5.1. Features and policies

Making VET systems more open, flexible and attractive is identified as an important part of the Copenhagen process of enhanced cooperation in VET as well as the European economic, employment and social agenda generally. The communication from the Commission *Modernising education and training: a vital contribution to prosperity and social cohesion in Europe* (European Commission, 2005b) stressed that improving the quality and attractiveness⁽¹⁹⁾ of VET continues to be a key challenge for the future. The Helsinki communiqué (2006) called for more attention to be given to the image, status and attractiveness of VET (Lasonen and Gordon, 2008), which was further emphasised by the Bordeaux communiqué (2008). According to the Bordeaux communiqué, attractiveness, accessibility and quality should allow VET to play a major role in lifelong learning strategies, with a twofold objective: (a) simultaneously promoting equity, business performance, competitiveness and innovation; (b) enabling citizens to acquire the skills they need for career development, to take up training, be an active citizen and achieve personal fulfilment. VET should promote excellence and at the same time guarantee equal opportunities.

As stated in the 2008 joint report on implementation of the Education and training 2010 work programme, further work still needs to be done to improve the quality and attractiveness of VET and progress, including reducing obstacles to progression from VET to further or higher education (Council of the EU, 2008a).

From a research point of view, attractiveness of VET is characterised as a cumulative process, which means that the more VET looks attractive, the more people and stakeholders use it and, in

turn, the more VET is used by these parties, the more it is attractive to others (Cedefop, forthcoming (c)). Increasing the number of stakeholders involved in VET is therefore essential to VET's attractiveness.

Potential stakeholders may either be users or providers of VET and/or be involved in its governance. Billett and Seddon (2004) have emphasised the importance of partnership-based governance at local level to reconcile conflicting approaches, build commonality of interests, promote responsiveness, realise the consequences of action, implement decisions and finally improve decision-making in VET governance.

Attractiveness of educational institutions, settings or tracks at the level of upper secondary education depends on three groups of determinants⁽²⁰⁾:

- (a) the schooling content and context including institutional control (public or private), reputation of the institution, track or programme, and the style of governance (practice of quality assurance, transparency); information and communication technologies (ICTs) and foreign languages in curricula and training programmes;
- (b) economic determinants: attractiveness of educational pathways or institutions can be encouraged or discouraged through tuition fees or tax arrangements;
- (c) opportunities for further educational and career development including gainful employment of training leavers, their earnings, job satisfaction, and the job-education skill match.

The EU policy of VET attractiveness is based on four pillars:

- (a) individualisation of VET pathways and delivery to consider the various capacities and interests of individuals (see also

⁽¹⁹⁾ Attractiveness is meant for the preferences, attitudes and related behaviour of individuals and groups as well as their families.

⁽²⁰⁾ See research literature on attractiveness reviewed in Cedefop's fourth VET research report, forthcoming (a).

Chapter 7). Individualisation of VET implies differentiation and flexibility (Cedefop, Descy and Tessaring, 2001). Internal differentiation relates to the teaching and learning process, whereas external differentiation refers to creation of new programmes/settings better to accommodate the needs and preferences of students. Flexibility induces possibilities for individuals and for the system itself to react rapidly in case of unforeseen developments/changes;

- (b) increasing attractiveness by providing people with a growing range of opportunities at the end of VET pathways. These opportunities can be of educational nature (workplace learning or access to higher education), or related to employment (job opportunities, career development, opportunities resulting from policies of gender equality);
- (c) increasing the attractiveness of VET through modernising its governance. The EU approach is based on the idea that modern governance implies streamlining and clarifying the educational offer, which may smooth and stimulate use of VET, thus favouring cumulative attractiveness. This view also recalls that modern governance means improving partnerships especially at local level to improve the steering and development of the VET system;
- (d) action on image and status of VET includes promoting its parity of esteem with general and higher education, and encouraging excellence in skills, for example by applying world-class standards or through skills competitions.

National policies implemented in Member States (DGVET, 2008; ReferNet, 2008) reflect – at least partly – EU priorities. In several countries, the VET offer has been diversified, educational routes more suited to lower-ability students have been opened, and modularised settings created. VET students have also been offered more options to reenter general education at secondary level or to enter tertiary education, to make the choice for VET reversible and thus increase VET attractiveness. Governance of VET systems has also been modernised by introducing quality assurance procedures, qualification frameworks for more transparency, and partnerships for more

responsiveness, in order to raise the usefulness and attractiveness of VET to more stakeholders. Finally, attempts are being made to bring academic education and VET closer together to fill the gap of esteem between both educational pathways.

To increase the attractiveness of VET, countries have put considerable emphasis on development of their vocational training and retraining courses. Examples for institutionalised solutions include (ReferNet, 2008):

- (a) establishment of well-equipped training centres (Bulgaria, Estonia, Italy, Lithuania, Hungary);
- (b) establishment of validation centres (Portugal) or external examination commissions (Poland);
- (c) introduction of higher educational and post-secondary programmes to reduce dead ends and increase the level of qualifications (Cyprus, Germany, Greece, Norway);
- (d) progressively developing counselling offices and organised networks in the majority of countries (Section 7.2).

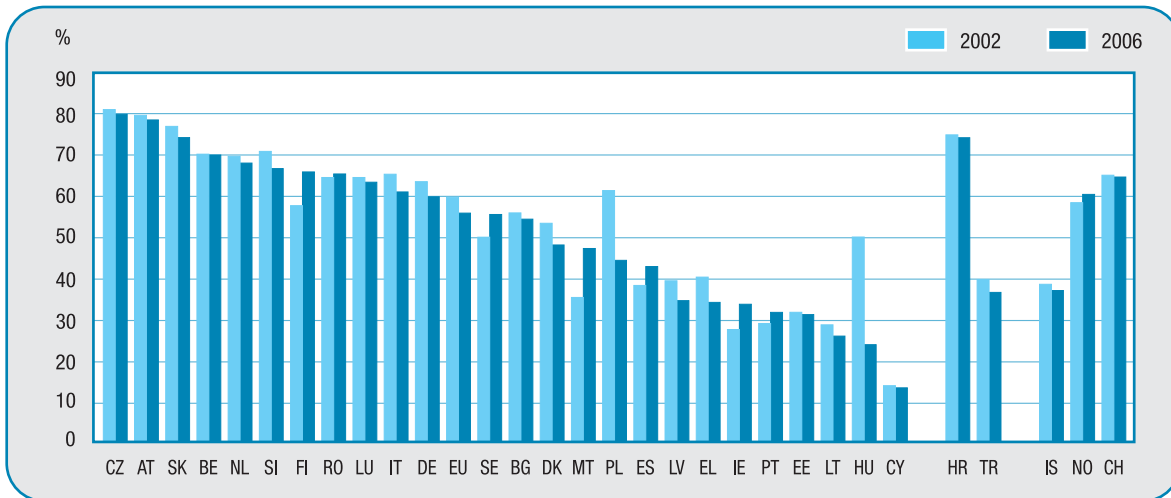
Problems remain however. First, not all priorities set up in the Copenhagen process have led to concrete measures. Lower achievement relates to providing VET students with individual guidance and support. Similar applies to increasing VET students' labour market opportunities; involving social groups, teachers and students in the governance of VET systems; and taking action to improve the image of VET. A consistent approach is needed since the simultaneity of initiatives taken at national or institutional levels in terms of vocationalism, academisation or differentiation (Dunkel and Le Mouillour, 2008) might be counterproductive. Finally, systematic evaluation of implemented attractiveness policies is also lacking.

5.2. Attractiveness of VET – trends and incentives

5.2.1. Participation in initial VET (IVET) and access to higher education

At present, more than half the students enrolled in upper secondary education (ISCED 3) participate in vocational or prevocational programmes. The proportion of students enrolled

Figure 25. **Students enrolled in vocational upper secondary education (ISCED 3), 2002 and 2006 (% of all students enrolled in upper secondary education)**

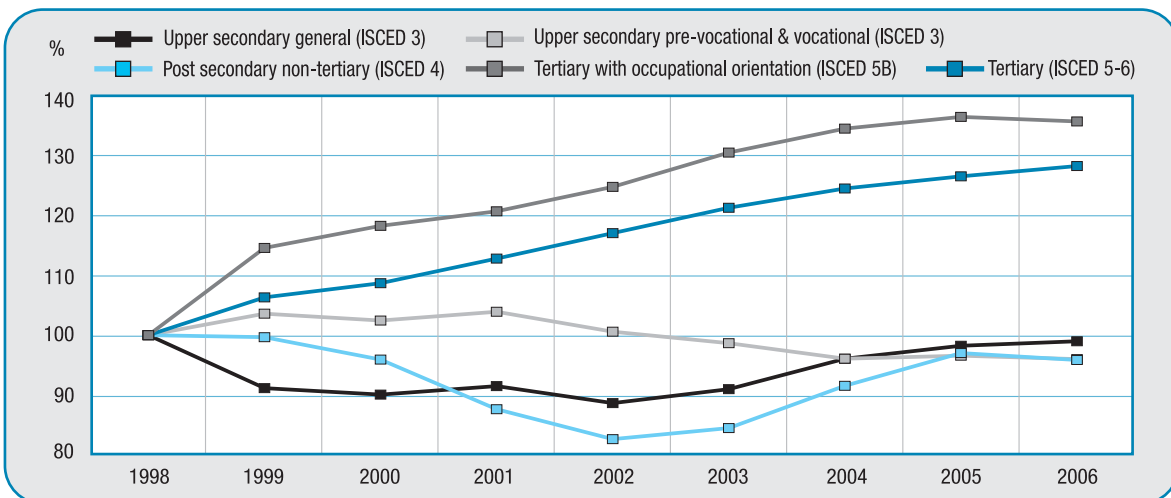


NB: EU average excludes France and the UK; Croatia 2004 instead of 2002.

(a) ISCED 3 vocational and ISCED 3 prevocational.

Source: Cedefop's calculations based on Eurostat, UOE data collection, date of extraction: 13.1.2009.

Figure 26. **Growth in enrolments in education and training by programme orientation 1998-2006, EU-27**



NB: 1998=100 – Upper secondary education excludes France and the UK; tertiary with occupational orientation excludes the UK.

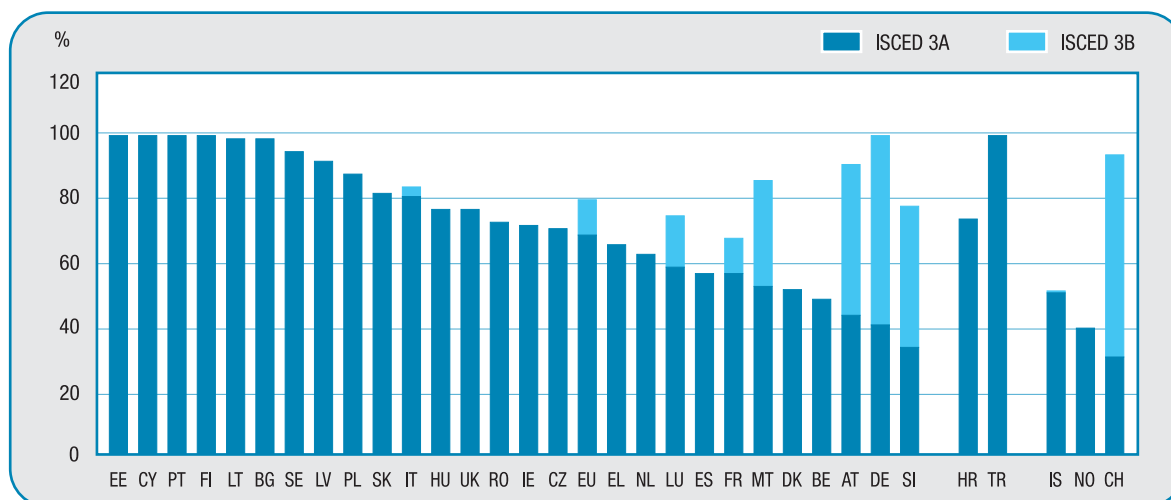
Source: Eurostat, UOE data collection, date of extraction: 19.12.2008.

in VET programmes at ISCED 3 has increased in eight countries between 2002 and 2006 (Figure 25). Especially Ireland, Spain, Finland and Sweden witnessed a stable increase in the share of students in vocational programmes. In many Member States, however, trends of VET participation are decreasing.

The most noticeable decrease in VET participation can be observed in Hungary; however,

these figures result mainly from a change in the categorisation of existing programmes moving some vocational training programmes from ISCED 3 to ISCED 4 level. It still has to be noted though that there is a trend of decreasing participation in Hungarian upper secondary level VET due to the falling prestige of vocational schools, as well as social and policy demand for expansion of higher education (ReferNet Hungary, 2008).

Figure 27. **Students enrolled in upper secondary education programmes giving access to both labour market and higher education (ISCED 3A and ISCED 3B programmes), 2006 (% of all students enrolled in ISCED 3 programmes)**



Source: Eurostat, UOE data collection, 2006, date of extraction: 19.12.2008.

When looking at post secondary non-tertiary education and tertiary education, we see that in particular studies in tertiary education with occupational orientation ⁽²¹⁾ attracted more Europeans – from 1998 to 2006 enrolments in tertiary education with occupational orientation grew by 37 % in contrast to 27 % growth in total enrolments in tertiary education (Figure 26).

A possibility to increase attractiveness of VET for students and their parents is to introduce more programmes at ISCED 3 level which allow both access to the labour market as well as higher education (see Chapter 7). This trend can be already observed. Figure 27 shows that in 2006 almost 80 % of all students in upper secondary education (ISCED 3) were enrolled in programmes providing an opportunity to access both higher education and the labour market – either directly or later in life. Of these students, about 10 % were enrolled in ISCED 3B programmes giving direct access only to vocationally-oriented tertiary education.

There are significant differences at country level ranging from all or almost all programmes at ISCED 3 giving access to both labour market and higher education (Bulgaria, Estonia, Cyprus, Lithuania, Portugal and Finland as well as Turkey)

to about half of such programmes in Belgium.

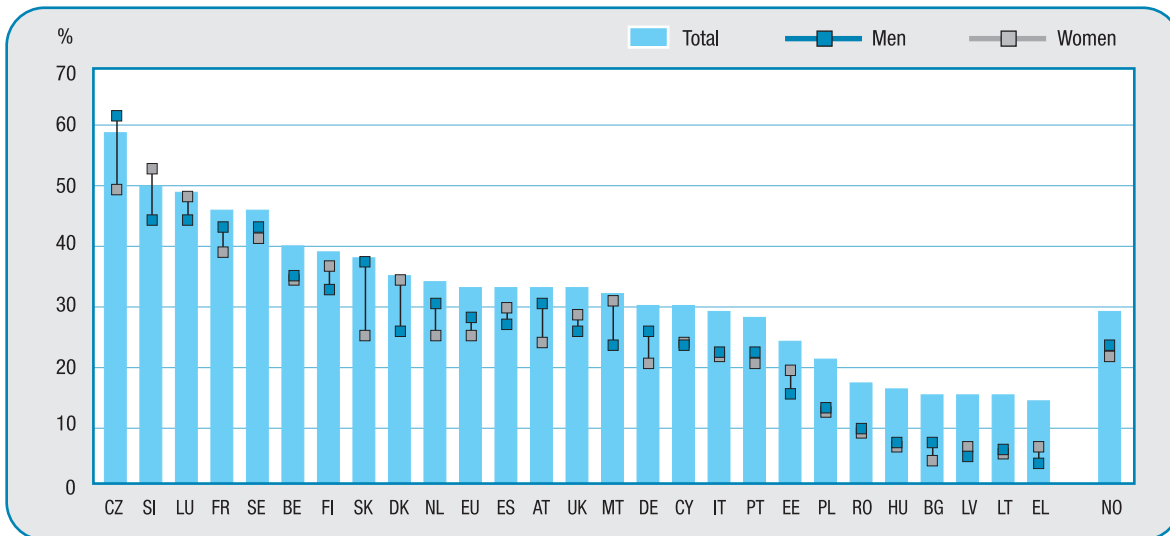
Another feature of improving attractiveness of VET is the better integration or redirection of females into specific VET programmes in which they are underrepresented. Member States reported only minor developments since 2006. One reason is that numerous policies and measures in this area had been introduced already some years ago.

For example, in Austria, a large number of political measures have been launched since 2002, including targeted educational counselling measures for girls and women; technology specific women's programmes ('Women in the crafts and technology' from 2006 to 2008); creation of attractive learning provisions for women in rural regions who are less likely to access education ('difficult to reach') and at a disadvantage; promotion for girls and women in technical and scientific higher education study programmes.

In the framework of the 2000-06 ESF planning period, Italy has introduced several innovative instruments such as tele-work, part-time work, job rotation and sharing, actions to support family management, development of replacement services for self-employed women and actions to foster regularisation of illegal work.

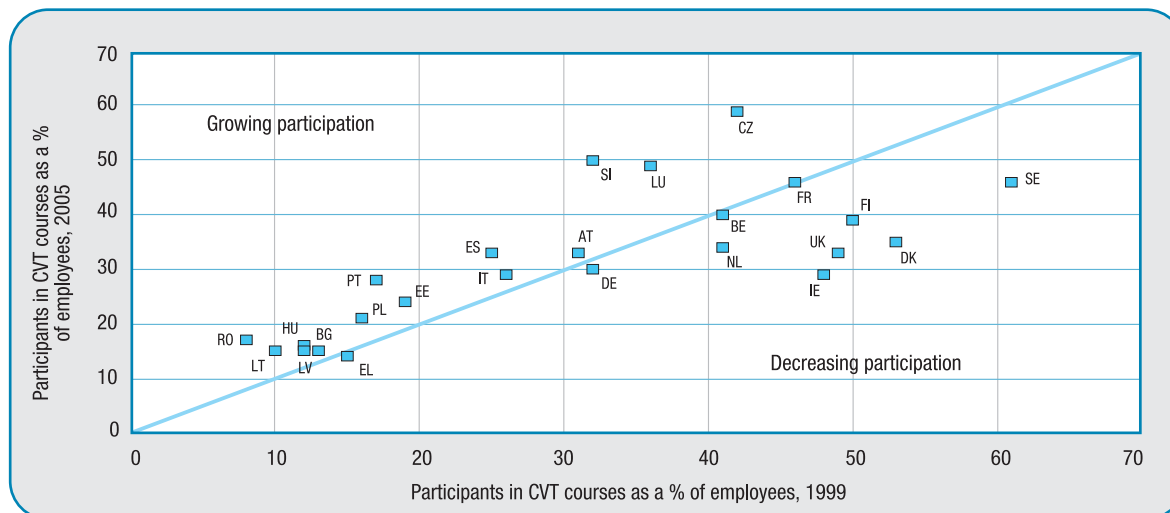
⁽²¹⁾ See research literature on attractiveness reviewed in Cedefop's fourth VET research report, forthcoming (a).

Figure 28. **Employees (all enterprises) participating in CVT courses by gender, 2005 (% of all employees)**



Source: Eurostat, CVTS3, 2005, date of extraction: 4.12.2008.

Figure 29. **Participation in continuing vocational training in Member States, 1999-2005 (% of employees in all enterprises)**



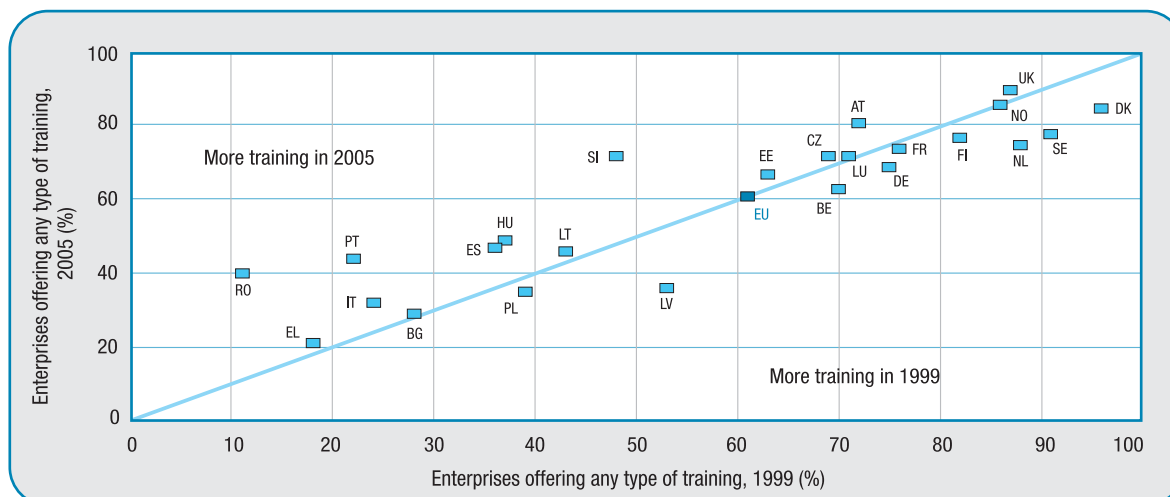
Source: Eurostat, CVTS2 and CVTS3, 1999 and 2005, date of extraction: 4.12.2008.

5.2.2. Participation in and provision of continuing vocational training

In 2005, 33 % of all employees participated in CVT courses organised by enterprises (measured by the number of participants in CVT courses as percentage of all employees in all enterprises). Figure 28 shows that there is a large variation across the EU with respect to participation in training courses, ranging from almost 60 % in

the Czech Republic to 14 % in Greece. Men are slightly more likely to participate, with 34 % compared to 31 % of women, a trend that is evident in 17 of the 27 countries for which data are available. The highest variation exists in the Czech Republic and Slovakia, where men are significantly more likely to follow training courses than women (11 percentage points higher). On the contrary, in Denmark and Slovenia,

Figure 30. **Ratio of enterprises providing CVT compared to all enterprises, 1999-2005 (%)**



Source: Eurostat, CVTS2 and CVTS3, 1999 and 2005, date of extraction: 4.12.2008.

significantly more women follow CVT courses than men.

The comparison of participation in CVT courses in 2005 and 1999 reveals that newer Member States are catching up, some by investing more in human resources. For example in Slovenia and the Czech Republic, participation rates in CVT courses have increased by 36 % and 28 % respectively. However, in the majority of newer Member States, despite a significant increase, participation in CVT is still low.

However, participation rates decreased in some countries with traditionally high participation of employees in continuing training, such as Sweden, Denmark, Finland and the UK. Despite this downward trend, these countries still belong to best performing countries in this area.

The reasons for these variations of CVT participation need to be analysed further. In 2008, Cedefop initiated an analysis of CVT participation and expenditure; results will be available in autumn 2009.

The training incidence (the ratio of enterprises providing CVT compared to all enterprises) remained stable between 1999 and 2005, with 61 % of enterprises providing any type of training (Figure 30). Leading countries in 2005 include Austria and the UK (up slightly in 2005 compared to 1999), the Netherlands and Sweden (which both lost ground). Countries where training incidence seems lower include Italy, Portugal and

Romania, though each has seen increases compared to 1999. Greece had low training incidence in enterprises in both 1999 and 2005.

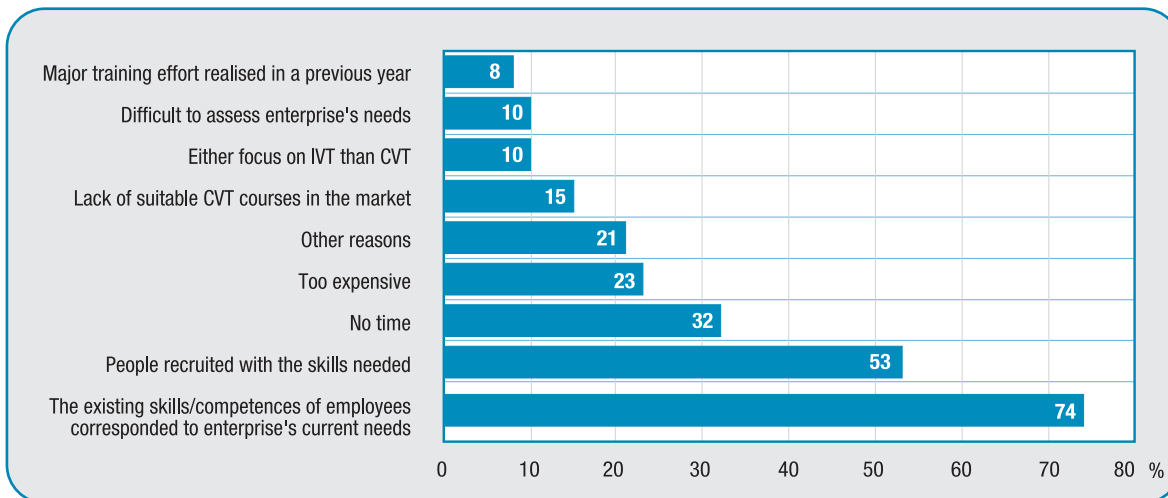
5.2.3. Reasons why Europeans participate or not in lifelong learning

As can be seen in previous sections and supported by evidence measuring progress towards the European benchmark – 12.5 % of adults aged 25 to 64 years participating in lifelong learning in the EU by 2010 – progress in lifelong learning of adults is slow, with stagnating or decreasing participation in some countries. In 2007, only 9.7 % of Europeans aged 25 to 64 participated in lifelong learning (formal and non-formal learning).

Two Eurostat sources provide information on why individuals do not learn more in their life course: the continuing vocational training survey (CVTS) and the adult education survey (AES).

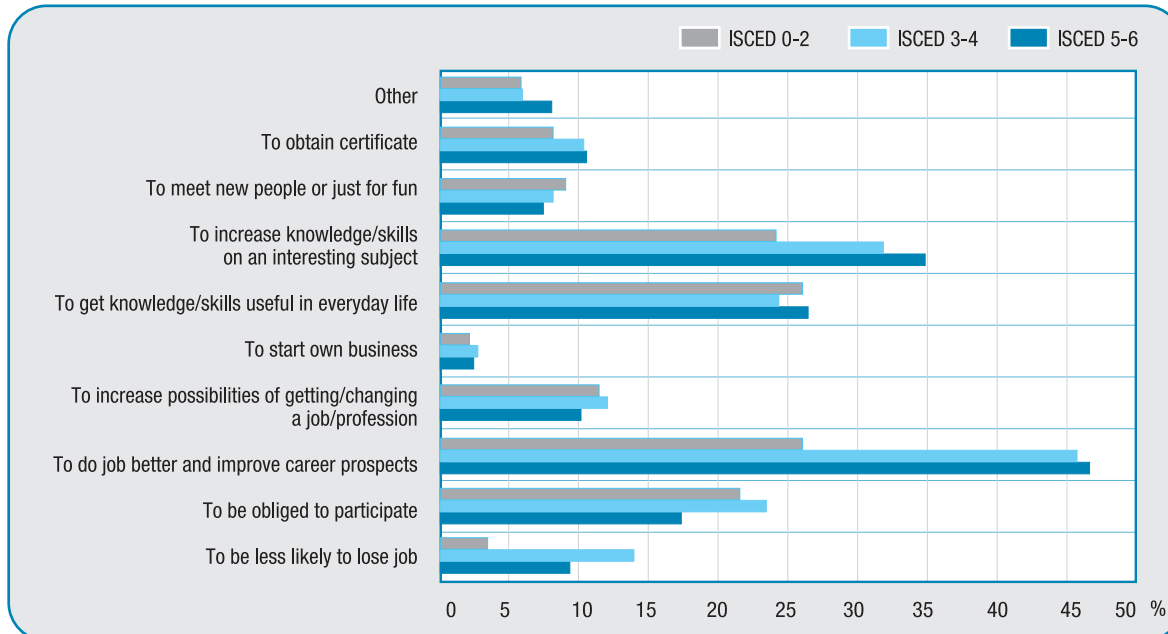
In the CVTS3 survey 2005, reasons why enterprises do not provide training for their employees were asked for. Non-training enterprises were requested to highlight the three most important reasons. Results show that above all, there was a perception that no training was needed, evident in nearly three quarters of all non-training enterprises. The predominant response to identified needs was to recruit individuals with the required skills and competences (54 % in the EU), thus relieving

Figure 31. **Non-training enterprises as % of all enterprises by reason for non-training, EU-27, 2005 (%)**



Source: Eurostat, CVTS3, 2005, date of extraction: 15.1.2009.

Figure 32. **Distribution of reasons of participation in non-formal education and training by education level, EU*, 2007 (%)**



NB: Data for EU were calculated as the weighted average of countries for which data are currently available in the adult education survey (BG, DE, EE, EL, ES, FR, IT, CY, LV, LT, HU, AT, PL, SK, FI, SE, UK). Data for France and Slovakia are provisional.

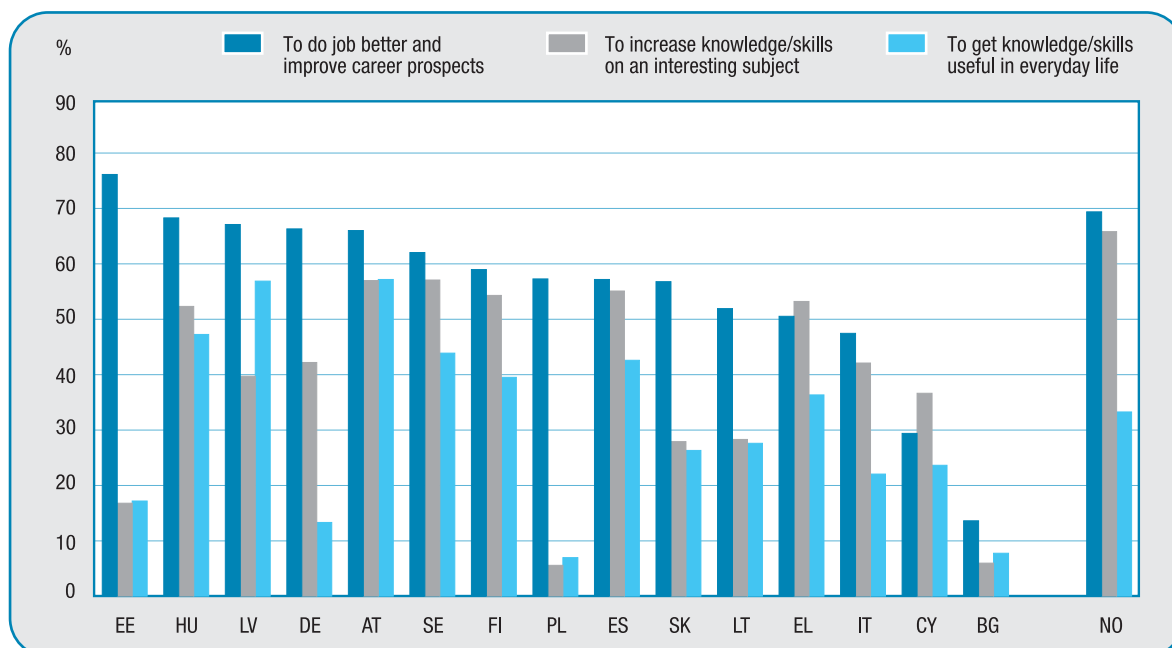
Source: Eurostat, adult education survey, 2007, date of extraction: 16.1.2009.

them of investing further in CVT. One in three European enterprises said that lack of time constituted an important reason why training was not provided (Figure 31). About 10 % of enterprises explained they do not provide

continuing vocational training because they focus more on provision of initial vocational training.

In contrast to the CVTS3 survey, in the adult education survey (AES) individuals were asked why they participated in non-formal education

Figure 33. **Selected reasons of participation in non-formal education and training among medium-skilled adults (aged 25 to 64), 2007**



NB: Data for Slovakia are provisional; data for France are not included because not comparable for methodological reasons; data for the UK are not included due to the high number of non-respondents.

Source: Eurostat, adult education survey, 2007, date of extraction: 13.1.2009.

and training, including continuing vocational training.

The three most important reasons reported by participants in the EU were that they wanted to do their job better and/or improve their career (43 % in the EU), to increase their knowledge/skills on an interesting subject (31.8 %) and to get knowledge/skills which are useful for the everyday life (25.4 %).

About 50 % and more than 65 % respectively of participants in non-formal education, including continuing vocational education, in Hungary and Slovakia as well as slightly more than 40 % in Norway reported that they participated in training because they were obliged to for various reasons, for example execution of regulated professional occupations and activities. On the contrary, this reason was not so important in Bulgaria, Spain and Poland where less than 10 % of participants in non-formal education declared this reason.

A relatively low percentage of participants (2.5% in the EU) indicated that they participated in training because they wanted to start their own business.

In some countries like Latvia, Austria and Sweden, more than 20 % of participants said they participated in non-formal education because they wanted to meet other people. This percentage was even higher in Finland (almost 30 %).

Figure 33 shows the three most important reasons why participants with medium educational attainment participated in non-formal education and training. These three reasons were: to do the job better and to improve career prospects; to increase knowledge/skills on an interesting subject and to get knowledge/skills useful in everyday life.

Differences between countries are significant. They range for example from about 26 % of Bulgarian participants (all levels of qualifications) declaring as a reason to do their job better and improve career prospects to about 80 % in Estonia. However, except for Bulgaria and Cyprus, this reason was very important in the majority of countries for which data are available (for about 50 % to more than 70 % of participants).

5.3. Incentives to increase attractiveness

Each country applies several financial and non-financial incentives to increase attractiveness of VET. Some measures have been available for several years; others have been recently developed or are in their pilot phase. This section focuses mainly on most recent developments; however, in case of significant results or impacts, previous measures will also be addressed.

5.3.1. Motivating people to participate in VET

It is impossible to give a complete overview of all existing measures, because each country

has its own supporting and granting system for the different IVET pathways and CVT courses (see Chapter 4). However, there are several initiatives introduced or becoming widespread only recently which are of common interest. Some examples:

- (a) educational maintenance allowances (EMA) of the UK are available to 16 and 17 year-olds from low income families who stay in full-time education. Their purpose is to encourage such young people to stay in learning; payment is conditional on a good attendance record. EMAs were introduced as a pilot in some areas for young people who reached the age of 16 in 1999. The EMA scheme was extended to the whole of England in 2004

Box 12. Centres of vocational excellence in England

Centres of vocational excellence, introduced by the Learning and Skills Council from late 2001 in England, were initially intended to be specialist centres of vocational provision, with focus on high level skills and close links between these centres and business and employment partners. The aims of the programme included:

- significant expansion in vocational learning, particularly at Level 3;
- increased effectiveness in addressing skills priorities;
- increased collaboration among learning providers and promotion of excellence and continuous improvement;
- examples of innovation and flexibility to meet the needs of employers.

Centres of vocational excellence were spread throughout England, with many based in further education colleges. Each centre focused on a specific area of technology, which might be very broad (for example, business and management or hospitality and catering) or more specialised (for example, biotechnology or digital imaging). Each centre was given additional funding of up to GBP 500 (EUR 600) for a three-year period.

An early evaluation in 2003 (Learning and Skills Council, 2003) found that these centres had made good progress towards meeting the aims of the programme. Two other surveys found that most employers who had used centres were very positive about their flexibility (including flexible opening times), their ability to offer specifically tailored training and their reputation for quality, reasonable price, specialist staff, and high-quality equipment and facilities. Users reported increases in

staff confidence, motivation and morale as a result of the training provided.

In its 2004-05 annual report, the Adult learning inspectorate said that most centres of vocational excellence had done good work in identifying skills priorities, improving consultation with employers and developing flexible provision and were delivering good quality education and training. In most centres, however, there had been little improvement in rates of achievement at Level 3.

Despite the initially favourable reports, a review in 2006 by Madeleine Wahlberg of the Centre for Education and Industry at the University of Warwick found that:

- there was little evidence of a formal strategy for evaluating centres of vocational excellence policy; many of the published evaluations dealt with only limited aspects of their implementation and their evidence base was often weak;
- there had been 'mission drift' in centres of vocational excellence policy, especially the late addition of social inclusion as an aim;
- there were 'turf wars' over who should control policy and funding;
- there were conflicts between centres of vocational excellence policies and other policies;
- students had become 'second tier' beneficiaries, unable to gain a transferable, whole qualification if employers chose to fund only parts.

Source: UK ReferNet, 2008.

following a three-year evaluation which showed that it had been effective in raising staying rates. From April 2006, EMAs were extended to entry to employment (E2E) and apprenticeship programmes;

- (b) to improve the social conditions of initial vocational education students in Latvia, their scholarships on average have been increased. In the period between 2007 and 2013 it is planned to spend more than EUR 14.2 million from ESF funding for scholarships to those vocational education students who show good results in studies and examinations.

Even though specific focus on talents could also increase VET attractiveness, only few Member States reported on particular talent management measures and priorities. One example is Germany, where an advancement bursary is available to talented completers of dual-system apprenticeships wishing to proceed directly into higher education. Further, a vocational training programme for the highly talented (*Begabtenförderung berufliche Bildung*) supports the continuing education of particularly high-achieving young employees possessing a recognised vocational qualification. Since 2008, the programme also gives specific degree courses for those vocationally qualified individuals who wish to complement their initial vocational training with a higher education degree without holding a formal higher education entrance qualification. The VET programme for the highly talented reached around 13 900 recipients by the end of 2007 (BMBF, 2008). There were mixed experiences with a similar initiative in the UK, as described in Box 12.

As far as other non-financial incentives are concerned, various elements making the given training path or course attractive are even wider. Apart from already mentioned factors like flexibility, modularity, quality of courses, qualifications, teachers and premises there are some other, similarly important social benefits and allocations in kind.

In IVET, motivating effects are national and international competitions of students, geographical mobility and exchange programmes, free textbooks and school transportation, as well as free accommodation at student dormitories (in Croatia).

In Ireland, to attract people whose enrolment and attendance is currently prevented by childcare responsibilities, assistance is provided for childcare expenses of participants in the vocational training opportunities scheme, Youthreach and Senior traveller centre programmes.

Apart from the examples above, several other countries use training funds, vouchers and individual learning accounts to make VET more attractive (Section 4.2). Besides, the importance of specific Community initiatives EQUAL and ESF should also be underlined. These multidimensional financial support channels are overarching and interconnecting local strategies and actions, hence they are important drivers of development and change.

The most widespread incentives for adult learning are related to educational leave; however, specific target groups might receive extra financial support promoting their time spent in education and training.

- In Austria, within the reform of educational leave, the minimum employment duration required for entitlement has been significantly reduced (from three to one year) and the CVT allowance is raised from previously EUR 436 per month to the amount of the notional unemployment benefit. On average, this corresponds to an increase of 70 %. Seasonally employed people (with interrupted employment relationships) are now also entitled to conclude an agreement on educational leave under certain conditions.
- Unlike Austria, there is no legislative entitlement to paid CVT leave in Ireland. In general, no public funds are distributed directly to the population for adult learning, which usually is paid for directly by individuals themselves. While participation in full-time further education (post leaving certificate courses), and higher education does not require payment of tuition fees, this is not the case for part-time participants. Tax relief is available for persons attending recognised third level courses; limited tax relief is also available for fees paid for attendance at approved CVT courses aiming to improve ICT and foreign language skills.
- In France, the individual training entitlement (*droit individuel à la formation – DIF*), in place

in private sector companies since 2004, gives every employee the right to 20-24 hours' training, depending on sectoral agreements, each year. Training activities are financed by employers, and annual entitlements may be accumulated for up to six years. In 2006, 358 000 employees benefited from the scheme. For training hours obtained during working hours, employees receive their normal salary; other hours of training are paid at a rate of 50 % of the net salary. Employees must take the initiative to implement their rights to training although this must be covered by a formal agreement with the employer.

- In Italy, in the framework of prepaid cards, individual learning accounts (ILA) have been conducted on an experimental basis. With the ILA card, entitled citizens are given a maximum credit of EUR 2 500 (divided into single EUR 500 spending limits) for a period of two years to be spent on participation in formal and informal learning activities chosen by individuals themselves, assisted by guidance and tutoring services provided by employment centres ⁽²²⁾.
- In Slovakia, a specific financial benefit became available for disabled jobseekers in May 2008. The financial provision aims at increasing their motivation to participate in education and training programmes lasting more than one month. The benefit is provided for a calendar month and equals to the minimum subsistence allowance.

5.3.2. Incentives to increase VET provision of employers

Involvement of enterprises in VET provision is a rather challenging and complex task in most countries, even though there is continuously increasing demand for enterprises' participation in apprenticeship, curriculum and qualification development, in line with market needs. However, due to time and financial constraints, lack of experts to investigate skill needs in given VET fields, and the occasional surplus of human resources, enterprises are not always keen on

being involved. For example, in Slovakia only financially strong enterprises and booming sectors have enough resources to run skills needs and occupation needs studies. In 2003, 72 % of Slovakian enterprises declared no need to assess CVT needs (highest share in the EU). To stimulate further the interest of enterprises, it might be worth considering possible financial and non-financial incentives governments can provide.

Such initiatives can be found in some countries, such as in Ireland, where employer organisations such as IBEC (Irish Business and Employers Confederation), ISME, (Irish Small and Medium-Sized Enterprises), and the Construction Industry Federation (CIF), all provide either financial or other incentives to promote training practices among their members. They also make a contribution to enterprise-based CVT activities through their participation in the industry-led 'Skillnets' training networks programme to identify and make provision for training needs.

Box 13. The Skillnets approach – Ireland

The Skillnets approach is based on the strengths and synergies of networking and partnership led and managed by enterprises themselves and has created and delivered training programmes across a broad range of industry and service sectors nationwide. A 'Skillnet' is a group of three or more enterprises that decide to cooperate to undertake a training project that individual members of the group would be unable to undertake alone. Based on positive results from the original pilot project 1999-2000, Skillnets was commissioned to continue the programme in 2002. There are 127 new training networks included in the 2008-09 programme, and in line with national policy, many of these networks will have a strong focus on the training needs of the lower skilled.

Increasing the number of training places is also supported in Austria, where training allowances have been introduced both for external (since 2000) and for in-house training (since 2002). According to CVTS3, the course attendance rate in companies with 10 employees or more increased between 1999 and 2005 from 31 % to 33 % (Statistik Austria, 2007).

⁽²²⁾ The project is linked to another training initiative, 'GILAT-Guidance for ILA in Tuscany', promoted by the Tuscany regional authority under the Community programme 'Leonardo da Vinci' and implemented with the regional authorities of Piedmont and Umbria.

Increasing access to VET by addressing equity

'Easing access for all to education and training systems'⁽²³⁾ is one of the three objectives set by the Stockholm European Council (2001) and spelled out in specific objectives at the Barcelona European Council (2002). In the Education and training 2010 work programme (European Commission, 2002b), the environment and attractiveness of learning as well as support of active citizenship, equal opportunities and social cohesion gained particular importance.

In line with the strategic objective of easing access for all to education and training, the importance of key issues such as equal opportunities, guidance, flexibility of learning and validation of former experiences has also been identified. Two out of the five education benchmarks agreed by the European Council in 2003 were in particular devoted to this objective: increasing participation of adults in lifelong learning (at least 12.5 % in 2010) and reducing early school leavers (no more than 10 % in 2010).

According to a Eurobarometer survey in 2006 most Europeans (79 %) believe that the EU has a positive impact on access to education and training. Most common obstacles to training relate to financial and temporal restrictions. Of Europeans who say they are unable to undertake training 37 % state that they cannot fund training themselves; 26 % mention problems in balancing their work and family responsibilities. Similar numbers of interviewees say that their employer will not support them (18 %), that it is difficult to fit training in working hours (17 %) or mention problems of distance from the training site (16 %) (European Commission, 2006a).

Improving access for all is a guiding principle highlighted in national laws and strategic documents of all countries following the Lisbon and Copenhagen agendas. Depending on the historical and socioeconomic background, there are some differences in levels and priorities of actions; however, the main issues addressed are fairly similar. Most new initiatives aim primarily at specific target groups, especially early school leavers and other youngsters not in education, employment or training (NEET), as well as people with a low level of educational attainment, especially older workers and migrants.

Examples of good practice range from specific training programmes and educational counselling to inclusive education of students with special needs and a more tailor-made training of low-skilled workers. Measures to help migrants succeed in VET increasingly include targeted support and language learning. Some countries are also (re)introducing apprenticeship or alternance training.

Although availability of well-prepared teachers and trainers is indispensable for increasing equity in education and training, provision of specific teaching competences for target groups is in serious shortage in many countries. To solve this problem, several teacher training initiatives have been introduced in some countries. For example in Latvia, teacher students are provided with study courses fostering teachers' competences for education and training students with special educational needs. Similarly, in Estonia, training is provided for teachers to cope with specific target groups, especially students with disabilities (for more details on teacher training see Section 8.2).

⁽²³⁾ In this publication, similar to the definition of the European Commission, (2006d), 'access' is understood as a right to participate ('participation'). Participation means that an individual has a real opportunity to undergo education or training. It is different from another, more 'formal' definition of access, which stresses the importance of having the right to participate in education and training, without being concerned with whether this right can actually be exercised in practice.

6.1. Opening new 'gates' for early school leavers

European countries agreed to reduce the share of early school leavers to no more than 10 % by 2010 (EU benchmark). In 2007, this share in the EU decreased to 14.8 % (Annex 2). However, progress is slow and there are considerable differences between countries.

The Czech Republic, Lithuania, Poland, Slovakia and Finland have already achieved the benchmark. The same can be presumed for Slovenia for which the most recent reliable data are available only for 2001. But most Mediterranean countries, namely Spain, Italy, Malta and Portugal, as well as Romania, are lagging far behind, with early school leaving rates of around 20 to more than 30 %. Sweden already reached the 2010 benchmark of 10 % more than a decade ago. However, since 2001 it has exceeded the benchmark several times. Also in other countries, like Denmark, Spain and Austria the rate of early school leavers has slightly increased since 2000 (Eurostat, labour force survey, 2007).

There is evidence from some countries that vocationally-oriented training programmes and pathways can encourage young people to remain in or return to formal education; hence, countries' interest in such programmes is increasing (European Commission, 2008d). Significant and gradual progress can be observed in several apprenticeship and alternance training fields (see Chapter 3):

- modularisation of apprenticeship training (Austria);
- introduction of young apprenticeship (England) and new modern apprenticeship (Cyprus);
- work-based learning pathways pilots (Wales);
- more provision of apprenticeship training, especially for ethnic minorities (Denmark);
- substantial further development of existing apprenticeship programmes (in several countries, Denmark, Estonia, France, Germany, Latvia, Norway and Sweden);
- a new law on or legitimising apprenticeship (Estonia, Lithuania).

To reach pupils who lack motivation to complete a more theoretical, school-based education without first gaining a practical insight into the field, Denmark introduced a new

apprenticeship (*ny mesterlære*) pathway, where students, in the first year of their education, receive practical training in an enterprise; school-based training is provided only afterwards.

As a pilot initiative, the UK (England) has introduced an increased flexibility programme (IFP) to motivate pupils who had become bored with school. Between 2002 and 2007, the IFP provided opportunities for pupils in approximately 2000 schools to spend one or two days per week in vocational learning. The aims are to raise student attainment, develop their social learning, improve attendance and increase post-16 year old students' retention in education and training. As a result, 87 % of participants went on to post-compulsory learning, and they felt more confident and better prepared for working life. Derived from the success of the pilot, schools and colleges have continued to offer programmes based on the curricula developed; the lessons learned have influenced other developments for the age group 14-19.

The UK also reports on special initiatives targeted at young people not in education, employment or training (NEET) to decrease their number in future (ReferNet UK, 2008).

Other, corresponding measures include:

- integration or approximation of general and vocational education (Denmark, Norway, Spain) as well as strengthening links with basic education ensuring better career orientation (Finland);
- raising the limit of compulsory education to the age of 16 (Italy) or even to 18 (England, Hungary, the Netherlands)⁽²⁴⁾;
- education guarantee until the age of 18 (Austria);
- introducing vocational training for those lacking appropriate entrance qualification to VET (Bulgaria, Estonia, Hungary);
- 'second chance' programmes (Germany, Ireland, Greece, France).

⁽²⁴⁾ In most European countries, the age limit of compulsory schooling has long been 16, except for the Czech Republic, Greece, Cyprus, Lithuania, Luxembourg, Austria, Portugal and Slovenia, where it is still 15. In Hungary the age limit of compulsory schooling was increased to 18 in 1996, however, the first group affected was the 1998/99 cohort which started its 11th year of school in the 2008/09 academic year.

There have also been developments in individualisation, modularisation and flexibility (Denmark, Estonia, Finland, France, Germany, Hungary, Latvia, Luxembourg, Norway, Romania, Spain and Sweden; see Chapter 7). However, a recent analysis in Denmark underlines that individualisation and modularisation requires increased orientation and guidance services especially for those who can not handle increased responsibility for their learning pathways.

Several countries underlined that in spite of any policies and procedures in place, the number of early school leavers is hard to bring down further without additional measures at regional and local levels.

6.2. Low-skilled and older persons

Some countries are more successful than others in increasing participation in LLL of low-skilled and older persons (Figure 34).

Two clusters of countries can be observed: a small group of European countries (Denmark, Finland, Sweden, the Netherlands and the UK) are more equitable and able to provide learning opportunities for older and low-skilled people. In the majority of EU Member States, participation of these groups in lifelong learning is rather low – far below the EU benchmark for the working age population (12.5 % by 2010).

6.2.1. Upskilling the low skilled

Despite progress, in particular as regards the younger generation, low-skilled people still represent almost one third (78 million) of the European working age population aged 25-64 (Figure 35). However, the EU average masks significant differences at national level ranging from about 10 % in the Czech Republic, Estonia, Lithuania and Slovakia, to more than 70 % of low skilled in Malta and Portugal.

To tackle this problem, countries introduced new training pathways or flexible programmes.

For example, the aim of the ‘Step one step ahead’ (SOSA) programme in Hungary is to increase the educational level of adults of working age, improve their chance to find a job and thus to help unemployed and inactive people to enter

the labour market and provide workers for certain, high-demand professions. The programme targets those with less than upper secondary education; people with outdated vocational qualification; those who wish to take part in further training in their occupation; and those having a secondary school leaving exam certificate and no vocational qualification. The programme provides training free of charge in high-demand occupations; its duration is between 150 and 1 000 hours. Upon successful completion, participants receive a monthly minimum wage. The drop-out rate of the first course was only 2 %, and the rate of satisfaction was high among participants. Of the participants, 60 % could find a job following the training.

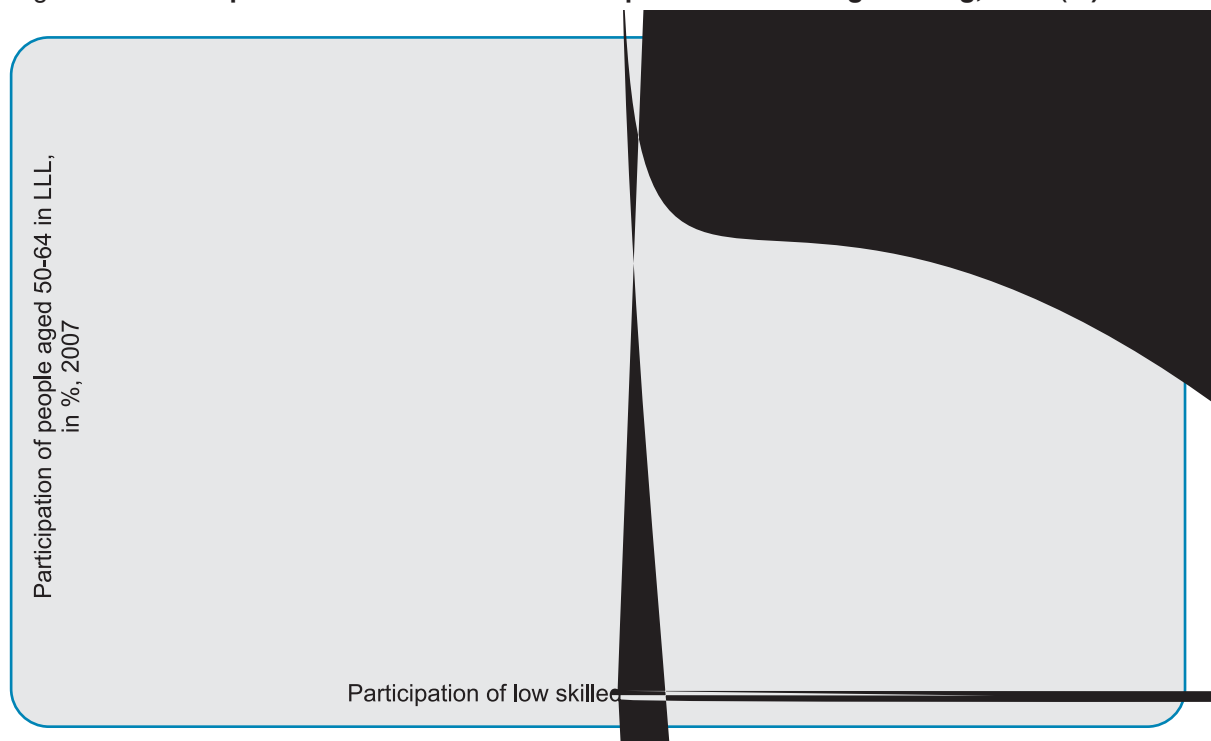
Similar programmes have been introduced in other countries, such as the Noste programme in Finland and the Upgrading Training Assistance Act (*Aufstiegsfortbildungsförderungsgesetz*, AFBG) in Germany. The Noste programme targets poorly trained adults to improve their career prospects and satisfaction at work, while the AFBG supports the extension and development of vocational skills.

In Ireland, specific training programmes are available for young and adult travellers⁽²⁷⁾ who left school early. Besides core skills of literacy and numeracy, the senior traveller training programme provides travellers with the skills to manage successfully transition to work and to participate fully in their communities. Certification of courses provided in traveller training centres and workshops ensures a range of progression opportunities for participants. These programmes give several skills to trainees and endeavour to break the vicious circle of illiteracy and social deprivation.

Distance learning incentives have also been implemented in some countries. In Belgium, for example, a supervised individual study (*Begeleid Individueel Studeren*: BIS) supports individual learning of adults via distance learning. The course comes to the course participant; timing and pace can be set by the individual. In Romania, access to initial VET has also been widened by development of the necessary

⁽²⁶⁾ Travellers are an itinerant people of Irish origin living in Ireland and Great Britain.

Figure 34. **Participation of low-skilled and older persons in lifelong learning, 2007 (%)**

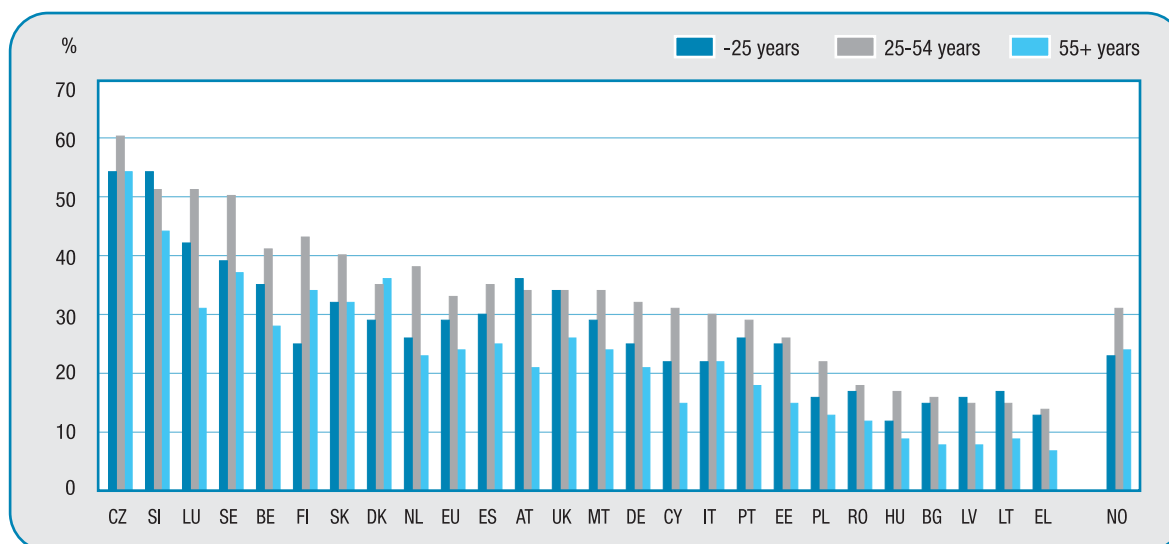


Source: Eurostat, *EU labour force survey (LFS)*, 2007, date of extraction: May 2008.

Figure 35. **Low-skilled adults as a percentage of total working age population (aged 25 to 64), 2007 (%)**

Source: Eurostat, *labour force survey (LFS)*, 2007, date of extraction: 4.12.2008.

Figure 36. **Participation of employees in CVT courses organised in enterprises by age group, 2005 (%)**



Source: Eurostat, CVTS 3, 2005, date of extraction: 3.12.2008.

however, older workers tend to accumulate disadvantages: they are on average less educated than younger age groups; they receive less formal and non-formal/continuing training, and their work experience and informal competences they have acquired during their working lives are not always properly valorised (Cedefop, Nyhan and Tikkanen, 2006).

A special Eurobarometer survey 2006 on discrimination in the EU indicates that 57 % of EU citizens feel that in their country people aged over 50 are considered no longer capable of working efficiently. Country results show that agreement with this view is most widespread in Portugal (78 %), followed by Slovakia (73 %) and Germany (71 %). This contrasts significantly with public opinion in Denmark (35 %), Cyprus (36 %) and the Netherlands (37 %), where only around one third of citizens agree with this statement (European Commission, 2007b).

According to the 2008 special Eurobarometer on the same subject, belief that age discrimination is widespread dropped by 4 % points since 2006; however, it is still at a high level (42 %). This suggests that Europe has made some moves towards combating age discrimination, but there is still some way to go (European Commission, 2008i).

As shown in the CVTS3 survey, participation of older employees in continuing vocational training (CVT) in enterprises in 2005 was still rather low in several EU Member States, especially Bulgaria, Greece, Latvia, Lithuania, and Hungary (Figure 36). However, in these countries low CVT participation also applies to other age cohorts.

According to the DGVT and ReferNet reports (2008), there were only few new measures specifically devoted to older workers. Most existing or currently introduced initiatives cover several other target groups as well. Besides this, the reports underline the importance of guidance, counselling, information campaigns, and other targeted tools.

In Belgium an 'Age and work expertise centre' was established, playing an informing, stimulating, supporting and policy-preparing role on age and careers. In addition and supported by the European Social Fund, the Government of Flanders and the social partners plan to encourage older workers to contribute to the competence development of their less experienced (younger) colleagues by mentoring.

In Poland, an interesting combination of measures was introduced by a project aiming to provide unemployed female older workers (aged 50+) with social working skills to assist disabled

persons and elders. The objective of the project is to gain new vocational skills, increase qualifications and support beneficiaries on the labour market.

A workshop on working at old age organised by Cedefop in 2008 ⁽²⁶⁾ concluded that it is in employers' own interests to take the impact of demographic change on recruitment, working culture and training seriously. Negative relationships between age and work performance are not confirmed by empirical research and a conducive workplace environment can support ageing workers to acquire and update the skills that work demands.

Empirical research confirms there is no single relationship between age and overall work performance/productivity. The fear that population ageing will lead to less innovation, slower adoption of new technologies and less long-term investment in education, training and R&D is not supported by empirical evidence (Cedefop, fourth VET research report, forthcoming (c)).

Not only experience and expertise, but also motivation, dedication and curiosity are crucial. Research shows that chronological age is far less important than workers' individual learning biography, their ability, willingness and attitude towards learning and applying their knowledge, skills and competences. Continuing VET can act as an enabler, by opening up opportunities for workers of all ages, tailoring training to ageing workers' specific learning needs and supporting work arrangements that are conducive to learning. An important task for future research is to address the major shortcomings in the current understanding of the mechanisms that enable successful working and learning at old age.

6.3. Special initiatives for vulnerable groups

Provision of equal educational opportunities is a central political goal in all European countries. However, research repeatedly shows that educational opportunities continue to be distributed rather unevenly in all countries (Pfeffer,

2007). Particularly ethnic minorities, people with disabilities and learning difficulties, as well as those having problems in reconciling their work and family commitments are often disadvantaged in accessing education or increasing their educational attainment. To ensure their social integration and equity considerations, specific policies and measures have been developed and applied across Europe.

6.3.1. Students with special educational needs

There is growing consensus that equity considerations require the integration of pupils with special educational needs. Their education should be provided in regular, mainstream classrooms, wherever possible. This consensus stems from realisation that educational and social experiences provided by special schools on the one hand, and mainstream schools on the other, are often different. Such differences often translate into inequities, especially in pupils' access to post-compulsory education and to the labour market (European Commission, 2008b).

Integration of special needs education into mainstream education is initiated by several countries. For example, in Finland, special needs education in VET is planned to be further developed so students in need of special support will mainly be studying with other students in the same learning environments. Organisation of education for seriously disabled people will focus on special vocational educational institutions.

In Latvia, integration of pupils with special needs into the mainstream education system is also fostered by particular study courses included in teacher study programmes. So more education establishments have become prepared for receiving children with special needs. In the ESF project 'development of support centres for providing vocational rehabilitation services for persons with special needs' (2005-08), eight centres of suitability have been founded at vocational establishments with qualified staff and different forms of educational programmes (full-time, part-time, distance learning).

In Iceland, a study programme for the disabled (*Starfsbraut*) is offered as a specific path in mainstream upper secondary school (*Borgarholtsskóli*), since 2005. The studies last

⁽²⁶⁾ Proceedings will be published in 2009.

up to four years. Main emphasis is on maintaining and improving the knowledge students already have and improving their connection to the labour market by on-the-job training as integrated parts of their studies. Special emphasis is laid on arts and vocational knowledge. Tuition takes place in a special department but, if possible, disabled students attend courses with other students, with a view to integrate them into general schoolwork. Students with dyslexia get special assistance and students with other special needs are also assisted in their integration into the labour market.

To help people with health problems and disabilities to enter work, a so-called 'pathways to work programme' was piloted in Northern Ireland. The programme was rolled out province-wide in 2008, providing its target groups with a comprehensive framework of practical and financial help, including mandatory, work-focused interviews.

As far as other measures are concerned, an extensive range of programmes are available across Europe, introduced and running successfully for a long time, focusing on different target groups requiring special attention, including disabled, as well as talented pupils.

6.3.2. Migrants

In the course of EU enlargements, considerable working mobility has taken place especially in those countries which opened their labour markets to new EU Member States. Some countries are also facing a gradually increasing number of immigrants from less developed third countries (Section 2.2.2).

As regards younger immigrants and their education, there is evidence that migrant youth is overrepresented in vocational schools not giving access to higher education.

Further, in many countries migrants are overrepresented in the category of 'dropouts', students who finish school without a diploma. To help them complete education and training, most training provision for migrants focus on language learning, social integration and citizenship. For example, according to a new core curriculum introduced in Finland, preparatory education is organised for migrants within initial VET. It provides students with language skills and other abilities needed for transition to vocational studies

but it does not lead to a formal qualification. In Austria, language courses are also available for migrant parents of schoolchildren and in Ireland interpreters are available for several specified courses. In Portugal, 5 000 migrants were trained in 2007 and this figure is planned to double by 2009.

6.3.3. Ethnic minorities

Special programmes for ethnic minorities are mainly featured in Bulgaria, the Czech Republic, Hungary, Poland, Romania, Slovenia, Slovakia (mainly for Roma); Ireland and the UK (mainly for travellers); and Estonia (mainly for Russians).

In central Europe, the most difficult groups to integrate into initial and continuing vocational training are the populations of regions lagging far behind, where unemployment is very high and participation in training is discouraged by the habit of living without work and poor socialisation patterns.

The proportion of Roma is especially high among them. In Slovakia for example, according to the 2001 population census, only 19.9 % of Roma aged 20-24 have attained at least ISCED 3C level of education compared to 89.4 % among all young inhabitants (ReferNet Slovakia, 2008; Slovak Statistical Office, 2001). Hence, the main aims of these countries are to increase the proportion of Roma children attending school, improve their success rate, ensure equal opportunities and consequently contribute to successful integration of Roma children and adults into society. These aims are also supported by special training programmes and other social policies and measures.

To increase participation of Roma children in education, the Slovenian State offers additional financial resources for individual and/or group work with Roma children in the school process and provides specific occupational programmes for training Roma assistants and Roma coordinators. These persons provide assistance in work with Roma children and offer them emotional and language help. They also provide support for better participation of adult Roma in different activities and institutions. Roma assistants are also trained in the Czech Republic and Slovakia.

6.3.4. Prisoners

Increasing the educational attainment of prisoners, hence contributing to their better reintegration into society is an important policy aim in several countries.

In Finland, according to its 2007-12 development plan, vocational education of prisoners will be developed by making it more flexible and by increasing the cooperation of those involved in organising vocational education. In Italy, social reintegration of convicts sentenced to penalties outside prison is on the agenda. Related measures concern employment, guidance and business start-up for the post-prison future.

In Estonia, a unique measure was taken to improve the quality of VET studies in prisons. In the past, diplomas were issued by a so-called

prison vocational school. According to the 2006 amendment of the Vocational Education Institutions Act, VET in prisons is now offered by regular vocational schools. This means that the quality of teaching is comparable to quality provided in regular schools and it is impossible to discriminate against the person later in employment based on the diploma. Prison schools have been closed and vocational schools have taken over the responsibility to train prisoners.

In Latvia, in the framework of the EQUAL programme (2005-07), additional general and vocational education programmes have been designed for prisoners to foster their future employability.

Lifelong learning through VET

As part of the Lisbon strategy, the Helsinki communiqué (2006) underlines the key factors that support creation of a lifelong learning area and culture. It requires countries to create 'open VET systems which offer access to flexible, individualised pathways and create better conditions for transition to working life, progression to further education and training, including higher education, and which support the skills development of adults in the labour market'. Equally, the Bordeaux communiqué (2008) requests to build bridges between educational pathways and value all forms of learning – formal, non-formal and informal. 'The principle of shared responsibility between the State, social partners, local actors and citizens requires participation of all these stakeholders in VET policies.'

7.1. Easing transfer between VET pathways

Phenomena such as rising levels of educational attainment and skill needs, increasing female educational and labour force participation rates, demographic downturn and information technologies all emphasise the transformation of education and society, under various labels, from internationalisation and globalisation to transnationalisation.

In particular the ongoing increase in skill requirements suggests that educational processes and outputs need to be reformed. Several shifts can be identified:

- shifts away from job-specific skills and formal classroom training towards broader and key skills and non-formal/informal learning processes;
- shifts from routine activities towards autonomous work in multiple social contexts;
- shifts from production jobs to services.

7.1.1. Strategic developments

To increase the attractiveness of VET and to ensure good accessibility for specific target groups (Chapter 6), guaranteeing the variety of pathways, as well as individualisation and flexibility has gained importance. The DGVT and ReferNet reports (2008) observe remarkable progress since 2006 in the majority of countries. This refers mainly to measures and acts related to recognition of prior learning (Belgium, the Czech Republic, Germany, Lithuania, Hungary), attempts to improve vertical and horizontal mobility within VET systems and between VET and higher education (Croatia, Estonia, Ireland, Italy, Lithuania, Romania, Sweden) and implementation of strategies to foster lifelong learning (Austria). Some countries (Bulgaria, Estonia, Slovenia, the UK) indicate that mobility between pathways is already an integral part of the education and qualification system while others (Malta, Slovenia, Slovakia) report that only minor progress has been possible due to an overall reformulation of the education system.

To improve a pan-European lifelong learning area in VET, countries have developed a large variety of strategies the core of which is development of national qualifications frameworks (NQFs) and establishment of credit point systems. Table 3 indicates the most relevant strategies implemented by countries:

The most important strategy seems to be implementation of qualification frameworks (Chapter 9), based on learning outcomes and establishment of credit systems to overcome several obstacles. These obstacles are, first, missing flexibility between pathways and a fixed link between qualifications and entitlement and also access to employment positions and educational programmes (Ireland, Spain, Austria). Second, VET programmes, certificates and qualifications still have a poor reputation and (legal and/or formal) acceptance several countries (Belgium, Latvia, Hungary) which becomes visible in low participation rates in lifelong learning and

Table 3. Strategies to ease transfer between VET pathways

Expansion/development and implementation of NQF	AT, CZ, DK, DE, ES, HU, IE, LT, RO, HR
Development of accreditation systems for VET and/or higher education	ES, DE, HU, BG
Competence and outcome orientation	AT, RO, DE, ES, HU
Implementation/realisation of lifelong learning strategies for special target groups (disadvantaged, older workers, women)	AT, BG, CY, DE, EL, IS, NO, SK
New decree to simplify recognition of prior learning	AT, BE, CZ, EE
General education as part of all VET programmes (ISCED 3 and 4)	AT, CY, CZ, SK
VET as optional part of general education	EE, NO
Integration of IVET and CVT: implementation of one coherent system	BG, CY, DK, ES, FI, IS, LT, SK
Modularisation/double qualification	AT, BG, DE, EE, FR, HU, LV, LT, SI, UK
Financial subsidies	DE, BE

Source: ReferNet, 2008.

insufficient application of the principles of accrediting prior learning. This might be linked to lack of motivation and orientation of individuals which prevents learning participation.

Apart from this, in the past two years, most countries have implemented several strategies, measures and reforms to improve lifelong learning through VET. Several national examples clearly indicate the immense progress towards easing the transfer between VET pathways which is crucial to raise attractiveness of VET (see Chapter 5):

- in Estonia, mobility of trainees in VET was eased by the Vocational Education Institutions Act where students can move easily between institutions, provided there are vacancies. To do so, students have to pass exams that were not part of the curriculum in their previous school or training. Spain has chosen a similar approach referring to individual training (*Permisos Individuales de Formación* or PIF) which authorises companies to provide practical training corresponding to diplomas and certificates;
- in other countries such as Finland, Lithuania, Norway and Sweden, mobility between pathways has always been an integral part of the educational system. In Norway, from 1950 mobility opportunities were regularly adapted to current labour market and educational needs.

In Finland, higher education legislation guarantees eligibility for all to higher education including those who have at least a three-year vocational qualification or comparable qualification. Similar approaches can be found in Denmark and Sweden (integrated upper secondary vocationally-oriented programmes in Sweden and Danish reform of the higher education sector). In Lithuania provisions for regulating assessment of prior learning and easing mobility were included in a new edition of law on VET in 2007;

- Denmark, Estonia and Austria have implemented integrative VET structures as well as a legal basis for modularising the apprenticeship training system, double qualifications (higher education entrance exam plus apprenticeship) and educational standards. Double qualifications and modularisation have also become an integral part of the Bulgarian VET system where two key reform projects focus on preventing dropouts and use of ICT ('national education portal'). Similar approaches – although with stronger focus on adult learners – can be found in Latvia and Slovenia. In Hungary, modularisation in CVT was addressed by the government in 2005 when it set forth development of modular adult training programmes;

- modularisation and double qualification are also part of the French vocational training system where dispensation from exams is granted if the candidate already holds a qualification at the same level. Expansion of modular structures is also under discussion and is being tested in pilot projects to reduce the number of early school leavers as well as to encourage a three-year course for the vocational baccalaureate as opposed to the current four-year course;
- another strategy is integrating secondary general, secondary technical and vocational education which was realised, for instance, in Estonia (see above) as well as Cyprus. In Italy, this strategy is implemented by a ministerial programme on ‘development and implementation of devices for easing transfer between VET pathways’ which was started in 2004. Ireland has initiated a ‘post-leaving certificate programme’ that aims to provide a bridge between school and work for those who need further initial education to improve their employment opportunities;
- broader approaches were chosen in Iceland and Slovakia. In Iceland, a bundle of actors (Ministry of Education, Science and Culture, municipalities, upper secondary schools and universities, social partners and local NGOs) established regional centres of lifelong learning which have been in operation since the late 1990s. Regular evaluations of the centres’ impact have shown their success in the increased number of people attaining courses and graduating. In Bulgaria, a community programme on lifelong learning was initiated in 2007;
- in the UK, mobility between pathways has a long tradition and was realised – among others – by establishing foundation degrees which are vocationally oriented higher education courses below the level of a Bachelor’s degree, requiring the equivalent of two years’ full-time study. They include the option of recognising informal and non-formal learning as well as work-based learning. To allow more young people to participate in these degree programmes and in VET in general, 150 new local authority services were established over the past two years. It is hoped that these authorities will be able to maintain the same standards of delivery as

Box 14. **Opening up pathways and linking VET and higher education**

A study on developments in opening up VET pathways (in countries participating in the Copenhagen process) finalised by Ecotec for the European Commission in 2008 (Ecotec, 2008), shows that systems to a certain extent are structured to allow for horizontal transfer from vocational to general education (and vice versa) and also vertical progression for VET students, either onwards to higher levels of VET or into academic streams. But this does not mean that individuals find it easy or straightforward to move between the two subsectors of education and training (Cedefop and European Commission, 2008a).

Individual pathway choices depend on various factors such as weighing up the costs and benefits and the perception of opportunities – the latter being mainly affected by society, culture and the individual’s environment. Member States need a more systematic and evidence-based understanding of why certain VET routes are more popular than others.

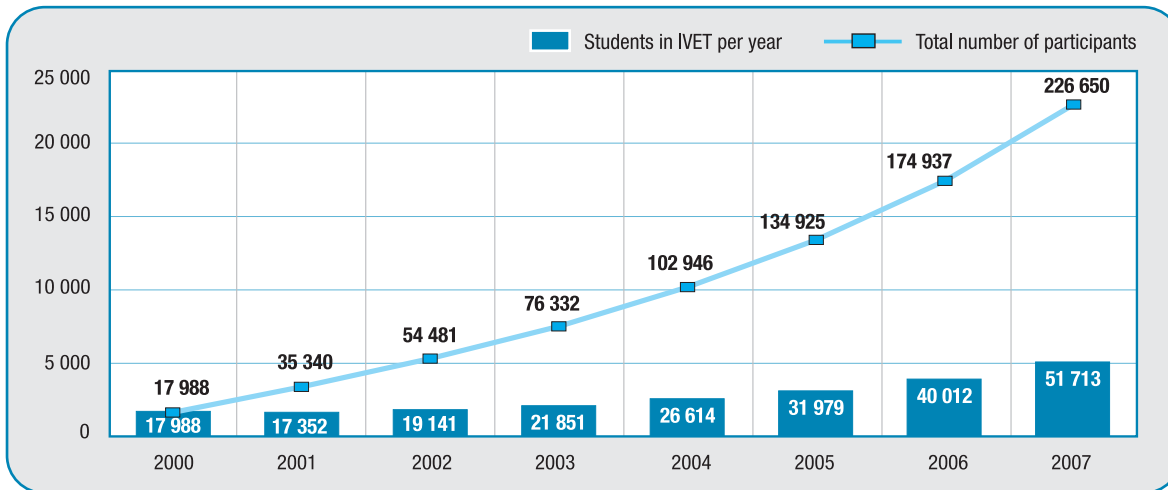
While some countries have problems with misleading trajectories (‘dead ends’) in IVET systems, the main difficulties that refer to pathways lie in the extent to which education and training systems are open for people to move between VET and higher education and to return to education and training later on in their lives. Member States need to focus on encouraging use of existing pathways and ensuring that pathways are genuinely open by dealing with problems of failure to progress, and by offering effective guidance services to assist individuals to make the right decisions now that greater choice is open to them.

To open up pathways and linking VET and higher education, the Ecotec study points out four overall patterns of change that could be observed in the past years:

- expansion of tertiary provision, often with little regard paid to the role that VET may play in it, and mainly in enrolments in academic fields;
- development of higher level (technical) vocational provision and post-secondary provision as a tool for further competence development;
- decline in popularity of lower level school-based VET – and in some cases its repositioning as a prevocational option;
- development of apprenticeships by ensuring proper integration with other parts of the education and training system.

Source: Cedefop and European Commission, 2008a.

Figure 37. Number of students enrolled in initial VET participating in the Leonardo da Vinci programme and total number of participants in the Leonardo da Vinci programme, 2000-2007



Source: European Commission, 2008a.

were developed by the previous 47 so-called ‘partnerships’. To provide a steer, government published standards for delivery of information advice and guidance services (IAG) for young people;

- apart from that, providing financial incentives and improving indicators and statistics on lifelong learning and particularly on learning pathways are also important steps to raise participation levels, mobility and visibility although they are mentioned by only few countries (Belgium, Germany).

7.1.2. Mobility of VET students

Mobility of labour is not only essential to promote European economic integration and other measures to create a single internal market for goods and services, but also to improve transnational exchange of experience and move closer to a European identity. Economic realities, however, are far from meeting requirements necessary to achieve these aims.

Despite obvious progress and benefits, mobility of VET students, including apprentices within Europe is still rather a marginal phenomenon.

A most important channel for mobility of VET students is the Leonardo da Vinci programme, supporting mobility of people in initial vocational training, adults undertaking training while they are in the labour market (this can either be in an employed or unemployed capacity); and

exchanges among vocational trainers. As shown in Figure 37, in 2007, it funded moves by 51 000 young people in initial vocational training. About 20 000 moves took place under the scheme for trainees in the labour market. It should, however, be noted that the divide between initial education and training on the labour market is not always clear. The fact that only 41 % of labour market trainees were aged over 25 would suggest that the majority under this scheme undertake mobility either when in transition to the labour market or soon afterwards.

The number of VET professionals – which can include trainers and guidance staff and human resource managers – undertaking short duration Leonardo mobility moves was 17 000 in 2007.

In addition to mobility under the Leonardo programme, it is worth pointing out that the European Social Fund has supported creation of bilateral or multilateral partnerships between regions for vocational training. However, while individual actions are clearly of interest, there is no overall picture of the extent of these actions or of their contribution to training.

Europe’s VET systems represent a considerable resource, the importance of which is set to increase as skills shortages are likely to increase. Mobility is, in comparison with the university sector, less established as an element in VET education and training.

There are several factors which explain this. The language barrier, a factor limiting mobility in all spheres, is a bigger limitation in this sector than in the university world, reflecting the fact that language teaching has a lower priority in VET curricula than in the academic strand of education. Complex structures of vocational training, which vary according to regulations, certification and validation procedures, degree of formalisation, institutional providers of education and training, and allocation of responsibilities, make it difficult to move between systems. This in turn accounts for a lack of transparency of skills gained in the course of placements spent abroad.

Barriers related to social security and tax status of apprentices are also a factor.

Business plays a central role in vocational education. The track record of business participation in Leonardo mobility is mixed – enterprises have been quite responsive when approached to act as host organisations, much less so as applicants to send trainees abroad. There seems in particular to be a problem in convincing them of the business case to invest in such mobility programmes. Businesses have also pointed frequently to the complexity of procedures in Leonardo. It is seen as being particularly off-putting for SME participation.

Overall, it seems clear that the Copenhagen process has not yet created the same favourable framework for mobility as the Bologna process has in the university world. Nevertheless, notwithstanding the difficulties and barriers, there is clear evidence of an unmet demand for mobility support. Programme managers report that the number of applications under all calls is very high, leaving in each case a large number of good but unsuccessful candidates (European Commission, 2008n).

As a consequence, participation in exchange programmes often tends to remain a luxury, since periods of VET spent abroad are not in all countries recognised as an integral part of education. In higher education, by contrast, this problem is better solved by adoption of the European credit transfer and accumulation system (ECTS), developed under the Erasmus programme (Fietz et al., 2007).

Box 15. Globalisation and Australian VET

Because globalisation also presents many opportunities, Australia has reacted quickly to grasp its potential in some areas, particularly in provision of education. Among OECD countries, Australia has by far the highest proportion of overseas students among its higher education intake at 18.7 %, well in excess of the OECD average of 7.2 %.

In recent years, the technical VET (TVET) sector in Australia has followed the lead of the higher education sector and also begun to internationalise. In 2005, 66 100 visas were issued by the Department of Immigration for overseas students to enrol in a VET course in Australia, up from 57 300 one year earlier. The top five intake countries were China, Thailand, Japan, Indonesia and South Korea.

Offshore delivery is also growing, with estimated 23 300 students taking part in courses delivered by TAFE (technical and further education) institutes in 2004, up from 18 300 one year earlier. Two thirds of students studying in Australian TVET courses came from China.

However, opening Australian training markets to foreign students lags considerably behind that of higher education. This most likely reflects the dominant mode of designing TVET provision to match domestic needs (whereas Australian universities have much more autonomy in planning course delivery) and the extent to which Australian higher education qualifications are valued internationally in comparison with Australian TVET qualifications: under the Australian qualifications framework these do not include degrees or associate degrees.

Source: Cully, 2006.

7.2. Lifelong guidance

There is political consensus that guidance and counselling are key strategic components for implementing lifelong learning and employment strategies at regional and national levels (OECD, 2004). Recent policy and strategy developments in lifelong guidance in Europe have been led by a clear vision. There have been several important

In 2008, Cedefop published three guidance-related studies^{a)}. *From policy to practice* (2008) pointed out that the different rationale and sometimes conflicting interpretations of career guidance in education and labour market sectors remain a challenge for constructing consistent and all encompassing guidance systems. The core message of *Establishing and developing national lifelong guidance policy forums* was that countries are streamlining guidance policy- and decision-making processes to support an integrated approach to social inclusion, active citizenship, lifelong learning and full employment in knowledge-based societies. The study *Career development at work* concluded that there is demand to create an effective strategy for providing career development support directed at adults and the employed.

Recent research on guidance in the EU, in addition to the above Cedefop studies, has focused on two major issues.

First, researchers have paid attention to the potential

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7.2.2. Broadening access to guidance

A major challenge to improving citizens' access to guidance is that there rarely is one coherent lifelong guidance system, but often two parallel and fragmented systems (education and employment). Cross-sectoral and multi-professional guidance cooperation is seen as a means to support better service provision and help clarify responsibilities between education and employment administrations (Belgium, the Czech Republic, Germany, Estonia, Spain, Cyprus, Hungary, Finland, the UK). In some countries the social partners have become more actively involved in guidance in providing services

to their members (Germany, Iceland and the UK), entering strategic partnerships with State institutions (Bulgaria) and issuing a competence agenda including guidance (Belgium).

Special guidance service structures and institutions have been established both in the education and employment sectors in several Member States during the reference period 2006-08. A regional network-based strategy to provide lifelong guidance seems to have gained significance. In many cases, regional guidance centres and partnerships have been set up or regional cooperation has been strengthened (Belgium, Bulgaria, the Czech Republic,

Denmark, Finland, Hungary, Iceland, Norway, Slovenia, Spain, Sweden). Labour market oriented guidance services have been improved, modernised and expanded to cater especially for the diverse needs of adult workers whether they are low-skilled, unemployed, employed, labour market entrants or leavers, job changers or immigrants (Austria, Belgium, Bulgaria, Croatia, Cyprus, Germany, Greece, France, Hungary, Iceland, Ireland, Lithuania, Latvia, Malta, Spain, the UK, plus Scotland/Careers Scotland).

In all countries, groups with special needs to be supported by individualised information, guidance and counselling were identified. These groups cover immigrants, disabled, early school leavers, dropouts, old workers, unemployed, low-skilled, prisoners, women returning from maternity leave, etc., at whom tailor-made services, programmes and projects have successfully been targeted. Many countries report on paying special attention to supporting smooth transitions (education-to-work, work-to-education, between occupations, between careers, etc.) by implementing innovative guidance measures in training programmes and at workplaces (Belgium, Bulgaria, Cyprus, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, the Netherlands, Slovakia, Spain).

Availability of on-line guidance services for young and adult people has increased. Examples cover study and career guidance with Internet support (Belgium), information and guidance web portals (the Czech Republic, Estonia, Spain, France), labour market databases and websites with career information (Ireland, Hungary), open information, counselling and guidance system AIKOS (Lithuania) as well as Learndirect helpline (the UK). Four countries (Bulgaria, Spain, Hungary, Romania) also point to promoting, marketing and advertising guidance and counselling services as potential users might not always be aware of them.

7.2.3. Strengthening quality of guidance

Professionalisation of guidance counsellors continues in developing and launching new training programmes (Bulgaria, Croatia, Denmark, Greece, Iceland, Latvia, Lithuania, Romania, Slovakia), providing further training for special groups of practitioners, such as those working in

adult learning (Austria), in vocational training centres (Croatia) or in public employment services (Germany). In Germany, the Federal Employment Agency aims at training 200 new careers advisers and 200 new apprenticeship advisers in 2008. In some cases, lack of trained guidance practitioners remains a challenge (Croatia, Hungary, Iceland), and in other cases, there are discussions on how to develop the role of teachers in providing guidance (Denmark, Germany, Cyprus).

Developing quality standards for guidance services is currently on the national agenda at least in Austria, Croatia, Cyprus, the Czech Republic, Estonia, Finland and Malta. Lithuania has established an inventory of requirements for vocational information and counselling services (2005) in which, among other things, provision of services, responsible institutions and their functions have been defined. Some countries emphasise that quality of guidance provision can be ensured by having a sufficient number of qualified guidance counsellors and they have set minimum requirements for guidance counsellors including their professional experience and training (Estonia, Norway). Institutions like ISFOL (Italy) and Innove (Estonia) also contribute to the methodological development of national guidance systems by introducing best practices from other countries and carrying out research studies on qualitative aspects of guidance.

7.2.4. Supporting acquisition of learning and career management skills

Much attention in training programmes/curricular development is given to career choice for young people as well as labour market familiarisation. Integrating learning with working and working with learning to improve students education-to-work transitions is a shared goal by several countries (Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Romania, Slovakia, Turkey, the UK). National occupational databases and classifications of professions have already been or will be established in some countries (Belgium, Bulgaria, Croatia, the Czech Republic, France, Hungary, Norway, Romania, Turkey). Sweden has developed a labour market information system for young people. Career guidance at higher

education institutions is to be developed to equip graduates with sufficient career management skills and support their labour market entry (Bulgaria, Greece, Cyprus and the Netherlands).

It is evident that more adults require guidance support for recognition of non-formal and informal learning (Belgium, Iceland), for upgrading their skills and qualifications (Greece, Hungary), and for actively participating in lifelong learning (Belgium, Denmark, Hungary and the United Kingdom). Iceland also aims at engaging more employers to offer workplace guidance to their employees. Cyprus is promoting active ageing programmes for senior citizens.

Gender-specific/sensitive education and career choice is in focus in some countries (Germany, Greece, Cyprus, Austria, Finland), where new guidance measures for men/boys and women/girls have been taken. For example, the Cyprus public employment services offer a personalised approach (including an individual action plan) for women, who require special support for labour market participation.

Member States are supporting people with special needs by fostering their skills development. For example, more and more individualised and client-centred guidance services, training programmes and language courses for young and adult immigrants/ethnic minorities (such as Roma) are on offer (Austria, Belgium, Bulgaria, Cyprus, Finland, France, Germany, Iceland, Ireland, Latvia, the Netherlands, Norway, Slovakia, Sweden).

7.2.5. Strengthening structures for guidance policy and system development

The European lifelong guidance policy network (ELGPN) ⁽²⁹⁾ was established by Member States and the European Commission in 2007. ELGPN is a mechanism to promote lifelong guidance policy coordination and cooperation in Member States and to support establishment of national/regional structures in implementing the priorities identified in the Council resolution on lifelong guidance (2004) in education and employment sectors. Altogether, 29 European

countries participate in ELGPN cooperation.

The ELGPN network – consisting of individual national lifelong guidance policy forums – provides a platform for European and national policy action based on effective leverage, exploitation and renewal of alliance knowledge and expertise. National forums or similar policy coordination mechanisms can be identified in most Member States (Cedefop, 2008d). Countries currently without a national guidance forum are setting one up (state of play in summer 2008).

The new Council resolution on better integrating lifelong guidance into lifelong learning strategies (2008) specifically calls for further strengthening European cooperation on lifelong guidance provision, in particular, through the European lifelong guidance policy network (ELGPN) and in liaison with Cedefop. As Member States are expected to identify policy approaches that will support implementation of the new Council resolution (2008), ELGPN has based its work programme 2009-10 on activities that focus on the four priority areas of the resolution: encourage lifelong acquisition of career management skills (priority 1); ease access for all citizens to guidance services (priority 2); develop quality assurance in guidance provision (priority 3); and encourage coordination and cooperation among various national, regional and local stakeholders (priority 4).

7.3. Validation of non-formal and informal learning

Today, validation of non-formal and informal learning is high on the political agenda in almost all European countries. Growing interest this policy domain has received in recent years is strongly related to the increasing importance of lifelong learning.

The priority given to validation results from countries' aspiration to create more flexible qualifications systems and frameworks, opening up learning outcomes acquired outside the formal education and training institutions. Such systems would enable individuals to build on their learning experience – irrespective of where and how knowledge, competences or skills have been acquired – and reach their full learning potential.

National policy reforms of validation are

⁽²⁹⁾ European lifelong guidance policy network's homepage: <http://elgpn.eu>

stimulated to a large extent by developments at European level. Creation of the EQF, resulting in a rapid emergence of national qualification frameworks (NQFs) and a shift towards learning outcomes, accelerated developments in validation. A set of common European principles for identification and validation of non-formal and informal learning (Council of the EU, 2004a) have been used by many countries as a reference for national developments. Similarly, recently developed European guidelines (Cedefop, 2008c) are expected to provide a reference point for developing validation methods and systems and support systematic exchange of experience and common learning across Europe.

7.3.1. Implementation and acceptance

Progress in developing validation varies across Europe – countries are at different stages of practical implementation and overall acceptance. Some countries have advanced significantly and achieved specific results allowing individuals to have their experience and skills acquired by non-formal and informal learning identified, assessed and validated. Others are still at an initial stage of discussion and planning. Overall however, there has been considerable increase in validation initiatives in the past few years.

Three countries' clusters can be distinguished according to stage of development of validation (European inventory in validation of non-formal and informal learning, European Commission, 2007). Examples are given based on the reports by DGVT and ReferNet (2008).

(a) High level of development: Belgium, Denmark, Estonia, Finland, France, Ireland, the Netherlands, Norway, Portugal, Romania, Slovenia, Spain, the UK.

Countries that belong to this group have introduced validation policies and practices enabling individuals to have their learning outcomes identified, validated or both systematically. A strong policy framework and legal structures supporting validation methods are developed in the majority of countries concerned. Validation as an instrument supporting lifelong learning is broadly accepted. All sectors – public, private and the third sector – have developed and applied relevant validation methods.

Examples of recent developments in validation:

- (i) *Denmark*. Assessment of prior learning is obligatory as part of a student's introduction to VET. In adult learning/CVT a new legal framework for recognition of prior learning was approved in 2007, which gives all adults a right to assessment of knowledge skills and competences (regardless of where they were acquired) as a basis for designing an individual learning programme or for obtaining a certificate. This policy development involves: implementation of legislation (2007/08); introduction of quality assurance mechanisms; development of simple and easily accessible documentation tools (including 'my competence portfolio', 2007); a nationwide information campaign (including television programmes) in close cooperation with social partners; providing practitioners with guidelines and best practice examples (a handbook on individual competence assessment, 2008);
- (ii) *Finland*. From 2006, demonstrations of skills (regardless of how and where acquired) were incorporated in all qualifications completed in VET. In IVET, students can have their study shortened if their recognised competences and skills cover a whole unit of the core curriculum. In adult education/CVT, students may demonstrate their vocational skills in competence tests and obtain competence-based qualifications. Working life, trade and industry play a strong role in planning, implementing and assessing these tests. Since 2006, by law, a VET provider is required to ensure individualisation of entrance to and preparatory training for competence-based qualifications, completion of qualifications and acquisition of necessary professional skills. Individualisation means customer-based planning and implementing guidance, counselling, teaching and support measures. Any special needs arising from different cultural and linguistic backgrounds or other reasons are also considered. The future challenge is to incorporate individualisation into funding VET as resources for VET providers may not be sufficient to implement individualisation.

(iii) Belgium. In Flemish Community, since November 2006, a system of validating job-related competences (certificate of occupational competence), irrespective of how acquired, became operational. By February 2008, 15 assessment centres for 20 professions were in place and every six months new ones are being established; 400 persons have been involved in the procedure. In Flemish Community, the system became operational in 2004.

In Flemish Community, in 2007 a new decree on adult education introduced prior learning assessment and recognition (PLAR) in adult education. Due attention is given to non-formal and informal learning and validation of competences. By the end of 2008, a PLAR 'knowledge network' (including a website with information on good practices, instruments and a discussion forum) was set up.

(b) Medium level of development: Austria, the Czech Republic, Iceland, Italy, Germany, Hungary, Lithuania, Luxembourg, Malta, Poland, Sweden

Validation in these countries is emerging. Members of this cluster have recently adopted a legal or policy framework for validation. Practical steps are currently being taken to implement validation methodologies or relevant pilot projects have been carried out, easing adoption of a national approach. Validation may be restricted to specific educational sectors or target groups and its acceptance may vary between different sectors.

Examples and recent initiatives of validation:

(i) *Austria*. Since 2007, adult educators have been able to have their knowledge, skills and competences validated, irrespective of how these were acquired, and obtain a recognised certificate or diploma. Partial qualification can be awarded (modular structure) through a credits system. Competences that adult educators still lack can be acquired at various educational institutions for adults. Counselling is provided.

(ii) *the Czech Republic*. A law on validation and recognition of the outcomes of CVET, effective from August 2007, developing NQF and its tools, foresaw a possibility for adults to acquire partial vocational qualifications (registered in NQF) through validation of individuals' prior learning results (VPL), regardless of the ways and settings of their acquirement. The approach was piloted with the aim to develop a relevant national scheme. The EPANIL⁽³⁰⁾ project (2004-06), which involved nine partners from six countries, was to develop and verify appropriate methodologies and tools drawing on best European practice. Target groups were vulnerable people, at risk of social exclusion. Results were used for developing standards and UNIV⁽³¹⁾ project (2005-08), within which pilot testing of VPL took place on a larger scale. Initiatives included: developing standards and other tools for VPL, creating regional LLL centres and school networks, training pedagogical staff including assessors and counsellors. Social partners were involved and common European principles served as a basis.

(iii) *Sweden*. The National Commission on Validation was established for the period 2004-07 with the aim to develop approaches and methods to validate prior learning while strengthening regional cooperation. Various solutions were tested on a pilot basis and evaluated with involvement of different stakeholders (business, social partners, education and training sector). The results (final report) with specific recommendations for more permanent approaches for validation are currently being considered by the government and other relevant stakeholders.

(c) Low level of development: Bulgaria, Croatia, Cyprus, Greece, Latvia, Liechtenstein, Slovakia, Turkey

⁽³⁰⁾ European common principles for accreditation of non-formal and informal learning in lifelong learning.

⁽³¹⁾ Recognition of the results of non-formal education and informal learning by networks of schools providing an education service for adults.

Validation is still a relatively new area for the countries in this group. In some cases, it encounters controversy and resistance from national stakeholders, including the education and training sector. Even if stakeholders recognise the benefits of validation, little is being done in policy or practice. Yet, some sporadic validation activities can be identified. These are often driven by the European agenda, EU-funded projects, private or third sectors. Many countries link work on validation to development of future NQFs.

Examples from selected cluster countries:

- (i) *Bulgaria*. Amendments to the law on employment, introduced in 2008, foresee creating conditions to assess and validate knowledge, skills and competences acquired through non-formal and informal learning. The strategy on adult education, strategy on continuing education and the draft version of lifelong learning 2008-13 are to help establish the validation system. By March 2009, a model of validation of non-formal and informal learning is to be developed and tested with help from international experts (in April 2008, an interdepartmental working group started preparing pilot projects in three professions).
- (ii) *Slovakia*. Validation has been a subject of academic discussion for a long time but there have been no initiatives to introduce relevant policies. The only experience was related to some projects of international cooperation. In 2007, a strategy for lifelong learning and lifelong guidance was adopted by the government, identifying validation of non-formal and informal learning as one of the strategic priorities. Specific measures are intended to allow for obtaining qualifications or partial qualification by accumulating credits from training and through recognition of prior learning. Subsequent legislative provisions will have to be adopted. Progress is hampered, however, by lack of an influential promoter. Reluctance of formal education institutions and resistance of employers may hinder the process as well and need to be overcome.
- (iii) *Latvia*. There is no system for validating skills and competences acquired through non-formal and informal learning. The relevant system will be introduced in a new version of the vocational education law, which is under preparation. Results of the project 'Development of a unified methodology for quality and improvement of vocational education and involving the social partners' (2005-07, within the framework of ESF national programme), which included development of methodology and measures for recognition of non-formal and informal learning, will be used.

7.3.2. Challenges and the way forward

Validation activities have significantly increased across Europe. However, validation is a multispeed process – countries are at different stages of development and face various challenges.

The main challenge for countries in the third group is to create a solid basis for validation, to establish or improve relevant legislation. Those in the second group mainly face the challenge to adopt practical solutions – methods and tools for validation. In the first group, some countries indicate the need to overcome difficulties in securing adequate resources – in terms of human capital (Estonia, Portugal and Romania), financing (Ireland and Finland), time (Estonia) – so the desired level of implementation of validation can be reached and specific targets achieved.

Overall, understanding the importance and value of validation has increased, which resulted in a greater take-up of specific validation practices. Apart from the public education and training sector, private sector stakeholders – social partners and individual companies – recognise ever more the benefits of validation. Validation is increasingly used for staff development and to ensure effective allocation of resources in business. In addition, the third sector has become involved. Still, in some countries lack of stakeholders' interest and insufficient awareness on validation opportunities and benefits (Bulgaria, Lithuania, Hungary, the Netherlands, Sweden) creates a serious obstacle to development of validation. This calls for more promotion initiatives.

Some countries are still reluctant towards validation approaches due to fear that the overall quality of qualifications and educational level may be reduced by opening up systems to non-formal and informal learning. To respond to this, it is necessary to ensure that the same quality criteria are applied when awarding qualifications based on any forms of learning – formal, non-formal or informal. Clear and common standards, defined as learning outcomes, should be agreed on to simplify validation.

Strengthening the overall quality of validation is a concern. Countries highlight the necessity to incorporate quality assurance mechanisms (Belgium and Spain) and develop reliable methods/procedures of assessment, so results (learning outcomes) would be credible, broadly accepted, and consequently, transferable across different learning settings (Norway and Sweden).

Methodological experiences, relating to portfolio, self-assessment and dialogue-based approaches should be systematically shared between countries.

Lastly, some countries call for designing a national approach and an overall coherent policy. This concerns those still experimenting in validation (Italy and Hungary) as well as those where validation has a relatively long tradition, but has been implemented at a lower level of government rather than nationally and resulted in many systems, rules and regulations (Norway). Developing a national and permanent approach in countries where validation activity is restricted to projects and programmes of limited duration (testing) is of particular relevance. Such an approach would increase transparency and predictability of validation.

Improving quality of VET

8.1. Quality of VET – *a sine qua non*

Quality of VET is linked to political, institutional or individual goals. It generally aims to marry excellence and equity, and better match training supply and demand. Increasingly, quality assurance strategies are included in general or specific legislative documents. The objective is to make VET more attractive and ensure VET graduates acquire the skills and competences they need to succeed in the labour market and continue or reenter learning. Teachers' and trainers' knowledge, skills, competences and commitment are progressively recognised as key for high quality and equity in VET.

8.1.1. Systemic changes and strategies to improve quality of VET

As already evident in the 2006 review, ensuring and improving quality has generally become a main driver for countries' work on VET and lifelong learning systems. It covers a wide range of areas and activities depending on the country context: from devising qualification frameworks, curricula revision, and development and revision of standards to improving governance and funding, teacher training and closer cooperation with the labour market. Often specific quality assurance strategies are interlinked with these general efforts (Austria).

State-of-the-art equipment and technologies is a precondition for high quality VET. As in 2006, some countries highlight their progress in increasing investment in infrastructure and equipment (Belgium – Flemish Community, Bulgaria).

To support quality in VET, several countries use EU structural Funds, in particular the European Social Fund (ESF) (Bulgaria, the Czech Republic, Estonia, Greece, Lithuania, Austria, Romania). In Slovakia, where quality assurance in VET had not been explicitly included in the previous programming period, it has become one of the priorities for 2007-13. In some cases, these

Box 17. Better quality as a driver of VET reforms – country example

Areas subsumed under the policy priority 'promote quality and efficiency in the education and training systems' in Portugal:

- promote teacher and trainer training, in particular continuing training, linking it directly to the reorganisation and restructuring of education and training at national and local levels;
- review the legislative framework to promote increased social partner participation in vocational training;
- reform the current national accreditation system of training bodies: gradually introduce a new system which certifies the quality of training bodies in terms of their training practices and results achieved;
- move to performance-based funding; use indicators which have been developed within the quality assurance system as an incentive to invest in the quality of training;
- amend the regulations for tertiary education: promote a dynamic national quality assurance system and evaluation of tertiary education; create a national agency for accreditation and clarify public funding.

Source: DGVT Portugal, 2008.

EU resources are used extensively for quality in VET in general through curricula reforms, development of standards, new forms of assessment, etc., and specific quality assurance measures (the Czech Republic, Italy, Latvia, Lithuania, Poland, Slovakia). In others the focus is on either of these (Croatia – Instrument for pre-accession assistance).

8.1.2. Different quality cultures in a common frame

Initiatives to develop quality assurance for VET, had already started prior to the Copenhagen process and joint work on common principles

(Austria, Denmark, Finland, Germany, Hungary, Iceland, Ireland, the Netherlands, Norway, Portugal, Slovenia, Sweden, the UK). In 2005, a European network for quality assurance in VET (ENQA-VET) was set up. By October 2008, ENQA-VET comprised representatives from 23 countries (16 in 2006) ⁽³²⁾ and the European social partners.

Between 2006 and 2008, all participating countries apart from France had put national quality assurance reference points in place. Their task is to disseminate ENQA-VET results and to inform the European partners on developments and practices in their countries.

Most countries consider their quality assurance systems in line with the CQAF or include some of its major elements ⁽³³⁾. Some are currently rethinking their approaches (Denmark, Italy, Portugal, Slovenia, Sweden), aligning them more closely to the CQAF ⁽³⁴⁾. Those that joined the EU more recently and did not have a long established evaluation culture, have used the work at EU level to align their VET systems to the objectives of the structural Funds and common priorities. They seem closer to the CQAF principles than some older Member States such as Greece.

Some countries such as Romania, have adopted a more top-down approach. Others are granting their VET institutions considerable autonomy to devise or adapt quality assurance mechanisms to suit their respective contexts, based on general guidelines (Denmark, Germany, the Netherlands, Austria, Finland for VET schools). Countries like Austria and Finland rely on voluntary commitment of VET institutions.

Since 2006, country reports inform extensively on quality development and assurance in upper secondary school-based VET. Information on mechanisms that apply in alternate training forms/

⁽³²⁾ At the time of writing, the following EU Member States are not members: Belgium, Bulgaria, Greece, Latvia and Poland. From non-EU Member States in the education and training work programme, only Norway is a member.

⁽³³⁾ Although the CQAF model is not included in legislation, some VET schools are using its principles to improve their quality management.

⁽³⁴⁾ This alignment also extends to quality assurance principles outlined in the EQF recommendation and European quality assurance reference framework for vocational education and training (EQARF), European Commission, 2008m).

Box 18. Building comprehensive quality assurance approaches based on CQAF

Creating a quality assurance infrastructure in IVET through interrelated projects and activities (Romania):

- CQAF implementation with active participation of trade unions and employer organisations;
- agency to accredit quality assurance systems in pre-university schools;
- toolbox to support schools' activities (developed in a Leonardo da Vinci project, Proqavet, by Greek, Austrian, Romanian and Finnish partners);
- industrialist confederation committee for quality assurance in VET;
- quality reference standards (government decision) linking learning in enterprises to specific quality requirements;
- catalogue of VET providers which meet CQAF requirements;
- workshops on quality assurance in education and training including teacher training.

Developing a systematic quality assurance approach for school-based (initial) VET (Hungary):

- legislation, funding (100 % from State budget) and specific development plan;
- high commitment to quality improvement both on system and provider level;
- CQAF coordination committee, leading institutions to promote the CQAF model;
- model and guide for self-assessment and external monitoring, including municipalities as 'school owners';
- indicators and benchmarks; benchmarking database to collect and disseminate best practices at national level;
- awareness raising, training and scientific/methodological support to VET providers;
- revising the approach and its key elements to make it more user friendly.

Source: Cedefop; based on ENQA-VET peer learning visits.

apprenticeship, in particular in their enterprise-based components, is patchy and scarce.

Quality assurance in CVT, which tends to be more heterogeneous and less regulated than IVET, and labour market training is not extensively covered. It generally focuses on provider or

programme accreditation. Several countries are, however, moving towards more output-oriented approaches (Greece, Spain, Italy, Latvia, Portugal).

Only a few countries refer to qualification, certification or validation processes that are quality assured (Portugal). This is, however, crucial, if qualification frameworks and validation of non-formal and informal learning are to be credible (see below and Chapter 9). But as a planned Cedefop study points out, simply concluding that those who do not provide information, do not quality assure these processes, would be false.

8.1.3. Assuring quality by defining expected outcomes

The purpose of the CQAF is to improve and help evaluate output and outcomes, for instance whether graduates can integrate into the labour market. This implies setting clear targets and standards in the planning phase which can be measured and monitored. These can be shared points of references or fixed measures against which results of an activity can be evaluated (Cedefop 2008a). Indicators, which quantify the objectives and assess the extent to which they have been met, are therefore an integrative part of the CQAF ⁽³⁵⁾.

Although indicators are being widely introduced in several countries only a few countries have introduced a coherent set of indicators to improve the quality of VET, according to a Cedefop study (Cedefop, 2007b). At system level, these are mainly Finland, and to a lesser extent Belgium (Flemish Community), Denmark and the Netherlands. In Spain, a set of indicators has been developed at central level, to be subsequently implemented in cooperation with the regions. ReferNet country reports include only limited information on indicators.

Using ESF support also requires applying indicators. ESF-funded quality initiatives in Italy, for instance, include a set of indicators linked to an accreditation system which puts more emphasis on the quality of learning. The intention is to guarantee a basic level of quality for training

Box 19. Using sets of indicators to evaluate performance in IVET – Country example

Seven key indicators related to strategic goals and priorities in terms of context, input, process, output and outcome used for school-based VET in Slovenia in 2007/08:

- indicator 1 to monitor the school's quality assurance system;
- indicators 2 and 3 focus on teachers: percentages of those with the required formal attainment levels and those in continuing training; proportion of school investment in continuing teacher training;
- indicators 4 and 5 to monitor completion rates within the given time and success rates at final exams;
- indicator 6 to monitor transition or progress of graduates: those in further education, employed or unemployed six months/one year after completion of their training;
- indicator 7 to monitor integration of VET schools into their local environment: share of resources received through organisation of seminars on demand of the economy.

These indicators are used for external evaluation. For mandatory self-evaluation of VET schools there are recommendations with indicators and guidelines for 11 areas, but schools are free to add others to suit their own goals and needs.

Source: ReferNet, Slovenia, 2008.

provision across all regions and provinces and to overcome fragmentation.

8.1.4. Towards output-based steering

Increasing focus on performance and output is also becoming a strategic management tool at system level. This is evident from the current review and a recent Cedefop study which examines how seven countries (Denmark, Germany, Ireland, France, Italy, the Netherlands, the UK) assure the quality of VET systems by defining expected outcomes (Cedefop, 2008a). Output monitoring based on centrally established indicators is becoming a regulatory mechanism in otherwise decentralised systems, in other words some kind of recentralisation.

⁽³⁵⁾ See recommendations on a European quality assurance framework. European Commission, 2008m.

Box 20. Using targets and indicators as management tools in IVET – Country example

Nationally set indicators to encourage improvements rather than to control or sanction, are used in Finland:

VET providers are free to develop their own internal quality systems to suit local needs. Many providers have opted for a CQAF-based approach. Central/national level supports VET providers through guidelines and tools which help them apply indicators to improve their quality.

Success is measured against objectives and results of previous years and then weighted. Weighting criteria are, for instance: percentage of disabled people among trainees, geographical location of VET providers (different indexes apply in the Helsinki region or Lapland), employment rate of trainees six months after completion of their studies.

An extensive database on VET is available. It includes statistical information on employment. Comparison and benchmarking between VET providers are easily made. Biannual surveys on quality in VET and several annual meetings are held to monitor progress achieved all over the country.

Each institution receives an overall performance index. It is based on six indicators. Progress in the quality of the training offer is measured against these indicators. Of the public funding for VET (all VET is publicly financed) 2 % is allocated to particularly successful VET providers. Many decide to distribute this to their teaching/training staff because 'they render quality possible'.

This 2 % can be increased up to 4-5 %. In some rare cases, VET providers with particularly excellent scores over several years, can receive up to 15 %. For the 212 VET providers competing for this performance-based funding, image is a bigger incentive than financial interest.

Although Finland systematically uses an important range of indicators, there are no penalties (or only in extreme cases). The Ministry of Education only rewards the best, which creates a pull effect for VET provision in general.

Source: Cedefop; based on ENQA-VET peer learning visits.

This does not only apply to performance-based funding (such as using floor targets for learner outcomes) but also in some cases to additional financial incentives (Denmark). Whether these are used as reward, penalty (the Netherlands, the UK), a more directive tool or a combination of these, depends on the country (see Chapter 4).

8.1.5. Monitoring and evaluating performance: how and by whom

Evaluation is becoming mandatory in more and more countries (the Czech Republic, Estonia, Slovenia). Regardless whether it is compulsory or not, self-evaluation is key in IVET in most countries. Austria, for instance, has no legally binding obligation but it has developed a comprehensive quality assurance strategy which has self-assessment at its core and a participation rate of 75 % among its VET schools ⁽³⁶⁾.

To make self-assessment more efficient and effective, countries:

- use support, training and incentives to make it more engaging;
- provide recommendations, guidelines and indicators that apply nationally to increase accountability and better link evaluation results and steering mechanisms.

Self-assessment reports are usually made public. As the CQAF indicates, this could help foster debate and lead to change. In the UK, for instance, studies are used to complement the findings of evaluation processes.

In school-based IVET, there is a growing trend to combine self-assessment and complementary external evaluation. The first is usually carried out annually, while the latter takes place less frequently. In Iceland, for instance, internal evaluation is quality assured by a five-yearly external evaluation.

Combining these two evaluation methods is stipulated in the CQAF, the upcoming EQARF and the EQF recommendation to ensure evaluation results are robust and will be accepted. Identifying the right balance between the two methods is a major challenge.

⁽³⁶⁾ This comprehensive quality assurance strategy does, however, not apply to enterprise-based training in apprenticeship.

Box 21. Towards an evaluation culture**Involving all concerned**

- Learners and employers contribute to developing a quality assurance strategy (the United Kingdom).
- Learners and parents participate in VET schools' self-evaluation (in Austria, Romania and Finland); in Romania, learners assess their teachers and trainers; learner feedback is used in adult learning and labour market training (in Spain and Finland).

Support structures

- National recommendations for quality assurance in VET (Finland).
- Guidelines for self-assessment (Slovakia, the UK).
- Regional promoters or advisors who provide training and support VET establishments (Austria, Norway, the former Yugoslav Republic of Macedonia).
- Regional centres or centres of excellence (Portugal) to create a push effect; regional quality improvement partnerships (the UK).
- Networking (Spain, Italy, Portugal, Romania).
- Cooperation between higher education and VET institutions to develop self- assessment (Italy).

Incentives and benchmarking

- Quality labels and awards (often linked to use of TQM-EQFM ^(e) models (Estonia, France, Hungary, Luxembourg, Turkey).
- Skills competitions (Hungary).
- Benchmarking among VET providers (Denmark, Hungary, Romania, Finland).
- Publicly-funded tests of CVT courses as reference points for providers and orientation for potential learners (Germany).
- (Partially) linking funding to performance as reward or steering mechanisms (Denmark, Finland).

^(e) Total quality management – European Foundation for Quality Management

Source: DGVT and ReferNet national reports, 2008.

Set-ups for external evaluation vary. While specifically created accreditation and evaluation bodies predominate in CVT, they are less common in school-based IVET (Bulgaria, Romania).

In some cases, regional authorities and stakeholders are involved (Norway), but the general trend is to entrust inspectorates with this

Box 22. Critical friends from outside – External evaluation through peer review

Peer review combines 'insider' knowledge with that of 'external insiders', as reviewers come from similar institutions, stakeholder groups and evaluation backgrounds. It can focus on specific areas or processes or on the overall quality management of an institution. In higher education, this method has been used as a flexible form of external evaluation. Its added value is perceived as follows:

- it combines different methods and perspectives, adding a complementary qualitative dimension;
- as it is tailor-made, focused and in-depth, it is particularly suitable to evaluate learning and teaching processes which is VET's core business;
- carried out by people of 'equal standing', it is more likely to be accepted by those evaluated;
- the process contributes to professional teacher development, as it is perceived as motivating and fosters common learning and networking of VET providers.

This means, it goes beyond quality control to quality development. Transnational peer reviews increase credibility, help detect blind spots in a system and increase transparency and common trust.

Guidelines and procedures for peer reviews were developed and tested in the framework of Leonardo projects.

Sources: www.peer-review-education.net [cited 12.11.2008], website of the Leonardo da Vinci project EAC/332/06/13 'Peer review extended. Implementing the CQAF through peer review – Mutual review and assessment of VET providers and extension of the European peer review network'. Conference paper and presentation. Pécs, 13-14 September, 2007 and Barcelona, 13-14 December, 2007.

task (Belgium, Bulgaria, the Czech Republic, the Netherlands, Norway, Poland, Spain, Sweden, the UK, the former Yugoslav Republic of Macedonia). These inspectorates operate at national or regional levels. In some cases, their remit is extended, for instance to include child-care aspects and services for youth (the UK, England), to control and assess exams (the Netherlands), or to unite inspection of general education and VET under one roof (the Czech Republic, Sweden, the UK).

8.1.6. Fostering evaluation cultures and common learning

To develop further quality evaluation cultures, countries use different support methods and incentives, sometimes in combined forms.

Performance evaluation should help improvement. To revise planning and adjust objectives and activities is the next step in the quality cycle. If this step is left out, performance evaluation risks remaining a time consuming *l'art pour l'art* exercise, as Denmark and Hungary point out. The Danish experience shows that moving from benchmarking to bench-learning among VET institutions might make change happen.

As it adds a bottom-up dimension to otherwise top-down measures, peer learning can foster continuing quality development. Leonardo da Vinci projects on transnational peer reviews in 2006 and 2007 have proved successful. There seems to be growing interest to use this method systematically as complementary external evaluation, across borders and also within countries (countries participating in this project are, Denmark, Germany, Spain, Italy, Hungary, the Netherlands, Austria, Portugal, Romania, Finland and the UK-Scotland; Norway is piloting peer reviews). Peer review is also foreseen in the ENQA-VET 2008-09 work programme.

8.1.7. Quality assured certification

People require qualifications that are accepted, of value in the labour market and comparable. Credibility and trust in certification⁽³⁷⁾ are major criteria for the EQF and learning-outcome based NQF to succeed (see Chapter 9).

For certification of non-formal and informal learning to become acknowledged mainstream practice, process, procedures and criteria for validation must be fair, transparent and underpinned by quality assurance (Council of the EU, 2004b). Decentralised and ever more diverse learning sectors and 'markets' require consistency of certification.

This means, assessing, validating and recognising a learner's knowledge, skills and competences also need to be quality assured. This should 'guarantee' that learners, who are awarded a qualification, have attained the level expected and required of them (meets educational or occupational standards), regardless of when, where, how and by whom the learning outcomes are assessed (Cedefop, forthcoming). It is not surprising that external monitoring of certification is gaining weight.

The Cedefop study examined the situation in nine Member States (the Czech Republic, Germany, Ireland, Greece, Spain, France, Romania, Finland, the UK-England) (Cedefop, forthcoming). It concludes that quality assurance practices in certification processes for VET vary not only across, but also within countries (IVET and CVT). They reflect the organisational structure of qualifications, the various actors in charge of the different steps in the certification process as well as geographical and sociocultural factors. Based on three main categories, the study analysed how the different actors in VET divide responsibilities to quality assure certification processes:

- external awarding authorities conduct all stages of the certification process;
- responsibilities are shared between providers and awarding authorities;
- VET providers are in charge of all stages of the certification process.

Two key messages emerged from the analysis:

- nearly all countries examined conform to at least two of these categories;
- there is a need to quality assure certification processes focusing on outcomes.

An apparent trend from the current review is interesting: countries where VET providers in school-based IVET used to be in charge of all stages are moving towards the shared model or towards external certification (Bulgaria, Croatia, the Czech Republic, Hungary). This is seen as an instrument for external evaluation of VET providers. Ireland, for instance, which combines characteristics of the shared and fully externalised model, evenly quality assures the full range: all stages of the certification process, both in IVET and CVT, plus quality assurance arrangements of VET providers.

⁽³⁷⁾ Certification comprises three subprocesses: assessment, validation and recognition. Assessment: appraisal of learning outcomes against predefined criteria; validation: confirms that assessment has been carried out correctly and complies with a predefined standard; recognition: granting official status to learning outcomes (Cedefop, forthcoming).

To quality assure validation of non-formal and informal learning, Portugal, for example, based its respective system on common European principles (Council of the EU, 2004b). Recently it introduced a 'quality charter' to improve the process. This charter is a tool to set quality standards, clarify strategies and service levels and help improve efficient use of funding. Portugal has introduced a tripartite committee to monitor and assess the certification system in its general shift in focus from accreditation to certification.

8.1.8. Standards as a quality and steering tool

The purpose of using standards is to assure that learning outcomes are consistent, irrespective of the place of training, and match labour market needs. Ultimately, this also leads to more efficient use of resources.

Stakeholders are increasingly involved in development of qualification standards, even in countries with weak social partnership traditions. This is apparent from the current review and a Cedefop study on the definition and renewal of educational and occupational standards ⁽³⁸⁾. There is no evidence, however, that EU-level labour market forecasts and trends are systematically considered. Definition of standards usually entails an overhaul of programmes and curricula. Standards thus become an important steering tool for VET.

Approximately two thirds of countries have developed or are in the process of developing occupational standards ⁽³⁹⁾ (the Czech Republic, Estonia, Spain, Italy, Lithuania, Luxembourg, Poland). Many countries are linking occupational and educational standards ⁽⁴⁰⁾ (Bulgaria, the

Czech Republic, Spain, Estonia, Hungary, the Netherlands, Austria, Slovenia). Others only use the latter (Cyprus, Denmark, Germany, Greece, Norway, Sweden), possibly because they ensure a strong link to the labour market, as in Germany or Scandinavian countries, where social partners are involved in defining qualifications and also provide training. Malta, and the UK, for instance, rely on occupational standards and use them to develop (modularise) qualifications and learning programmes. This makes them more open to validation of non-formal and informal learning. Depending on concepts and connotations, these standards are complemented or replaced by competence, examination, assessment, validation or certification standards.

Countries, also increasingly refer to VET standards (Lithuania). They are being developed mainly in CVT (Belgium - Flemish Community, Ireland, Cyprus, Poland, Portugal, Romania, Finland). They integrate specific content-related requirements for CVT programmes, linking them to occupational standards.

The study identifies a trend towards outcome-based qualification standards to improve quality in VET, which is also relevant to lifelong learning and mobility (Chapter 7). This trend is evident even in previously strongly input-based countries, such as Poland, although regulating learning inputs is still predominant in a few (Cyprus, Greece, Liechtenstein, Slovakia).

To ease mobility of workers and learners, some European projects looked into collaborative development of occupational standards across countries. As discussion on the Bordeaux communiqué has proved, views on this issue are, however, controversial ⁽⁴¹⁾.

8.1.9. Against the odds

In general, quality assurance is not equally developed and transparent across all levels and sectors of education and training or regions within a country. Developing coherent national approaches that strike the right balance between trust and control is still a challenge for many. Common to nearly all countries is the missing link between VET and higher education, despite

⁽³⁸⁾ The Cedefop study (forthcoming) covers all 32 countries which participate in the Education and training 2010 work programme.

⁽³⁹⁾ Occupational standards describe occupations systematically (tasks, functions, competences required). They help monitor the labour market, serve as benchmarks to measure occupational performance or describe the occupational profile, depending on the countries (Cedefop, forthcoming).

⁽⁴⁰⁾ Educational standards follow the logic of progressive accumulation of knowledge and skills. What is standardised (programme duration, teaching content, methods, learning outcomes) and how much autonomy is granted to local authorities, training providers and teachers, differs widely (Cedefop, forthcoming).

⁽⁴¹⁾ For discussion of the projects *Professionalisation durable*, *Europäische Kernberufe* and *Certiskills* (Cedefop forthcoming).

an attempt to foster dialogue on quality assurance between these sectors at a conference held in spring 2006 during the Austrian Presidency.

Likewise, approaches to IVET and CVT differ considerably. Ex-ante measures and input-orientation still predominate the latter. However, some countries are reorienting their approaches towards quality of learning and output/outcome orientation (Italy, Portugal). Despite growing awareness of its added value, self-assessment seems to play a much lesser role in CVT than in IVET. The Bordeaux communiqué (2008) and the recently adopted recommendation for a common European quality assurance reference framework for VET (EQARF) (European Commission, forthcoming) are intended to support more holistic and systematic approaches towards quality assurance in VET.

Creating a quality culture requires determination, expertise, participation, time and funding. While newer Member States and (potential) candidate countries tend to underline shortage of necessary funding and expertise, some of EU-15 consider complex and decentralised governance and many different actors a hurdle in implementing quality assurance systems in line with the CQAF. In traditionally decentralised systems, performance-based steering at national level might be perceived as recentralisation which restricts pursuit of local objectives or innovation (Denmark).

Above all, quality assurance focusing on output and outcome requires strong commitment of all actors. However, concern is raised that quality assurance could be perceived by teaching and training staff as a constraint and time-consuming at the expense of quality of learning (Denmark, Estonia, Hungary). Changing mind sets is one of the main challenges.

As Cedefop studies (e.g. Cedefop, 2008a, p. 97 et seq.) and several country reports reveal, a more target- and output/outcome-based approach might cause friction between centrally expected output and outcomes and local needs. Roles between local and central authorities might not be clear cut. Involving all actors, however, is quite a long and complex process.

Targets related to long-term policies might not show results in the evaluation period unless supported by process indicators. Targets are not

always easy to measure and might require a sophisticated data infrastructure. Achieving targets might also be affected by contextual factors. Overemphasis on achieving qualitative targets at the expense of educational standards is a risk to avoid. Funding and additional financial incentives for providers based on target achievement also raise equity concerns unless their socioeconomic context is considered (as in France or Finland).

Standards need to be precise enough to be easily measurable and comparable and sufficiently flexible to fit different contexts and needs. Educational and occupational standards need to be better linked and require continuous updating. This might be particularly challenging in emerging professions or those that do not fit traditional categories, or in cases where stakeholders find it difficult to articulate their needs (SMEs). It is also important to balance conflicting interests of stakeholders, as qualifications have multiple social and economic functions from fostering social inclusion to selecting employees, regulating salaries, improving productivity to encouraging further learning and mobility.

As methods and sources used to define qualification standards vary widely, there is lack of transparency which also implies a need to quality assure standards.

Linking their qualification systems to the quality assurance framework, as required by the EQF recommendation, is still considered a challenge in many national contexts. Some countries have successfully managed to integrate at least certain quality assurance requirements into their qualification system. Spain and Denmark, for instance, as well as some newer Member States, have made significant efforts over the past few years to ensure that some quality assurance mechanisms based on learning outcomes are effectively considered by the qualification system.

8.2. Teachers – Guarantors of quality

When devising and implementing quality assurance mechanisms, some countries consider it crucial that teachers and trainers understand quality assurance as value added. The support

measures outlined above reflect this need and aim at preparing VET teachers for specific quality assurance tasks.

As evident from countries' policy priorities, it is in their general initiatives to improve quality in VET that countries increasingly perceive teachers and trainers as key to make reforms work. Policy measures that focus on teachers and trainers have become one of the priority areas in a third of countries.

To do so, they need to possess renewed methodological skills and competence as well as state-of-the-art knowledge in their specific subject area in line with labour market changes (European Commission, 2005a). This entails development opportunities and continued support throughout their careers. Raising the status of teachers and trainers, setting standards, increasing their qualification levels and keeping initial and continuing training up-to-date have therefore become major issues of concern in policy-making. This trend was already apparent in the 2006 review.

It is not surprising that more and more countries use ESF support to address professional development needs of VET teachers and trainers (Belgium - French Community, Estonia, Italy, Cyprus, Latvia, Lithuania, Austria, Poland, Slovakia).

The need to invest even more in initial and continuing training of VET professionals in future to ensure high quality VET is also underlined in the Bordeaux communiqué. The Copenhagen declaration (2002) and the Maastricht communiqué (2004) had already identified competence development of teachers and trainers as key to support VET reforms⁽⁴²⁾. In 2006, the Helsinki communiqué reiterated the need for highly qualified teachers and trainers who undertake continuing professional development⁽⁴³⁾.

8.2.1. VET teachers and trainers at the heart of VET reforms

VET teachers' and trainers' professional development is receiving increasing attention,

as they need to be prepared for their expanding roles and tasks⁽⁴⁴⁾. Reviewing the policies and initiatives devised, five interrelated policy clusters can be identified, which are often combined:

- (a) defining a strategic vision of VET teachers and trainers' roles and training requirements (new legislation, policy documents, research, and funding programmes);
- (b) raising qualification levels, through standards, certification and accreditation;
- (c) building a more consistent system for initial, induction and in-service training of VET teachers and trainers (by establishing new training institutions);
- (d) raising the status of VET teachers and trainers, new recruitments paths and policies to retain competent staff;
- (e) addressing vocational and pedagogical skill mismatches of teachers and trainers, (through courses and new training arrangements).

8.2.2. Towards a strategic vision of teachers' and trainers' roles and professional development requirements

Policy-makers are increasingly considering how initial and in-service training can enable VET staff to cope with:

- (a) new developments in the labour market, needs of businesses and innovation in technology and working practices;
- (b) changing paradigms in teaching and training that underpin VET reform (learner-centred approaches, the shift to learning outcomes and competence-based training, which involves new forms of validating and assessing learning);
- (c) decentralisation and increased autonomy of VET providers, which entail new management tasks, teamwork and networking with external partners;
- (d) expanding roles (facilitating learning and providing guidance);
- (e) the demand for more efficiency, effectiveness and quality assurance;
- (f) the increasing role of ICT as an education and management tool;

⁽⁴²⁾ http://ec.europa.eu/education/policies/2010/doc/council13832_en.pdf .

⁽⁴³⁾ http://ec.europa.eu/education/policies/2010/doc/helsinkicom_en.pdf .

⁽⁴⁴⁾ See Cedefop, Cort et al., 2004, p 15 and Cedefop, Lipinska, 2007, p 85et seq.

(g) the need to provide education and training to new target groups within lifelong strategies (Cedefop, Cort et al., 2004).

White papers, either within broader VET reforms or specific focus on VET teachers, are shaping a strategic vision on initial and in-service training, career prospects, and qualification requirements of teachers (Belgium - Flemish Community, Greece, Hungary, Norway, Poland, Slovenia, Slovakia and the UK-England).

Major reforms of VET legislation and more specifically of professional teacher development have recently settled competence and qualification requirements and opened the gate for reorganising initial and continuing training (Belgium - Flemish Community, the Czech Republic, Denmark, Estonia, Spain, Latvia, Lithuania, Hungary, the Netherlands and the UK).

National programmes and strategic implementation plans seek to upgrade the competences and qualifications of teachers through comprehensive reforms of initial and in-service training and school-based development projects (Bulgaria, Estonia, Finland, Latvia, Lithuania, Norway, Slovenia, Sweden and the UK). Funding programmes for innovative projects (Germany and Italy) and major financial investments encourage continuing professional development. In Denmark, a recent agreement with the social partners foresees investment of EUR 30 million for continuing training of teachers in vocational colleges. In Sweden, 30 000 teachers should receive further education at universities and colleges in 2007-10.

In comparison, fewer countries have designed strategic programmes for professional development of IVET and CVT trainers, such as the further education workforce strategy (2007-12) in the UK. Nevertheless, new lifelong learning and employment agendas are increasingly drawing attention to competence and qualification needs of in-company trainers.

8.2.3. Raising qualification levels

Recent legislation in several countries confirms the trend to upgrade qualifications required for teaching and training professions already evident in 2006. To qualify as a VET teacher often requires graduation from higher education and longer training than previously. More and more countries

have introduced, are developing or upgrading minimum standards and professional profiles which define basic skills and competences that VET teachers (Bulgaria, the Czech Republic, Estonia, France, Latvia, Lithuania, the Netherlands, and the UK) and trainers need to have (Belgium - Flemish Community, Greece, Italy, Cyprus, Austria, Portugal and Romania).

In sharp contrast, in-company trainers outside the dual system are traditionally not required to meet specific qualification requirements other than being skilled workers with a certain period of work experience. Not surprisingly, many policy initiatives to identify and certify the competences of VET staff have focused on trainers⁽⁴⁵⁾. In several countries, in-company trainers are now required to acquire professional certification (Greece, Cyprus, Portugal, Romania and the UK) and be registered at a professional body (Greece and the UK). This entails commitment to continuing professional development. Certification processes usually include training paths which allow VET trainers to acquire the necessary levels of competence. These developments go hand in hand with quality assurance mechanisms and accreditation of training providers. Some countries (Germany and France) have recently adopted or consider professional specifications for in-company trainers.

Upgrading qualifications through continuing professional development in higher education (Austria) or credits which participants can use in subsequent further education (Denmark, Sweden), also aims at raising the status of VET teachers.

As professional standards and qualifications of VET teachers are raised, validation and accreditation of competences acquired through daily practice is gaining weight in the policy debate (in Latvia, Lithuania and Slovakia). Several countries are devising systems to validate and accredit trainers' on-the-job learning through formal qualification or certification (Austria) while they already exist in France and Portugal⁽⁴⁶⁾

⁽⁴⁵⁾ Unfortunately, responses on policy developments do not always distinguish between those working in the dual system and in-company trainers in general.

⁽⁴⁶⁾ Eurotrainer, making lifelong learning possible: a study on the situation and qualifications of trainers in Europe, ITB – DG EAC, 2008.

(Cedefop, 2007c). Competence standards, qualification requirements and certification processes are redesigning the teaching and training profession. These important developments could contribute in future to more consistent training systems for practitioners, in which initial, induction and in-service training are better integrated.

8.2.4. Towards a more consistent system for initial, induction and in-service training

Upgrading qualifications of VET teachers is also leading to new structures and coordination mechanisms for initial and continuing training (in Denmark, Estonia, Latvia, Lithuania, Hungary and Austria). State programmes and training networks are paving the way for a better coordinated development of training provision. Reforms include a move to merging teacher training institutes into tertiary university colleges (Denmark and Austria). Creating new institutions to coordinate the training provision of trainers is less frequent. Noteworthy examples in Austria are: 'IVET trainer schools' for continuing training of trainers of apprentices, and the 'Academy of continuing education' which aims at making more professional the training profession.

Nevertheless, continuing professional development of VET teachers and trainers, which should be considered a lifelong enterprise (Cedefop; Cort et al., 2004, p. 26), is mandatory only in some countries and does not usually offer career development prospects or lead to salary increases. With new professional standards and qualification requirements being set up, in-service training is likely to expand though. In the reporting period, continuing training of VET teachers was made statutory in the Czech Republic, Greece and the UK, for instance.

8.2.5. Making the teaching profession more attractive

The prospective retirement of teachers in the short-to-medium term needs to be managed carefully. To be able to plan for the future, reliable projections of teachers and trainers' skill mismatches and training needs are necessary. In view of the estimated decline of learners in initial education and training, it is even more

important to ensure policy decisions are based on a wider range of quantitative as well as qualitative data.

Major research projects have been launched to map VET teachers' competences and qualifications, monitor changing needs and shortages of qualified teachers and identify areas that require further policy action (Estonia, Italy, Hungary, Finland and Sweden).

Box 23. Better evidence for policy making

- VET teacher and trainer census (Italy) and new statistics (Finland) to refine data collection on teachers' basic competences and participation in continuing training.
- Comparative studies across the EU on the qualifications of VET practitioners and relevant training practices to help identify possible lines of action for policy-making (Estonia).
- Surveys on the professional situation of trainers to monitor working conditions, identify key competences, map qualification levels, and assess needs for professional development (Germany and Estonia on both IVET and CVET trainers, and Estonia, Ireland and Italy on CVET practitioners).

Attracting and retaining the best teaching talents necessitates appealing working conditions and career development prospects. Several countries are striving to create new entry routes to the teaching profession for professionals from occupations and trades, with recent industry experience and higher levels of qualifications, while improving retention of current staff. More transparent salary and career systems contribute to parity of esteem between vocational and general education, and improve the attractiveness of VET teaching. Revised professional development concepts also include efforts to build more consistent and specific career paths and levels for VET teachers. These developments confirm trends identified in the 2006 review.

Although countries did not report any particular initiative intended to improve the working conditions of VET trainers, a few measures address CVET trainer shortages. For example, the Czech Republic and Estonia have recently started to train VET teachers for the role of adult

trainer in their policy initiatives to turn VET schools into lifelong learning centres. With the growing need to train more adults and the expected demographic decline (see Chapters 2 and 5) this initiative seems timely and pertinent.

Box 24. Incentives to attract/retain VET teachers

- New entry routes for professionals from occupations and trades (Estonia, Germany, Hungary, Sweden and the UK);
- Financial incentives in subject areas where teachers are lacking (UK);
- Reforms of teacher salary systems (Bulgaria, Estonia, Latvia, Lithuania, Hungary, Sweden and the UK) which may include differentiated remuneration based on results achieved (Bulgaria);
- Build more consistent and specific career paths and levels (Bulgaria, the Czech Republic, Slovakia and Sweden).

8.2.6. Addressing vocational and pedagogical skill mismatches

One of the key challenges facing VET is how to guarantee that teachers and trainers' vocational skills keep up to date with changes in technologies and working practices and new methodological approaches. Innovative and cost-effective approaches are called for ⁽⁴⁷⁾ (Council of the EU, 2007a). Alternative pathways for initial and in-service training include on-the-job learning, new mentoring programmes at induction stage, networking, peer learning and use of virtual environments that offer training and support. On-the-job-learning provides teachers with improved skills in their subject areas, direct experience of the world of work and the needs of companies. It also helps to (re)establish more pertinent links between VET institutions and enterprises.

More and more countries are adopting continuing professional development of VET teachers and principals in school-based development projects to ensure that newly gained skills and knowledge are applied and bring about

Box 25. Making teachers and trainers technically and methodologically fit

Dualistic approach:

- on-the-job learning or 'returning to industry' schemes in which trainers work in companies: Belgium (Flemish Community), Finland, and the UK;
- industrial placement and apprenticeship arrangements to update and upgrade trainers' skills and competences: Belgium (French Community), Cyprus, Estonia and Finland;
- twinning programmes to upgrade both work-based skills of teachers and the pedagogical aptitude of workplace trainers: Finland and the UK.

Continuing professional development of VET teachers within school-based development projects: the Czech Republic, Estonia, Hungary, Slovenia and Sweden.

Networks and web platforms to provide resources and encourage knowledge sharing:

- for teachers: Estonia, Latvia, Hungary and Sweden;
- for IVET trainers: Austria (in cooperation with social partners), Poland;
- for CVET trainers: Belgium (Flemish Community), Italy, Hungary, and Portugal;
- for both in cooperation with social partners: Germany, Italy and Denmark.

New in-service courses to:

- prepare teachers and trainers to apply learner-centred approaches and interactive methods: Bulgaria, the Czech Republic, Germany, Estonia, Italy, Lithuania, Hungary, Poland, Portugal, Romania, Slovenia and Slovakia;
- deal with cultural diversity and address different learning needs: Belgium (Flemish Community), Bulgaria, the Czech Republic, Latvia, Hungary, Romania, Slovenia and Finland;
- carry on new roles, such as guidance and counselling: Bulgaria, the Czech Republic, Germany, Italy, Lithuania, Hungary, Romania, Slovenia and Slovakia;
- promote cooperation between VET institutes and the world of work, by equipping VET trainers with the knowledge and skills needed to support on-the-job learning and network with companies: Estonia, Ireland, Hungary, Romania, Finland and Sweden;
- update assessing competences, since competence-based training and online learning have major implications for assessment methods: Ireland and Finland;
- improve ICT and e-learning skills: Bulgaria, the Czech Republic, Estonia, Italy, Cyprus, Lithuania, Slovakia, Poland and Portugal.

⁽⁴⁷⁾ Common European principles for teacher competences and qualifications, http://ec.europa.eu/education/policies/2010/testingconf_en.html

change. This is considered a proficient way to ensure sustainable and qualitative change in VET (Nielsen, 2007). School-based continuing VET teacher development is often an integral part of quality assurance mechanisms.

Peer learning arrangements, new communities of practice and online environments initiated by training providers or public authorities or in cooperation with social partners seek to overcome training shortcomings and broaden opportunities for professional development. Supporting implementation of methodological or technical aspects of reforms, they encourage knowledge sharing on teaching methods, innovation in business technologies and working methods and other issues linked to qualifications and status of VET staff.

New in-service courses address emerging roles and educational practices of VET staff associated with new methodologies that underpin VET reforms and demands on quality assurance. Upgrading basic skills of VET staff is an important priority, in particular computer literacy, since practitioners are increasingly expected to use ICT as a teaching and management tool, and become familiar with e-learning. Several countries also introduce language learning for teachers to promote their mobility and make it easier for them to support incoming and outgoing learners.

8.2.7. Overcoming inertia

To bring about real change requires more than formally introducing new curricula, content and methodologies, increasing financial investment in teacher and trainer training and creating a framework for equal access to training opportunities. It entails addressing motivational issues to avoid the 'Matthew effect', in which mainly those who already have updated skills and competences, participate. The age structure of teachers and trainers poses a particular challenge in some countries (Estonia, Lithuania). Overcoming inertia to leave familiar terrain and making the rationale for change, training needs and benefits of training better understood, is perceived as an important challenge by several countries (Bulgaria, the Czech Republic, Estonia, Slovakia, Slovenia).

In addition, among the barriers which impede swift implementation of their policies, several countries have identified low image of the VET teaching profession, unclear definitions of the CVT profession, lack of teacher trainers and little awareness of training needs. Improving the pedagogical leadership of VET institutions and promoting research in the quality and impact of continuing teacher and trainer training are some of the issues necessary to address to support policy measures.

Achieving EU goals and implementing European tools

The most visible and successful part of the Copenhagen process is development and implementation of European tools increasing the transparency and comparability of education, training and qualifications systems. The single Community framework for transparency of qualifications and competences (Europass), the European qualifications framework (EQF), and the European credit system for vocational education and training (ECVET) have moved over the past few years from abstract ideas to concrete initiatives starting to make an impact on how education, training and learning is organised at national level.

9.1. The shift to learning outcomes

European tools aim at removing geographical, institutional and sectoral barriers to education, training and learning. This is important for easing access to lifelong learning, promoting smooth learning progression and enabling the valuing and recognition of learning. The fundamental basis to these instruments and a key to achieving these ambitious objectives is the shift to a learning outcome-based approach.

Defining and describing qualifications based on learning outcomes – ‘statements of what an

Table 4. Objectives of EU instruments

Instruments' goals	EQF	ECVET	EUROPASS
Access/Progression	Promoting lifelong learning, portability of citizens' qualifications	Promoting lifelong learning, especially portability of learning outcomes	Easing mobility throughout Europe for lifelong learning
Mobility	Promoting European mobility and social integration of workers and learners	Promoting European mobility of learners	Easing international mobility of learners
Transparency	Improving the transparency of qualifications and of national qualifications systems	Improving the transparency of qualifications and learning outcomes	Improving the transparency of qualifications and competences
Comparability	Increasing comparability of qualifications		
Transferability (transfer, accumulation)	Easing transfer of qualifications	Easing transfer of credits for learning outcomes	Easing transfer of learning outcomes
Recognition/Validation	Easing inclusion of non-formal and informal learning outcomes in qualifications	Improving VET recognition and validation procedures	Easing use of learning outcomes
Cooperation	Promoting cooperation and strengthening trust among all concerned	Promoting improved cooperation and trust in VET and adult education	Promoting cooperation among (and between) schools, universities and companies

Source: adapted from Dunkel and Le Mouillour, 2008.

individual knows, understands or is able to do at the end of a learning process' ⁽⁴⁸⁾ – fulfil several different functions. The approach:

- criticises a purely input-based perspective defining and describing education, training and qualifications purely based on location, duration and teaching methods;
- introduces a language comprehensible to both users and providers of education and training and simplifies a dialogue on the relevance and quality of qualifications;
- strengthens accountability of education of training by introducing clear statements of what an individual learner or employer can expect from a particular programme or qualification;
- clarifies the relevance of learning forms and contexts, including those outside formal systems.

The crucial role of the learning outcomes approach is reflected in the main objectives and functions of the three main European instruments (Table 4).

The learning outcomes approach was important for Europass when it was introduced in 2005 (Section 9.2), as clearly demonstrated by the principles underpinning the Europass CV, the certificate supplement and language portfolio. EQF and ECVET initiatives (Sections 9.3 and 9.4) have taken the learning outcomes approach one step further and present it as the common language which can make it possible to open up the 'black box' of qualifications and make it comprehensible to individual users.

Recent national developments in Member States confirm a growing priority in policy agendas to increase the flexibility and permeability of qualifications systems and the shift to learning outcomes is acknowledged as a prominent tool in this respect. Many countries provide case studies showing the way towards (DGVT and ReferNet, 2008):

- developing VET qualifications and job profiles based on learning outcomes and standards (Bulgaria, the Czech Republic, Greece, Italy, Hungary, Austria, Romania);

- revising national legislation and other regulations on VET programmes/qualifications implying a learning-outcomes approach (Denmark, Estonia, Iceland);
- introducing competence-based curricula and modularising VET programmes (Austria ⁽⁴⁹⁾, Belgium - Flemish Community, the Czech Republic, Estonia, the former Yugoslav Republic of Macedonia, Germany, Lithuania, Malta, Poland, Portugal, Slovakia, Slovenia, Sweden); for Finland, this already happened during the national curricula reform at the end of 1990s;
- introducing learning outcomes as an effective way to guide assessment of students' practice, replacing more traditional notions (Finland, Hungary, Ireland, Norway, Romania).

The same tendency is reflected in efforts of European sectoral organisations using a learning outcome approach to bridge qualifications and competence demand in sectors and improve access and transparency to sectoral career pathways at European and national levels.

However, while many countries are making a lot of progress, others are still at an early stage of implementation. A key challenge is to move from general political statements to practical reforms influencing qualifications standards, teaching methods and assessment forms (Cedefop, 2008). Many countries and institutions still lack practical experience in use of learning outcomes for defining standards, describing curricula and organising assessments. In some cases, we also observe inherent scepticism towards the approach, fearing it will weaken attention to the quality of teaching and learning input. Another important challenge for the future is whether the shift to learning outcomes, increasingly promoted at European and national levels, will result in more open and active learning or not.

⁽⁴⁸⁾ Recommendation of the European Parliament and of the Council of 23 April 2008 on establishment of the European qualifications framework for lifelong learning. (European Council; European Parliament, 2008), p. 1-7.

⁽⁴⁹⁾ This takes place currently in higher education institutions.

9.2. Europass and the role of national Europass centres

Europass, as a portfolio of five documents (curriculum vitae (CV), language passport, Europass mobility, certificate supplement and diploma supplement), is now implemented in 32 countries (EU, European Economic Area and candidate countries) addressing half a billion citizens.

A network of national Europass centres (NECs) promotes its implementation in participating countries. These national centres are established and working in all EU/EEA countries cofinanced by the Commission through operating grants. Most NECs were set up mid-2005, and only a few centres, for example in Bulgaria, have been established more recently (Ecotec, McCoshan, 2008). In candidate countries, Turkey set up a

NEC in 2008 and is actively involved in implementing the initiative.

As reported by ReferNet and DGVTs (2008), activities of NECs focus on five main areas:

- (a) publishing promotional material;
- (b) organising informative events;
- (c) setting up and managing the national Europass website;
- (d) fostering collaboration with stakeholders;
- (e) participating in Leonardo da Vinci projects and other non-EU mobility programmes.

All countries reported interesting examples of practice for promoting Europass. Different approaches were developed and included national media campaigns (the Czech Republic, Lithuania, Finland); the dissemination through European networks (Euroguidance, Eures, Youth portal, Ploteus); use of various national networks (Belgium, the Czech Republic, Italy, Sweden); setting up specific Europass networks (France)

Table 5. **Europass instruments: statistics and practice**

Europass portfolio	Statistical data	Examples of practice
Europass CV	From February 2005 to December 2008, about 4.2 million CVs were completed online using Cedefop's tutorials and over 6.1 million CV templates were downloaded.	In some countries, employment agencies promote use of Europass CV.
Europass language passport	From February 2005 to December 2008, about 113 000 language passports were completed online and over 424 000 ELP templates were downloaded.	The Europass language passport is used by schools, vocational training institutions, higher education institutions and language schools.
Europass mobility	In 2006-07, over 77 000 Europass mobility documents were issued to persons undergoing mobility.	Europass mobility is mostly used in the Leonardo da Vinci programme.
Certificate supplement	20 countries (out of 32) have established a national inventory of certificate supplements.	The certificate supplement is being progressively prepared for more training programmes in national and often also in English.
Diploma supplement	The diploma supplement is used by many higher education institutions.	There are more and more countries (Austria, the Belgium-Flemish community, Germany, Norway, Poland, Romania, Sweden) where this is issued with the national diploma. Few countries, such as Cyprus, are still on the way to legalise its statutory issue.

Source: Cedefop statistics, DGVT and ReferNet, 2008.

as well as other activities (ReferNet, 2008).

Europass is also promoted through European, national and regional programmes. In Sweden, for example, Europass mobility is spread through the national initiative 'APU abroad' and also through well-established regional programmes, Nordplus and Nordplus junior, which include five Nordic countries: Denmark, Finland, Iceland, Norway and Sweden.

9.2.1. Europass making a difference to individuals

The usefulness of Europass for its users is manifested in its increased and steadily growing take-up. Original targets set by the Commission at the launch of the initiative have already been surpassed by a great margin (European Commission, 2008n).

As for its impact, the first evaluation of Europass showed it had given clear benefits to many people. Over a fourth of Europass users considered Europass had helped them gain access to opportunities for learning and employment across Europe to a very large or to a large extent (Ecotec, McCoshan, 2008).

The success of Europass is also evident from the significant number of visitors to its website (<http://europass.cedefop.europa.eu>), launched in February 2005 and developed by Cedefop on behalf of the European Commission. The most active users can be found in Italy, followed by the Netherlands, Portugal, Germany and Spain.

The Europass website is now available in 26 languages and has reached more than 14 million visits (December 2008), with 4.2 million CVs completed online and another 5.7 million CV templates downloaded.

Over the past years, a regular increase in use of Europass instruments can be observed; this is clearly reflected in the statistics presented (Table 5).

9.2.2. Europass: successful present, prominent future

The first stage of implementation is now seen as complete. Future work should focus on increasing use of Europass at national level, establishing and strengthening new cooperation ventures. Directors General for VET for further improvement of Europass recommend to:

- strengthen synergies between Europass and implementation of the EQF and corresponding national qualifications frameworks;
- improve user-friendliness of Europass tools;
- spread information on the advantages of Europass to all stakeholders and end-users by strengthening interinstitutional cooperation.

At European level, progress of work on the European qualifications framework (EQF) and the European credit system for VET (ECVET) requires Europass to be reviewed to consider their development. The Europass certificate and diploma supplements need to be developed to include information on the EQF level attained by the holder, while the former should include information on units of learning outcomes and corresponding credits. An important initial conclusion from piloting and testing EQF (in the Leonardo da Vinci programme) is the recommendation to build on the principles underpinning the certificate supplement. Several EQF test projects concluded in 2008 point to the certificate supplement as an excellent way to describe and compare qualifications using a learning outcomes-based approach.

There is also a need to add descriptions of credits transferred using ECVET (Ecotec, McCoshan, 2008).

The Europass CV will be further developed, in particular by strengthening its self-assessment function, supporting individuals in capturing learning acquired outside formal education and training. Cooperation between Europass and Eures (European employment services) will enable citizens to transfer personal data from one system to the other. Further, contacts should continue going on with sectors (metal industry, hotel, catering and tourism industry, engineering sector) to ensure that sectoral skills passports developed by sectors are compatible with Europass.

The Commission plans to take concrete action to address these issues and ensure synergy between Europass and related European initiatives (EQF, ECVET, recognition of learning outcomes).

9.3. The European qualifications framework: towards national implementation

The European qualifications framework (EQF) is a common European reference framework which links national qualifications systems, acting as a translation device to make qualifications more readable and understandable across different countries and systems in Europe.

As an instrument for easing mobility, its main added value is introduction of a common European learning outcome-based reference structure. As an instrument for promoting lifelong learning, it covers – in its eight levels – the entire span of qualifications from those at the end of compulsory education to those awarded at the highest level of academic and professional education and training. This details the horizontal and vertical links between knowledge, skills and competence, illustrating potential learning pathways and possibilities.

While the basic principles promoted by the EQF are well suited to build bridges to reduce institutional and sectoral barriers to education, training and learning, the impact of this instrument on access and progression depends on the extent to which countries allow these same principles to influence national reforms. The 32 countries participating in the Education and training 2010 programme have been invited by the EQF recommendation adopted in April 2008, to relate to European levels in two stages:

- (a) referencing national qualifications systems to the EQF by 2010;
- (b) introducing a reference to the EQF in all new qualifications, certificates, diplomas and Europass documents by 2012.

Developments since 2006 show that the principles introduced by the EQF have been broadly accepted by the majority of countries involved. While some countries initially expressed concerns on the relatively short time available (for example Austria and Poland), the majority of countries are now working actively to meet the deadlines (DGVT responses, 2008).

While the EQF recommendation largely leaves it to countries themselves to decide how to

implement the EQF, the overwhelming majority opted for setting up national qualifications frameworks (NQFs).

NQFs explicitly address the need for using learning outcomes as a basis for reform and the need to make qualifications levels explicit and transparent. They can be seen as instruments for reforming national qualifications arrangements, in particular by providing a platform for cooperation between education and training sectors, thus addressing the frequently fragmented character of national systems.

While only four countries have implemented NQFs (Ireland, France, Malta and the UK) to date, more countries are involved in planning, developing and implementing NQFs (see Annex 1: Status of NQF developments in 32 countries). Countries with already established NQFs are deepening implementation by adopting more consistent approaches to learning outcomes, credit transfer and recognition of non-formal learning (Ireland, England, Scotland and Wales) and bringing their NQFs into line with the framework for qualifications of the European higher education area (QF-EHEA) and EQF (France).

This blossoming of NQFs – as a reflection of and response to the EQF – shows the EQF has now moved into a stage of practical implementation. The current process combines a European push for international comparability and national pull for reform (Bjørnåvold and Coles, 2008). While other initiatives took place earlier, for increasing transparency of qualifications and easing mobility, EQF is a quite different policy initiative as it has created a strong pull effect for national reforms altering the point of equilibrium in governance of education and training systems. The EQF case demonstrates clearly that a novel European space based on common trust is being established in education and training. The continued success of the EQF depends on further deepening this common trust.

9.3.1. Convergences and divergences in emerging national qualifications frameworks

While common trends can be identified in national policies between different countries for developing qualifications frameworks, these will always reflect

Table 6. Types of emerging national qualifications frameworks

Type of framework	Characteristics	Examples
Sector	<ul style="list-style-type: none"> • There are defined series of qualification levels and (possibly) descriptors for one or more education and training sectors (general, VET, HE). • There are no explicit links between sector frameworks for different education or training sectors. 	Spain Hungary Netherlands
Bridging	<ul style="list-style-type: none"> • In its weakest form, there is a set of common levels covering all education sectors which is the basis for relating to each education and training sector framework. In its strongest form these common levels can have a set of descriptors different to those of the sector frameworks they relate to. • Separate sector frameworks exist as a basis to this bridging framework. • The ‘bridging’ framework forms a formal link between different education or training sectors. 	Denmark Estonia Scotland
Integrating	<ul style="list-style-type: none"> • There is a single set of levels and descriptors covering all education and training sectors. Each sector uses this set of levels and descriptors as its own framework. • No separate sector frameworks exist. • The integrating framework forms a formal link between different education or training sectors. 	Ireland

Source: European Commission, (forthcoming).

the particular national contexts where they are developed.

Development of NQFs at national level can only be fully understood when considering the Bologna process for higher education and efforts to establish a European qualifications framework for higher education (QF-EHEA). The 46 countries participating in the Bologna process have committed themselves (ministerial meetings of Bergen in 2005 and London in 2007) to establish NQFs covering higher education. While the EQF recommendation considers these developments – the short, first, second and third ‘cycles’ of the EHEA correspond fully to levels 5 to 8 of the EQF – some countries have so far exclusively focused on developing NQFs for higher education.

This is now gradually changing and the majority of countries are developing overarching frameworks addressing all eight EQF levels and the relationship between them. This reflects the need to develop frameworks covering the entire scope of qualifications and to address issues of access to, progression within and transfer of

qualifications across education and training sectors. Integration is in this sense a key word for understanding development of NQFs. One of the main challenges currently faced by countries is for example to agree on the relationship between VET and higher education. Realising lifelong learning requires existing barriers to progression between these two particular sectors to be reduced, illustrating the crucial role of NQFs in national reforms.

Development of NQFs is a multispeed process coloured by national political and institutional situations and contexts. While the overall objectives introduced by the EQF (and the QF-EHEA) to a large extent are shared (learning outcomes, explicit qualifications levels, etc.), actual developments have reached different stages. Based on the situation mid-2008, three main forms of national frameworks are observed in the 32 countries taking part in the Copenhagen process (Table 6).

The table illustrates that countries in their development of NQFs address increasingly ambitious objectives. For the moment, many

Table 7. **The added value of NQF/EQF developments: countries' points of view**

NQFs are expected to address:	EQF is expected to contribute to:
<ul style="list-style-type: none"> • inconsistencies of national systems by introducing an integrated set of qualification levels and descriptors (based on learning outcomes); 	<ul style="list-style-type: none"> • an improved understanding of similarities and differences between diverse national qualifications systems, thus simplifying transfer and recognition;
<ul style="list-style-type: none"> • need for a coherent national reference for qualifications standards; 	<ul style="list-style-type: none"> • a common reference for development and renewal of qualifications;
<ul style="list-style-type: none"> • involvement of stakeholders from different sectors and segments to fight fragmentation and to develop ownership and commitment to national reform; 	<ul style="list-style-type: none"> • increased and improved European cooperation;
<ul style="list-style-type: none"> • transparency of systems and qualifications, for individuals, employers and others; 	<ul style="list-style-type: none"> • increased transparency and common trust;
<ul style="list-style-type: none"> • pathways and progression routes in the education and training system; 	<ul style="list-style-type: none"> • comparability of different national qualifications thus easing access and progression;
<ul style="list-style-type: none"> • valuing a broader range of learning outcomes, including non-formal and informal learning. 	<ul style="list-style-type: none"> • recognition of prior learning and foreign qualifications.

Source: DGVT responses, 2008, reports from peer learning activities on NQFs, Krakow and London, 2008.

countries are still at the stage of what is described as a (education and training) sector-based NQF, for example concentrating exclusively on higher education (in Bulgaria, Iceland, Latvia, Norway, Romania, Spain, Sweden and Turkey) or VET frameworks (Romania). Increasingly, however, countries express a wish to go towards bridging or integrating models even though this development is a long-term objective requiring time and strong involvement of all stakeholders (see developments in Germany and Austria).

Some countries (Germany and Austria) see NQFs as crucial for strengthening the position of vocational education and training; notably by improving communication between VET and higher education and by giving more visibility to skills and competence elements in defining and describing qualifications. The EQF promotes parity of esteem by stating that skills and competences are important for all qualifications levels. VET qualifications, as a consequence, can be identified and developed at all levels, including levels 6 to 8. This challenges the traditional division of labour between education and training institutions, and in particular access and progression issues between VET and higher education.

The rapid development of NQFs across Europe is based on an understanding that this instrument – and its link to the EQF – can bring added value and consistency to ongoing reforms of education, training and qualifications systems. While this added value will vary from country to country, reflecting different national contexts, some common issues may be identified (Table 7).

While reflecting national traditions and needs, NQF developments are clearly considering the basic principles outlined by the EQF. A significant number of countries are intending to use eight reference levels in their national frameworks (Belgium, Croatia, the Czech Republic, Estonia, Latvia, Lithuania, Malta, Slovakia, Spain, Turkey). Even countries with established NQFs, such as England, Northern Ireland and Wales, are currently testing an eight-level (plus entry level) qualifications and credit framework designed to be fully operational by 2010. France is also considering revising the number of levels. The preference for an 8-level structure does not mean, however, that EQF levels and descriptors are imposed at national level. Denmark and Austria are a good example. Their decision to use an eight-level structure was based on detailed

Table 8. **Preconditions for successfully implementing EQF: countries' points of view**

Preconditions or preparatory activities	Countries
Need for a legal basis.	Austria, Croatia
Sufficient information of all interested partners and end users.	Croatia, Cyprus, the Czech Republic, Denmark, Finland, France, Hungary, Lithuania, Lichtenstein, Malta, Norway, Portugal, the UK
Sufficient involvement, ownership and consensus between all relevant parties.	Estonia, Finland, Iceland, Lichtenstein, Lithuania, Sweden
Create common trust without setting up large control mechanisms or bureaucratic systems.	Belgium, Cyprus, Romania, Slovenia
Create acceptance for introduction of mechanisms for validation of non-formal learning and quality assurance.	Austria, Cyprus, Greece, Iceland, Netherlands, Malta, Romania
Train teachers and trainers within the scope of lifelong learning.	Luxembourg, Turkey
Ensure link between European tools (Europass, EQF, ECTS and ECVET), implement the Bologna process at university level and adapt ISCED to correspond to EQF.	Denmark, Finland, Luxembourg
Define appropriate level descriptors and develop clear guidelines to relate national levels to EQF levels.	Bulgaria, Denmark, Germany, Romania

Source: DGVT responses, 2008.

national analysis and consultation. It is only when this part of the process is completed that actual referencing to the EQF can start (the first countries, Ireland and the UK, will finalise this by spring 2009).

While countries acknowledge the benefits EQF can bring, they also identify challenges for its successful implementation. Naturally challenges differ from country to country, depending, among other factors, on previous experiences in using learning outcomes for defining and designing qualifications and cooperation arrangements between education and training sectors, notably VET and higher education. Table 8 summarises the main challenges reported by countries (DGVTs and ReferNet, 2008; Peer learning activities on NQFs, Krakow and London, 2008).

The challenges involved in future implementation of the EQF at European, national and sectoral levels are examined in continual testing and piloting of EQF in the Leonardo da Vinci programme. Outcomes of these projects already provide important feedback on the

challenges involved in developing NQFs and implementing the EQF. Projects started in 2006 and finalised end 2008 (Cedefop, Conclusions from the workshop *Testing the European qualifications framework*, 2008c) point to three main areas where development and further cooperation is needed:

- develop general methods, based on project and national experiences, for defining and developing learning outcomes-based qualifications;
- develop templates and common approaches for description of qualifications, thus strengthening transparency and comparability (the Europass certificate supplement is seen as one possible approach);
- continue work on conceptual clarification and common understanding;
- deepen understanding of the implications of qualifications frameworks developed by economic sectors (ICT, auto industry, construction, etc.).

Developments at sector level pose a particular challenge and illustrate that qualifications are not exclusively awarded by public, national bodies. On the contrary, increasing diversity of stakeholders, including multinational companies and sectoral organisations are becoming active. The question currently being discussed is whether the EQF can become a reference point for all qualifications, including those awarded outside traditional systems and frameworks.

Successful implementation of EQF requires the active participation and consensus of all parties concerned. At European level, European social partners have supported and been actively involved in developing the EQF from the very beginning. At national level, involvement of industry, chambers and social partners, particularly those involved in European pilot projects, is vital to remedy upcoming challenges. This shows that the EQF cannot exclusively be understood in technical terms as a set of levels and descriptors. It is more a platform for cooperation and gradual and long-term development of common trust.

9.3.2. EQF beyond European borders

EQF is increasingly seen as a reference point for countries outside the EU/EEA area. In particular, development of NQFs and adoption of a learning outcome-based approach are examples of extensive common learning beyond Europe.

Since launching the EQF consultation document in 2005, preaccession countries involved in the Bologna process⁽⁵⁰⁾ have experimented with learning outcome-based approaches in VET reforms and have started to work on NQFs. This has often led to development of two qualifications frameworks (for VET and higher education) in each country.

European countries not part of the Education and training 2010 process, but participating in the Bologna process⁽⁵¹⁾ as well as central Asian, north African/middle eastern countries, which are not signatories to the European Cultural Convention,

are currently reforming their qualifications systems and are keen to link them with the EQF.

Non-European countries outside Bologna/ETF cooperation arrangements consider the EQF relevant to their national policies on recognition and transparency. Some have established comprehensive qualifications frameworks for lifelong learning (Australia, South Africa, New Zealand). Others are planning development of NQFs (India, Korea, Canada, UAE)⁽⁵²⁾. This shows the basic challenges underpinning development of European tools, notably lifelong learning and lack of permeability of qualifications systems, are not exclusively European issues but are shared by countries all over the world.

9.4. European proposal for the European credit system for VET (ECVET)

The European credit system for vocational education and training (ECVET) has been further developed since the decision in the Copenhagen declaration (30 November 2002) to develop a system of credit transfer for VET to promote transparency, comparability, transferability and recognition of competence and/or qualifications, between different countries and at different levels. The subsequent communiqués of Maastricht (2004) and Helsinki (2006) gave priority to ECVET, stressing the importance of testing and implementing such a European instrument.

In 2006-07, the ECVET proposal, based on contributions of experts, the European Commission and Cedefop was subject to European consultation. This brought evidence of wide support for this approach among Member States and stakeholders. Meanwhile, ECVET is pending the decision for a recommendation from the European Parliament and European Council.

9.4.1. ECVET: opportunities and challenges

ECVET provides a common methodological framework based on units of learning outcomes directly related to qualifications. It is designed to

⁽⁵⁰⁾ Preaccession countries are: Croatia, the former Yugoslav Republic of Macedonia and Turkey (candidate countries), and Albania, Bosnia and Herzegovina, Montenegro, Serbia (precandidate countries).

⁽⁵¹⁾ Andorra, Armenia, Azerbaijan, Bosnia-Herzegovina, Georgia, the Holy See, Moldova, Montenegro, Russian Federation, Serbia and Switzerland.

⁽⁵²⁾ Bjørnåvold, J. Note AG1-5. EQF Advisory Group, 13-14 March 2008, Brussels.

simplify transfer of credits between qualifications and VET systems. ECVET builds on common concepts and principles with the European qualifications framework (EQF) and the European quality assurance reference framework (EQARF). Thus, while the main objective of EQF is to increase transparency, comparability and transferability of acquired qualifications, ECVET may ease transfer, recognition and accumulation of learning outcomes of individuals on their way to achieving a qualification.

Benefits expected by countries in developing the ECVET are similar to those stated in policy documents (DGVT responses, 2008). They concern both individual and institutional levels, by:

- individualising pathways;
- increasing motivation for LLL;
- increasing participation rates to VET;
- easing geographic mobility;
- making recognition of non-formal and informal learning easier;
- ensuring transparency among educational systems and establishing common trust;
- bringing the education system closer to the labour market linking vocational standards with curricula.

In the European VET area, ECVET is expected to increase or consolidate common trust based on sustained cooperation and voluntary implementation of this tool. Implementing ECVET is linked, according to countries' answers, to two aspects: deadline and cost-effectiveness. Concerns are raised on future implementation of this instrument acknowledging that 2012⁽⁵³⁾ does not seem achievable for most Member States (DGVTs, 2008). Stakeholders seem aware of the importance of keeping the balance between the expected positive effects of ECVET on mobility (and permeability) and the administrative, social and legal arrangements to be met (DGVTs, 2008).

Directors-General for Vocational Education and Training highlight their lack of experience with credit systems, also pointed out in the ECVET Reflector study (Fietz et al., 2007), given

that most VET and qualifications systems (65 % of 31 systems surveyed) have no credit systems. Among other potential challenges, they underline:

- insufficient time for testing;
- implications in connecting learning outcomes, units and qualifications; and
- inadequately developed quality assurance systems and methods for validating learning outcomes.

Given the complexity and interconnectivity of VET processes and stakeholders' remits, Member States favour a progressive experimental introduction of ECVET.

Two studies underpinning development of the European credit transfer system for VET – ECVET Reflector (Fietz et al., 2007) and ECVET Connexion (Gelibert and Maniak, 2007) – provide evidence that no VET or qualifications systems are in a position to implement ECVET immediately and fully. At the same time, implementing ECVET does not require a radical change to rationales of existing VET and qualifications systems as all of them have a certain level of ECVET readiness. This is defined by indicators linked to the tool's technical specifications, flexibility of training pathways, autonomy of training providers and openness to mobility (ECVET Connexion). The ECVET Reflector study considering ECVET readiness based on transfer and recognition mechanisms comes to an identical conclusion.

Countries suggest that time is required for further elaboration of ECVET before implementation (for instance, terminology and methodology), or integration of EQF/NQF with ECVET, and ECVET with ECTS. Successful implementation of ECVET requires networking between VET stakeholders and a change in the cultural setting of VET systems opening for mobility and permeability.

9.4.2. Opening the way to ECVET

Besides need for cooperation, implementation of ECVET does not happen on its own but is linked to policies on improving international mobility in VET or to changes at national, regional or local levels towards more permeability in and between VET systems or subsystems. These reforms are important triggers for implementing this tool.

⁽⁵³⁾ 2012 is proposed by the European Commission to Member States as the date for adopting measures for ECVET's gradual application to VET qualifications (European Commission, 2008j).

National reforms since 2006, reveal that many countries around the world are looking at ways of introducing credit transfer processes (and thus flexibility) into qualifications systems. Australia ⁽⁵⁴⁾, Belgium (Flemish Community), Denmark, Ireland ⁽⁵⁵⁾, New Zealand, Scotland, Spain, Sweden and the UK ⁽⁵⁶⁾, for instance, have developed or are exploring development of credit transfer systems (OECD, 2007 and ReferNet, 2008).

Other policy initiatives observed among Member States (ReferNet, 2008) aim to:

- introduce a credit system in VET reform (Iceland, Luxembourg, Slovenia) or study its feasibility for future introduction considering ECVET [the Czech Republic, Germany, Finland (Finecvet project)];
- analyse legal and organisational status quo of VET options regarding their ECVET readiness (Austria);
- develop or update related national legislation (Iceland, Italy ⁽⁵⁷⁾, Latvia, Slovenia);
- introduce credits in new curricula (Hungary);
- develop procedures for collection, transfer and recognition of learning outcomes and skills (the Czech Republic, Germany);
- transfer credits considering the proposed ECVET;
- introduce and recognise partial qualifications (the Czech Republic, Hungary, Slovakia, Spain).

Undoubtedly, these national developments open the way to future implementation of ECVET but success depends to a high degree on its practicability. This is also the main message of the ECVET Reflector study that suggests keeping ECVET as simple as possible in terms of administrative burden and user-friendliness and to confer upon it the status of an evolving

instrument dependent on experimentation. Testing and experimenting has already taken place since 2006 in European pilot projects under the lifelong learning programme, while a second project generation to test and develop ECVET was initiated in August 2008 by the European Commission. The first generation of ECVET-related projects focused on building sustainable partnerships with all stakeholders engaged in elaborating and awarding qualifications. In some projects, the partnership is developing accreditation procedures for VET providers using the methodology concerned. Projects have a common approach: they are developing common qualifications or occupational standards in their respective fields (European management, painter, master craftsperson qualification in bakery, or vocational fields such as fitness or cultural heritage). The second project generation will focus on institutional and governance aspects of ECVET implementation.

At the mid-2008 stage of development of the ECVET initiative – ECVET not yet officially adopted – obviously further work is needed to bring this tool to maturity. While not yet in a position to draw robust conclusions across countries for its potential success, European studies (ECVET Reflector and ECVET Connexion), results of European ECVET consultation and preliminary findings of pilot projects provide evidence that the ECVET proposal is feasible.

9.5. Challenges and further steps

Analysis of policy developments and initiatives undertaken during 2006-08 in 32 countries participating in Education and training 2010, shows that, as a result of European initiatives on Europass, EQF and ECVET, reforms of national education systems have intensified. They mainly focus on increased orientation towards learning outcomes and development of national qualifications frameworks. While developments have been rapid until now, the real challenges for making lifelong learning a reality for individual citizens lie ahead of us.

⁽⁵⁴⁾ The Australian qualifications framework already foresees formal links between qualifications belonging to different parts of education systems based on articulation and credit transfer arrangements (AQF, 2007).

⁽⁵⁵⁾ The credit system being introduced in the Irish common awards system could be fully integrated into ECVET as proposed (ReferNet, 2008).

⁽⁵⁶⁾ A qualifications and credit framework (QCF) for England, Wales and Northern Ireland is implemented from August 2008.

⁽⁵⁷⁾ The Italian Decree of the Prime Minister of 25 January 2008 introduced new guidelines as part of an ambitious process to reorganise and stabilise the higher education and technical training system (IFTS) (ReferNet Italy, 2008).

Experiences during 2006-08 show there is need for further developing the technical and conceptual tools needed to pursue the shift to learning outcomes and, in particular, develop and implement NQFs-EQF. This technical and conceptual development will have to be intensified in the coming period.

Involving all relevant stakeholders at European and national levels is crucial if European tools are going to have any impact on education, training and learning practices. Without such involvement and ownership, the common trust needed for more open, permeable and flexible qualifications systems will not be created.

One key issue for the 2008-10 period is to what extent framework developments in the Education and training 2010 and Bologna processes can be better coordinated. While the EQF and qualifications framework in the European higher education area have been developed for somewhat different purposes and differ in scope, they pursue many of the same objectives.

Success of the EQF and QF-EHEA depends on increased coordination between these initiatives, and in particular on developments of NQFs. A situation where developments in higher education are isolated from the rest of the education and training system would be negative.

Developments in 2006-08 also illustrate the need to link with other policy initiatives, notably quality assurance (crucial to common trust) and validation of non-formal and informal learning (crucial for broadening the range of learning outcomes valued). These developments have to be continued and intensified.

The future success of European tools, among other factors, will much depend on the ability to sustain these initiatives. Undoubtedly, Europass, EQF and ECVET, based on the open method of coordination, foster policy learning and drive national change. A major challenge for future implementation of the tools is to assure continuity and permanence.

Statistics and indicators – The way forward

Adequate and consistent VET data and indicators provide important evidence for policy-makers to develop well targeted measures and monitor their implementation. Both the Helsinki (2006) and Bordeaux communiqués (2008) highlight that special attention should be given to improving the scope, comparability and reliability of VET statistics.

Improving the quality of VET statistics can only happen if both European and national policies consider it a priority in an overall strategic framework, and consequently provide the necessary resources. This strategy requires harmonised data sources that apply common concepts founded on European regulations. In the European statistical system (ESS), it is the joint responsibility of the Commission (Eurostat) and Member States to provide data according to agreed quality standards.

In recent years, many Member States have aimed to improve political and legal frameworks, further develop and use existing data, and ensure their consistency. National data harmonised across countries are a precondition for a consistent system of EU VET statistics.

Helsinki and Bordeaux communiqué objectives for VET statistics are a challenge for all. The May 2007 Council conclusions define the first clear political framework for future improvement of the scope and quality of education and training statistics (Council of the EU, 2007b). At EU level, substantial progress in VET statistics can only be expected in this overall process, and within the scope agreed by the Council. To achieve this in the ESS, the strategy builds on three main elements, often ultimately depending on data providers at national level: better use of statistical sources, improving statistical sources specifically created for LLL, while strengthening the statistical infrastructure.

10.1. Achievements at European level – Improving education and training statistics

The past few years have seen significant policy progress in improving official education and training statistics. One key development was the *Council conclusions of 24 May 2005 on new indicators in education and training* (Council of the EU, 2005) which led via a Commission proposal to the coherent framework of indicators and benchmarks for monitoring progress in education and training, concluded in May 2007 (Council of the EU, 2007b). Although specific reference was made to development of the VET component, this did not go so far as to define VET dimensions for relevant indicators and the opportunity was missed to give political weight to the Copenhagen process.

It is now a challenge to emphasise and develop the VET component for those measures (benchmarks) that have potential in the short term: (i) early school leavers; (ii) upper secondary completion rates of young people; (iii) adult participation in lifelong learning; (iv) educational attainment of the population; (v) investment in education and training.

Extending the EU labour force survey (EU-LFS) so 'highest level of education attained' is also available by programme orientation (general versus vocational) would allow the first four indicators to report on VET. The third indicator is also covered by the continuing vocational training survey (training in enterprises) and the adult education survey (learning in different environments).

While the five European benchmarks are still relevant for monitoring progress of the Education and training 2010 programme, it is now necessary to reflect on benchmarks beyond 2010. Recent replies to a questionnaire completed by the

European Directors of Vocational Training reveal that only four Member States do not see a need for any change to the current five benchmarks. Of the Member States, 10 accentuate the need for revising targets and 11 Member States, as well as Iceland, Norway and Turkey are in favour of extending current benchmarks or adding new ones specifically to cover VET (DGVT, 2008).

10.2. Developments in the European statistical framework

10.2.1. Better use and improvement of statistical sources

In line with the Helsinki communiqué recommendation to use better and combine data sources, a recent Cedefop study raises awareness of what might be feasible when using and combining different sources while preserving quality and ensuring comparability. It also underlines the diverse European sources with some kind of data on VET or LLL (Cedefop, 2008f).

Beyond the continuing vocational training survey and the Unesco-OECD-Eurostat (UOE) data collection on education systems, further sources with VET and LLL variables include the adult education survey, the EU labour force survey, the EU survey on income and living conditions (SILC), the EU labour market policy database and the European system of integrated social protection statistics. Many of these sources might help provide a more complete picture of VET trends in Europe, even if – given the array of methodologies used, varying definitions of VET and different statistical populations measured – direct comparison is far from possible.

Improvements in education statistics are evident via the regulation and implementing act which will define the general and vocational education data to be provided to Eurostat (UOE). This includes efforts to improve data availability and quality as well as accompanying methodological information. Further recent progress in line with a third priority of the Helsinki communiqué, development of statistical information on investment in and financing of VET, is considerable growth in collecting, among others, educational finance data, alongside

initiatives to improve measurement and coherence with national accounts data. However, additional efforts are needed to improve the quality, coverage and breakdowns available by ISCED level, as signalled by several DGVTs.

Another development is release of data from the third European continuing vocational training survey (CVTS) in enterprises. For the first time, the survey provides data on initial vocational training. A current Cedefop study to be completed in 2009 will provide analyses of continuing training in firms and recommendations for future surveys.

Another source is the adult education survey (AES), which collects information on all types of learning activities (formal, non-formal, and informal) according to the EU definition of LLL⁽⁵⁸⁾. This was accompanied by demographic and socioeconomic information on individuals and their (self-reported) skills. The AES might be improved by providing information specifically on VET, even if the survey can report more broadly on LLL⁽⁵⁹⁾.

10.2.2. New developments needed

If the recent past has seen some key developments in improvement of statistical sources, some shortcomings still remain. These include:

- gaps in data needed – mobility of VET students, better finance, teacher and entrants data have all been highlighted as important by the DGVT;
- available data is not fully exploited – making more data and microdata available and improving time series will promote greater use of data;
- data are not always available – sometimes collection is not possible at Member State level, and data provided are not yet published at international level;

⁽⁵⁸⁾ As adopted by the Commission and Member States LLL encompasses 'all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences with a personal, civic, social and/or employment-related perspective' (European Commission, 2001, p. 33).

⁽⁵⁹⁾ For the former, information on vocational/technical upper secondary education designed to lead directly to the labour market or to further non-tertiary programmes (ISCED 3c) is collected separately. For the latter, the survey focuses instead on whether individuals participated in guided on-the-job training.

- there is no adequate source at European or international levels to analyse in sufficient depth the benefits of VET. Relevant developments in the EU-LFS and the EU-SILC have the potential to fill this gap.

10.3. Achievements in Member States

10.3.1. New political and statistical tools for VET statistics

Beyond European developments such as implementation of CVTS3, AES or the forthcoming LFS ad-hoc module, numerous initiatives and trends are evident in Member States. Mostly these developments concern new legislation, development of new systems, better exploitation of data sources or extension of data collected. Relevance of VET statistics is essentially influenced by the role of VET in national education systems and the structure of the VET system itself. Statistics benefit from strong VET systems ⁽⁶⁰⁾.

- In the UK, VET statistics are based, apart from the CVTS, on various special surveys that provide information on skills, adult learning, training the workforce and specifically learners.
- In Germany, various institutions collect data down to regional levels, such as data on the dual system and other forms of vocational education and training, data on training the unemployed and statistics on contracts in the dual system. A political initiative was launched to develop 'integrated educational reporting', with a 2007/08 prototype leading to the recommendation to transfer to federal level.
- In Denmark, legislation introduced in 2005 requires all institutions providing VET, to offer information on the time spent by students completing courses, completion rates, and drop-out rates.

Political efforts to reestablish or improve VET might also entail strengthening VET statistics. However, European or national statistical infrastructures are often not flexible enough to reflect recent political developments and

restructuring towards more flexible and permeable education systems, with special focus on VET.

- In Spain, the Statutory Act on Qualifications and Vocational Training (2002) and the Statutory Education Act (2006) provide greater flexibility and permeability in the VET system to obtain certificates or to accredit acquired skills. A decision was taken in 2006 to develop VET statistics based on individual data, expected to be available for the first time for the 2008/09 school year.
- In Italy, absence of a national statistical system on VET with standardised statistics based on regional and provincial data mean that VET statistics are incomplete. A national and regional authority effort, started in 2007, aims to develop an information system on vocational training, setting-up interlinked registers based on individual data.

In Member States where development of statistical systems on education has included VET from the beginning, adaptation to changing needs is easier. Appropriate political and legal frameworks help, with register-based statistical systems playing a prominent role.

In Nordic countries, register statistics have a long tradition, and political and legal frameworks are well established. Sweden has an advanced system of register statistics providing detailed VET data, including completion rates, drop-out rates, and statistics on school-to-work transition. Registers also allow for longitudinal follow-up of VET graduates.

In Finland, the Statistics Act has provided for individual register data on VET since 1999. Combining these data with individual data from other registers, opens a wide range of possibilities for analysis, hence policy support. Performance-based funding is a new political development which intends to motivate VET providers to improve the quality and outcomes of VET.

In non-Nordic countries, political and legal frameworks for individual data or register statistics need to be established. National conditions on how far to use and process individual data, especially register data, might cause limitations. It is worth underlining that developments, mainly in some new Member States, go clearly in the direction of register-based statistics.

⁽⁶⁰⁾ The following information on particular countries is taken from responses to the ReferNet questionnaire.

- In Germany, the Vocational Training Reform Act of 23 March 2005 revised VET statistics, and set the political framework for transition to individual data surveys as well as expanding data to be collected. First results of the revised VET statistics are expected from 2009 onwards.
- In Austria, the Education Documentation Act revised education statistics, including VET statistics (*Bildungsdokumentationsgesetz*, BidokG 2002, effective since 2003). Statistics Austria will draw up a new integrated system of education statistics which, based on individual data, will improve information on flows through the educational system, educational biographies, school successes, qualifications and teachers.
- In the Czech Republic, gradual transition from standard to individual data collection, will improve the statistical information system as a whole, and also impact on VET statistics. Data on students, drop-outs and estimates on the efficiency of educational programmes are expected. The process is expected to be finalised in 2010.
- Estonia implemented a register-based information system on education in 2005; it has collected and analysed education data. Data are updated online and combined processing with other registers considerably expands analytical possibilities for VET statistics. In 2006/07, more detailed information on drop-outs was added. Further plans exist to add work-based adult learning, adult education, data on VET teachers, etc.

10.3.2. Remaining gaps

Beyond the success stories, several gaps have been identified by Member States. For example, the Czech Republic highlights areas for which there are no or only partial data and it is necessary to make qualified estimates. This concerns in particular continuing education, VET financing (mainly data on private funding), and pedagogical staff. Data on VET teachers and trainers might also be improved in Sweden (ReferNet Sweden, 2008).

Statistics Norway has advanced statistical sources based on individual register data, and could produce more statistics than currently available. However, lack of resources and

external pressure for different activities are challenges. A few gaps exist, such as data on labour market transition, but low unemployment in a tight labour market creates little political demand for relevant VET statistics.

Estonia also underlines that without personal registry data from the Estonian Tax and Customs Board, helping follow-up of VET graduates, it is impossible to know which sectors they work in or whether they are even employed.

Germany underlines lack of adequate data for estimating the efficiency of vocational education and training, a gap they are trying to close by launching a comparative study of VET programmes in a few occupations.

Latvia underlines the need for better information on skill needs forecasts, highlighting lack of data on graduates' professional activities. However, plans exist to follow graduates up to 36 months after graduation from educational institutions.

10.4. Ways forward in VET statistics

A recent Commission proposal for a Parliament and Council regulation aims to revise the basic legal framework governing production of statistics at European level (European Commission, 2007g, p. 2). It is a step forward to consolidate the basis for regular surveys and data collection. At EU level, it is the guarantor for strengthening the statistical infrastructure of the European statistical system, and for ensuring relevant, affordable and comparable data of sufficient quality and coverage.

Many Member States have enhanced their education and training statistics systems by improving political and legal frameworks, further developing and using existing data, and ensuring their consistency. While progress in VET statistics at national level is respectable, EU level cannot always keep up. However, the different pace of developments at EU and national levels means that creating additional synergies might be beneficial. Where national developments do not always consider the European dimension, country harmonisation is a precondition for a consistent system of EU VET statistics.

Output harmonisation to agreed quality standards might be one way of proceeding.

A measure that would considerably improve the scope of data on VET is inclusion of 'programme orientation' linked to highest level of education in the European LFS. At national level, this information is already available in several Member States. Several DGVTs would support relevant initiatives at European level. Cedefop will put this issue forward to relevant working groups at Eurostat.

The current review of ISCED97, an initiative by Unesco, OECD and Eurostat, needs the full attention of Member States and Cedefop. The process is expected to be completed in 2011. Cedefop will closely follow developments to support and ensure correct and complete mapping of VET programmes according to any envisaged ISCED revisions.

To improve reporting on VET, a harmonisation process needs to be undertaken for VET

concepts and definitions across different sources, potentially becoming a modular system of VET statistics in the medium to long term. In such a system, different modules based on specific data sources would complement one another to cover VET in its entirety.

To close the data gap on outcomes of VET, Germany has initiated a project for international comparison of skills and competences acquired in VET programmes (VET-LSA). This large-scale assessment in some countries intends to explore in a few occupations how young adults are prepared for the labour market by providing insights into the strengths and weaknesses of different vocational programmes.

In the OECD programme for international assessment of adult competences (PIAAC), the job requirement approach (JRA) will provide information on the type and level of skills used in the workplace.

VET beyond 2010

The Bordeaux communiqué (2008) calls for a new strategic vision for European VET policy to be developed in the context of the updated framework for policy cooperation in education and training (see Chapter 1). Thinking forward in time can help shape the overall future strategy for Europe. It is now time to think beyond 2010.

11.1. Looking ahead beyond 2010

Europe's major challenges are expected to persist beyond 2010, with some shifts in emphasis and some new issues on the horizon (Chapter 2). However, the future is characterised significantly by uncertainties, evident from the recent global financial crisis.

Uncertainty, caused by socioeconomic factors and changes, also has a major impact on VET development, pushing for modernisation. But VET does not only react to changes. Research shows that it can also become a driver of success and competitiveness for European economies and societies (Cedefop, fourth VET research report, forthcoming (b)).

Countries have unanimously agreed that national and European-level work commenced in the Copenhagen process will need to continue. To help develop the process and tools further and implement them, they propose to keep the pan-European focus on VET (open method of coordination). Policy learning among regions is gaining in importance. More time is needed to ensure new approaches are mainstreamed and European tools are used at grassroots level to citizens' benefit.

Most countries consider current policy priorities also valid for the future, both at national and EU levels. Accentuation will depend on the country context.

As countries' policy strategies for VET are often aligned to the programming period of the structural Funds, they go beyond 2010. Their

Box 26. Building on the past

Several priorities are most likely to remain high on the research and policy agendas post 2010 and the strongest evidence suggests they are important for Europe's economic, social and environmental future. This is because many of the key objectives remain unfulfilled at European and national levels. [...]

It is important that any analysis uncovering new needs places due emphasis on this continuing aspect. [...] Future objectives should be built on the success of current objectives, which should not be diluted, even though they are unlikely to be achieved by 2010 [...].

Source: Béduwé et al., forthcoming (a).

policy agendas are thus fairly stable in the coming years. Ways to address expected priorities are similar to those analysed in the preceding chapters of this report. In most cases, the expected policy agenda is presented from a reactive perspective.

11.2. Perennial issues

'Mobility' and 'better response to labour market needs' can be identified as the main policy objectives with a range of perennial specific objectives:

- (a) developing adequate methods and support to put outcome-based qualification frameworks into practice, applying outcome-based curricula and, in particular, assessing and validating skills and competences;
- (b) increasing flexibility and permeability of paths; mainstreaming validation of non-formal and informal learning;
- (c) skills development for disadvantaged groups high on the agenda with focus on:
 - (i) preventive policies to keep learners in education and training;

- (ii) remedial measures to make up for deficits;
- (iii) more opportunities for adults to upskill, in particular low-qualified;
- (iv) intergenerational learning.
- (d) making VET more attractive by improving its quality. Finding the right balance between trust and control (see Chapter 9) and excellence and equity;
- (e) developing teachers' and trainers' competences;
- (f) anticipating future skills, better information on enterprises' skills;
- (g) support structures and methodologies to cater for learners with migrant backgrounds: integration through VET; educational and guidance personnel with migrant backgrounds; linking skills acquisition to language learning; integrating European tools into integration policies;
- (h) more cooperation across educational sectors, in particular between VET and higher education, as boundaries are blurring. Unified or at least coherent qualifications frameworks and consistent credit systems are considered long-term aims;
- (i) improved foreign language skills and recognition of acquired competences to increase crossborder and interregional learning; introduce an accepted pan-European training ID card along the lines of the student ID card;
- (j) need and development of common references or common European profiles for core occupations;
- (k) better governance at all levels, based on autonomy, accountability and learning partnerships and efficient allocation, equitable distribution and sustainability of national and EU VET funding.

Focus on skills

Skills development, in particular upskilling of adults, has been identified as one of the pressing perennial issues. Already in the 2006/08 reporting period, increasing access to education and training for those with less opportunity, was one of countries' top priorities. Nevertheless statistical evidence points to persisting inequity (Chapter 4).

Box 27. Informing workforce training policies

Achieving high levels of adult participation in learning in the workplace remains an elusive goal. VET research should have a key role in identifying how to engage adults in the workforce in training, and also those seeking to enter or reenter employment. In particular, we conclude that over the next decade, new VET research will be needed to:

- ask seriously what skills older people will need to develop and how work organisation can accommodate their needs;
- identify how to meet the changing needs of migrants – not least distinguishing between first, second and third generation migrants and between different ethnic/social groups. Factors such as age, gender and nationality need far greater attention;
- analyse social inequalities between diverse groups of young people across Europe, related to opportunity costs of education and the economic capacity needed to support changes in economic activity during full-time education;
- find ways to promote education and training for women entering and reentering the labour market, and establishing gender equality.

Source: Béduwé et al., forthcoming (a).

Wider implementation of the learning outcomes-based approach and the growing need to validate skills and competences acquired outside formal education and training, entail a thorough rethink of assessment (Chapter 8). The progress review and the list of future priorities indicate that competence-based assessment tools will receive increasing attention not least in the skills competitions, which will be held to prepare for future Euroskills competitions. Measuring VET competence is complex. It needs to consider both sector- and job-specific skills as well as general key competences.

Measuring competences has also become an instrument to benchmark performance of educational systems. As international large-scale assessment programmes, however, usually concentrate on general competences, the 2008 progress report of the European Commission

towards the Lisbon objectives sees an increasing need for surveys which also assess vocational skills and competences (European Commission, 2008k, p. 58). It will be interesting to see the outcome of a study initiated by Germany (Chapter 10). It explores if it is feasible to conduct a European comparative assessment of the skills and competences that young adults have developed in VET. The purpose of such assessment would be to investigate to what extent young adults are prepared for the world of work in different vocational tracks in Europe.

11.3. Towards better use of evidence

From reports it is not fully evident whether priorities are politically driven or underpinned by sound evidence. As Cedefop's fourth research report (forthcoming) suggests, the priorities for policy cooperation in VET are not based on sound research, but almost entirely driven politically, by governments and social partners.

Box 28. From 'trial and error' to sound evidence

'Evidence-based policy making' is a fashionable term but tends to be rhetoric. Policy-makers and researchers tend to follow their own agendas and preoccupations.

Currently commissioned research on VET priorities mostly reviews national, sectoral or sometimes local experiences but is rarely based on theoretical or empirical analyses. Systematic policy evaluation and impact research is scarce. Research and policy are not sufficiently connected.

From a policy point of view, the risk is that modernising VET will not achieve the expected benefits. This lack of research and sound evidence promotes 'trial and error' approaches. Applied research and timely evaluation should be undertaken to inform policies as they develop and are implemented, discuss hypotheses and analyse their effectiveness and impact. Including a comparative dimension will maximise the potential for policy learning in the European context.

Source: Based on Cedefop, fourth VET research report, forthcoming (c).

Country responses, however, suggest that VET policy-making will be based more on evidence in the future. As a precondition, setting targets, developing benchmarks for VET, monitoring progress and improving data will gain in importance. Impact research might be used on a larger scale to underpin European processes. Joint research projects and close research cooperation could be helpful to add comparative dimensions and share expertise.

- Evaluate the impact of quality assurance systems to assess whether indicators, output-orientation and performance-based funding actually lead to better quality of learning.
 - Carry out research to test the underlying assumptions of European policies and tools, examine how they work in practice and foster policy learning.
 - Review VET practice in methodology, content and results. Much information is available on changes in legislation, structures and policy measures. We need to know more about what is actually happening in VET: such as what expectations do learners have, what knowledge, skills and competences do they acquire and how; how are new educational practices promoted; how are innovation and entrepreneurship integrated into VET teaching and what are their outcomes.
 - As boundaries between different education sectors and levels are blurring: how do these new lifelong learning systems unfold in their different country contexts? How does the learning outcomes-based approach affect VET in these less hierarchical structures?
- Broader room might be given to debate objectives and demands on VET that seem contradictory or controversial, for instance:
- the role of VET in society: can VET meet its multiple policy objectives? How to reconcile the demand for excellence and equity in VET, can it attract and cater for high achievers and be 'all-inclusive'?
 - resolving the dilemma of VET teachers and trainers: to be highly competent teachers and at the same time be jacks-of-all-trades, act as mentors, coaches, counsellors. Is it better to require teachers to be multifunctional or work with teams of different professionals?

11.4. Issues not on the menu

An interesting point in this outlook into the future is that most issues are presented mainly from the education and training sector perspective. There is hardly any reference to VET as a policy lever in other contexts.

Climate hazards and the need to develop sustainable forms of energy have been identified as global trends shaping education and training (Chapter 2). VET's contribution to environmental sustainability or to developing sustainable forms of energy has neither been suggested by the countries nor has it been yet adequately explored by VET research.

Tensions between national policy-making and control and local implementation and decision-making in decentralised systems has been identified as one of the ongoing challenges. In many countries, regional authorities are responsible for (some forms of) VET provision. While much is known about progress at national level, it is less clear how European policies are implemented regionally and locally. To ensure European citizens benefit from EU policies, they need to arrive at grassroots level. A wider debate on how EU policies are implemented and how regional VET policies contribute to EU objectives might be valuable.

Given the focus on skills development, it is surprising that the future contribution of VET to flexicurity is not included. As VET prepares workers to deal confidently and securely with repeated professional transitions, it has a role to play in promoting employment security. Evidence shows that flexibility has increased but security has not ⁽⁶¹⁾ (see Section 2.3). Cedefop's outlook into areas of interest for future VET research ⁽⁶²⁾ suggests that it will be necessary to understand better how VET and employment interact.

In response to the request for excellence and high levels of skills, the policy debate usually focuses on raising tertiary level attainment rates and considers introducing targets or benchmarks. Unemployment rates of highly-skilled young people in some countries, the findings of Cedefop's skill needs analysis and its new

research programme on skills mismatches, however, suggest that overqualification might also be(come) an issue (Chapter 2).

11.5. Research for future VET policy-making

VET policies have to consider the complex interdependencies between education and training and the socioeconomic system and need to operate in increasingly uncertain environments. As indicated above, research, if linked to policy-making, can help clarify these relationships and provide a basis for decision-making. In its fourth research report *Modernising vocational education and training*, Cedefop attempts to provide and discuss the evidence base for enhanced cooperation in VET bringing together experts from the world of research to discuss policy priorities for VET.

As outlined above, the report concludes it is important to build future objectives on past achievements, even though the originally set objectives have not been fulfilled. Continuity and consolidation are thus crucial. To base future objectives and policies on better evidence the report identifies the following five main areas.

'We can only see a short distance ahead, but we can see plenty there that needs to be done' (Alan Turing).

⁽⁶¹⁾ Cedefop, fourth VET research report, forthcoming (c).

⁽⁶²⁾ Béduwé et al., forthcoming (a).

Box 29. Five future issues for VET research

Issues for research

- (a) to analyse the role of VET in achieving the key European goals of environmental sustainability and skills needed to develop and exploit new sources of energy for Europe.
- (b) VET governance at European level. Linked policy at European level is key to successful innovation, but the field remains underresearched. Developments in VET should be better linked to European innovation strategies. Projects such as EQF will need robust impact evaluation. 'Qualifications frameworks are tools for governance, mobility and transparency simultaneously. Whether they achieve the range of institutional benefits expected, promote lifelong learning and modernise qualifications systems should be a priority for future research'.
- (c) to develop understanding of new relationships between VET and employment: how individuals may make choices about their careers and labour-market positions, new forms of collective activity that may emerge. The following are some research questions arising:
- (i) work organisation: what will be the impact of changing patterns of individual choice on patterns of learning and working, and combining both? What strategies will actors develop to control new labour-market situations? How will work organisation adapt to meet these changes;
 - (ii) career trajectories: how will individuals make choices during their learning careers and throughout professional life? What resources help individuals to manage their career trajectory, and under which conditions;
 - (iii) social organisation and individual choices: how can individuals be supported in making career choices and informed decisions and their working activity? Which public and collective resources, including modes of VET provision, can work best under these conditions?
- (d) empowerment will become the effective way to improve the capabilities of learners and pathways open to them. A concomitant risk is a divide between expert and novice learners, the latter having low self-image, poor learning strategies and little reflective ability. Thus, for research and development issues into innovative aspects of VET teaching and learning, we highlight three issues:
- (i) research to contribute to professionalising VET teachers and trainers;
 - (ii) research into empowering VET learners;
 - (iii) harnessing new technologies to VET teaching and learning.
- (e) conceptualising competences certainly calls for further investigation by VET research. It is a concept that should not be taken for granted or assumed to be unproblematic. A key question is whether it is possible to use a single, holistic and homogeneous methodology to recognise all kinds of competences.

Source: Béduwé et al., forthcoming (a).

List of abbreviations

AES	Adult education survey
ALMP	Active labour market policy
APEL	Accreditation of prior experiential learning
CQAF	Common quality assurance framework
CRELL	Centre for Research on Lifelong Learning
CVET	Continuing vocational education and training
CVT	Continuing vocational training
CVTS	Continuing vocational training survey
DGVT	Directors-General for Vocational Education and Training
ECTS	European credit transfer system
ECVET	European credit system for vocational education and training
EEA	European Economic Area (EU-27 + Norway, Iceland and Liechtenstein)
EHEA	European higher education area
ELGPN	European lifelong guidance policy network
ENQA-VET	European network for quality assurance in VET
EQF	European qualifications framework
EPSCO	Employment, Social Policy, Health and Consumer Affairs Council
ESF	European Social Fund
ESS	European statistical system
ETF	European Training Foundation
EURES	European employment service
EU-SILC	EU statistics on income and living conditions
GDP	Gross domestic product
GNP	Gross national product
ICT	Information and communication technology

ILO	International Labour Organisation
ISCED	International standard classification of education
ISCO	International standard classification of occupations
IVET	Initial vocational education and training
LdV	Leonardo da Vinci (EU programme)
LFS	Labour force survey
LLL	Lifelong learning
MST	Maths, science and technology
NACE	Classification of economic activities in the European Community
NEC	National Europass centres
NEET	Not in employment, education or training
NGO	Non-government organisation
NQF	National qualifications framework
OMC	Open method of coordination
OECD	Organisation for Economic Cooperation and Development
OJC	Official Journal of the European Communities
PIAAC	Programme for the international assessment of adult competences
PIRLS	Progress in international reading literacy survey
PISA	Programme for international student assessment
PLA	Peer learning activity
PLAR	Prior learning assessment and recognition
PPS	Purchasing power standards
QF-EHEA	Qualifications framework for the European higher education area
R&D	Research and development

SME	Small and medium-sized enterprises
TALIS	Teaching and learning international survey
TIMSS	Trends in international mathematics and science study
TQM-EFQM	Total quality management – European Foundation for Quality Management
UN	United Nations
Unesco	United Nations Educational, Scientific and Cultural Organisation
UOE	Unesco/OECD/Eurostat (common data collection)
VET	Vocational education and training

Country abbreviations

EU European Union	AT Austria	EEA European Economic Area *
BE Belgium	PL Poland	IS Iceland
BG Bulgaria	PT Portugal	LI Liechtenstein
CZ the Czech Republic	RO Romania	NO Norway
DK Denmark	SI Slovenia	
DE Germany	SK Slovakia	Other
EE Estonia	FI Finland	AU Australia
IE Ireland	SE Sweden	BR Brazil
EL Greece	UK United Kingdom	CA Canada
ES Spain		CN China
FR France	CC Candidate countries	CH Switzerland
IT Italy	HR Croatia	IN India
CY Cyprus	MK the former Yugoslav Republic of Macedonia	HK Hong Kong
LV Latvia		JP Japan
LT Lithuania	TR Turkey	NZ New Zealand
LU Luxembourg		RU Russia
HU Hungary		SG Singapore
MT Malta		TW Taiwan
NL the Netherlands		US United States of America

* EEA also includes EU Member States.

ANNEX 1

Status (*) of national qualification frameworks in 32 European countries

Country	Status	Description
Austria	In progress	An overarching Austrian NQF based on learning outcomes is currently being developed. In 2006, a project group was established with representatives from the Federal Ministry of Education, the Arts and Culture (BMUKK) and the Federal Ministry of Science and Research (BMWF). Broad consultation (265 responses received) was carried out between December 2007 and June 2008. The national steering group, set up in February 2007, will draw up a recommendation for implementing the NQF by the end of 2008 and the NQF is planned to be ready by 2010.
Belgium	In progress	A Flemish qualifications structure including an overarching (national) qualifications framework is under development. A set of eight draft reference level descriptors was developed during 2005/06 and led to a discussion note published in October 2006. Procedures for describing and levelling qualifications will be prescribed in a decree by January 2009 and is expected to be adopted during spring 2009. In Wallonia, a formal decision on setting up an NQF was made in March 2006. A group of experts was established autumn 2006 to outline the main features of a future NQF based on an eight-level structure. A draft legal proposal for a framework covering levels 6-8 was introduced in 2008, a proposal covering levels 1-8 is expected in 2009. There are still issues pending on future links between levels 1-5 and 6-8 in Wallonia.
Bulgaria	In progress	The Bulgarian Ministry of Education and Science committed in 2006 to set up an NQF. A task force was set up in August 2008 to create, by 2010, an integrated framework of qualifications, linking different education and training sectors (VET and HE). Drafting the NQF will be based on learning outcomes and work on redefining standards (in particular VET) has already started. A framework for higher education has already been developed by a working party, pending approval.
Croatia	In progress	During 2006, the Ministry of Science, Education and Sports formed a joint working group of experts from VET and HE to develop an overarching lifelong learning Croatian qualifications framework (CROQF) based on eight levels with an additional four sublevels reflecting the particularities of the Croatian qualifications system. A proposal was discussed during spring 2007 with all relevant stakeholders. The Croatian framework is expected to be complete by 2009.
Cyprus	Limited progress	Consultations among major stakeholders took place and a proposal for a political decision on creating an NQF has been prepared. In the meantime, the system of vocational qualifications whose implementation has begun will constitute an integral part of a future NQF for all levels of education. New Directive 2005/36/EC is at the final stage of implementation into national law.

(*) Status on 18 December 2008m.

Country	Status	Description
Czech Republic	Framework adopted, implementation ongoing	The proposal for a national qualifications framework promoting integration of IVET and CVET was presented in 2006 and entered into effect in August 2008. Implementation is currently going on. The framework is based on the law on validation and recognition of outcomes of CVET. The core of the NQF is a publicly accessible register (repertoire) of all complete and partial qualifications. The NQF uses an eight-level structure and builds on units (complete and partial qualifications) and standards (for qualifications and assessment).
Denmark	In progress	An overarching NQF has been under development since early 2007. An interministerial working group presented its proposal for an NQF in August 2008. The national framework for higher education (related to the EHEA) is currently being revised in light of work on the overarching framework. The Danish NQF will have eight levels and will be based on a learning outcomes approach – to a large extent already introduced into the Danish system.
Estonia	In progress	There is a proposal for an overarching lifelong learning NQF. Amendments to the Professions Act introduced by the Ministry of Education and Research in 2007 and adopted by the government in May 2008 support transition from the present competence-based five-level qualification system to a new eight-level framework. The framework will be fully competence-based and will simplify validation of non-formal and informal learning. These developments are supported by the ESF project 'Developing a qualification system'.
Finland	In progress	Work on a framework for higher education (related to EHEA) started in 2005. In December 2007 the government approved the development plan for education and research 2007-12 based on which an overarching NQF will be prepared by 2010. The Ministry of Education set up in 2008 a group to prepare NQF development. A proposal is expected by June 2009. The Finnish qualifications system is already to a large extent using a learning outcomes or competence-based approach and the framework will simplify validation of competences acquired in non-formal or informal settings.
France	Implemented since 2002	The NQF is being revised to bring it into line with the EHEA and EQF. The key element of the French framework is the national repertoire of professional qualifications. Currently, the national directory of professional qualifications – RNCP is being prepared to include 15 000 qualifications. Continuing review of the French framework may imply reconsideration of the number of levels (currently five) used.
Former Yugoslav Republic of Macedonia	Limited progress	An NQF is planned to be developed and working groups have been nominated, but practical work has not yet begun. The concept for a national vocational qualifications framework has been developed providing a basis for an NQF.

Country	Status	Description
Germany	In progress	An NQF for the higher education sector (related to EHEA) was implemented in May 2005. In January 2007, federal and state governments set up a coordinating group to develop a German qualifications framework (GQF) covering all areas and levels of education and training. The coordinating group has agreed on an eight-level structure described through categories. The recommendation of this group presented in January 2009 and will be followed by combined consultation and test phase. A final result is expected at the end of 2010.
Greece	Limited progress	A high level committee for a Greek NQF under the umbrella of the Ministry of National Education and Religious Affairs was established in spring 2008. In the framework of the national system for linking vocational education and training to employment (ESSEKA), a new system of accreditation of professional qualifications based on learning outcomes was created by Ministerial Decision No 110998/2006. A high level group chaired by the secretary for HE was set to develop an NQF for higher education (related to the EHEA).
Hungary	In progress	Elaboration of an NQF started in 2007 as part of the new Hungary development plan 2007-13. In spring 2008, a motion was submitted to the government regarding referencing to the EQF. An NQF is expected to be set up by 2013. Hungary uses learning outcomes extensively for VET qualifications, to a more limited degree for general and higher education.
Iceland	In progress	In 2006, a new law on HE was adopted and from 2007, the Minister for Education implemented an NQF for HE (related to EHEA). This framework is structured according to three cycles divided into five levels. The 2008 Act on upper secondary education represents a first step towards a framework covering qualifications outside the HE sector. A five-level structure is suggested for this part and a detailed proposal on descriptors has been prepared. Linking these two frameworks to an overarching NQF is currently being considered. Substantial progress in use of learning outcomes has been made.
Ireland	Implemented since 2003	The Irish NQF based on 10 levels has reached an advanced stage of implementation. All FETAC (Further Education and Training Awards Council) awards are now included in the NQF and since July 2006, the National Qualifications Authority of Ireland (NQAI) published policies and criteria on inclusion in, or alignment with the NQF, of the awards of certain international and professional awarding bodies. From January 2008, new awards are developed solely through the common awards system. The Irish national framework of qualifications successfully completed verification of compatibility with the framework for qualifications of the EHEA. Referencing to the EQF will start in spring 2009.
Italy	In progress	Mid-2008, the <i>Tavolo Unico Nazionale</i> (Unified National Committee) met for the first time to start definition and implementation of an NQF. This work is linked to the national system of minimum occupational, training and certification standards completed in May 2007. Definition and implementation of national minimum standards in various economic and professional sectors is planned to take place by 2010, and implementation in the regions by 2009.
Latvia	In progress	Development of an NQF building on the existing five-level structure in VET and the three-level structure for higher education is envisaged. Work on an NQF for HE (related to EHEA) has started. Currently, laws on vocational education and higher education are under preparation. This new legislation will simplify future linking of Latvian professional qualifications system to the EQF.

Country	Status	Description
Lithuania	In progress	A new law on VET (2007) legitimised development of the national qualifications system. An overarching NQF will be based on eight levels. A law on the national qualifications system is currently under development which will consider the principles set in the law on VET.
Luxembourg	In progress	A working group, coordinated by the Ministry of Education, was set up in 2006 to prepare an NQF proposal to be submitted to relevant stakeholders in 2007. A new law on VET was adopted in autumn 2008 and provides the basis for taking forward work on an NQF. This NQF will simplify validation of non-formal and informal learning.
Malta	Implemented since 2007	The Maltese QF has eight levels, it is in line with the EQF and uses the learning outcomes approach. It is governed by Legal Notice 347/October 2005. The Malta Qualifications Council, set up in October 2005, is the national body responsible for development, assessment, certification and accreditation of qualifications other than those in compulsory education and degrees.
Netherlands	Limited progress	The decision to set up an NQF has been made and a national steering committee has been established to follow this up. The form and scope of this framework has still to be decided and has been subject to investigations by external contractors for the ministry. The investigation will be finalised by the end of 2008. The Dutch Education Council has also produced a report (2007) on NQF.
Norway	In progress	A proposal for an NQF in HE (related to EHEA) is being developed. It is based on the EQF descriptors. A technical working group was set up in spring 2008 to develop a proposal for an NQF for VET. A pilot project for testing EQF in certain sectors was carried out in close collaboration with the social partners. Development of an overarching NQF for lifelong learning embracing VET has to be further discussed. A proposal for implementation of the EQF will be prepared by June 2009 and will influence future NQF developments.
Poland	In progress	A decision has been taken for creating an integrated overarching NQF (KRK) included in priority III 'High level of education system' in the human resources operational programme 'Human capital 2007-13'. A working group with members from different education and training sectors was set up mid-2008 to develop a concrete NQF proposal. A recommendation will be presented end 2009. Work on a NQF for higher education started in 2006.
Portugal	In progress	In 2007, Decree No. 396/2007 of 31 December 2007 which established the national qualification system foresaw creation of the Portuguese qualifications framework (QNQ). This framework will define the structure of levels of qualification, taking as a reference the principles of the EQF. The QNQ seeks to integrate national subsystems of qualifications and give visibility to qualifications in relation to the labour market and civil society. Also, the national qualifications catalogue was created in 2007 integrating 123 qualifications for 40 education and training areas. Qualifications references are focused on learning outcomes and structured in certified and autonomous units which can be capitalised for one or more qualifications. The catalogue aims to link the national VET system with both EQF and ECVET.
Romania	In progress	An NQF for HE (related to EHEA) is being set up and a national agency for qualifications in HE will support this. An NQF for VET based on five levels has been recently agreed between government and the social partners. Development of an overarching Romanian NQF has yet to be decided. The NQF action plan includes development of qualifications based on learning outcomes and correlation of VET with HE.

Country	Status	Description
Slovakia	In progress	A working group of the Ministry of Education was set up in December 2006 to develop an NQF for HE (related to EHEA). Development of the national system of occupations is in progress based on amendment of Act No 5/2004 on employment services valid since May 2008. This will be the basis for renewal of the national qualifications system to be compatible with EQF and an NQF for lifelong learning based on eight levels to be introduced based on the forthcoming act on VET and LLL act. A specific task group was set up by the Ministry of Education in 2008 to prepare all level implementation of NQF; five-year ESF project with an envisaged budget of SKK 700 million will support these developments.
Slovenia	In progress	In 2006, the Slovenian government adopted the decree on introduction and use of classification system of education and training (Klasius), which provides the formal basis for building a Slovenian qualifications framework. Conceptual bases are in preparation and a working group for constructing the NQF has been appointed. An eight-level framework is being considered, covering all main qualifications. The Slovenian education and training system is to a large extent built on a learning outcomes approach and has also established mechanisms for validation of non-formal and informal learning.
Spain	In progress	Separate frameworks for higher education (related to EHEA) and VET have been developed. The links between these two sectoral frameworks (three and five levels) have yet to be clarified. The legal basis for the VET framework is provided by the 2002 Law on qualifications and vocational training and the 2006 Law on education.
Sweden	In progress	A ministerial working group was set up in 2007 to analyse different options for linking qualifications levels to the EQF. Based on this work, Sweden decided in November 2008 to develop an overarching NQF. This NQF will be linked to the framework for higher education (related to EHEA) established in 2007. Learning outcomes are being used throughout the Swedish system and many functions embedded in an NQF are already present.
Turkey	In progress	A commission has been established to develop a national qualifications framework for higher education (related to EHEA). A new Law 5544 on occupational qualifications institutions was adopted on 21 September 2006 to prepare an overarching NQF based on eight levels. A Vocational Qualification Authority (VQA) was established early 2007 coordinated by the Ministry of Labour and Social Security to develop a strategy for implementing the national qualification system. VQA has already developed secondary legislation on establishing sector committees and developing occupational standards. First discussions on accreditation, assessment and certification have taken place.
UK	Implemented	There are four NQFs in the UK: (a) the national qualifications framework for England, Wales and Northern Ireland; (b) the Scottish credit and qualifications framework; (c) the credit and qualifications framework for Wales; (d) the framework for higher education qualifications in England, Wales and Northern Ireland. The government has initiated a vocational qualifications (VQ) reform programme to rationalise vocational qualifications across the UK. This has led to adoption (October 2008) of the qualification and credit framework (QCF), intended to apply across England, Wales and Northern Ireland. The QCF is now being used as a basis for referencing to the EQF, a process which started autumn 2008 and will be finalised spring 2009.

Source: DGVT and ReferNet responses spring 2008. Reports to the EQF advisory group autumn 2008.

ANNEX 2

Performance in five EU benchmarks

	Low achievement in reading		Early school leavers (%)		Youth attainment (%)		Mathematics, science and technology graduates			Participation of adults in LLL (%)	
	2000	2006	2000	2007	2000	2007	% Increase	Share of females		2000	2007
EU	21.3	24.1	17.6	15.2	76.3	78.1	27.4	30.8	31.3	7.1	9.5
BE	19.0	19.4	12.5	12.3	80.9	82.6	6.9	25.0	26.4	6.2	7.2
BG	40.3	51.1	20.3 ^(a)	16.6	74.9	83.3	17.3	45.6	41.2	1.4 ^(a)	1.3
CZ	17.5	24.8	5.5 ^(b)	5.5 ^(c)	91.1	91.8	65.9	27.0	26.5	5.6 ^(b)	5.7
DK	17.9	16	11.6	12.4	69.8	70.8	1.1	28.5	33.9	19.4	29.2
DE	17.9	20	14.9	12.7	74.7	72.5	29.6	21.6	28.6	5.2	7.8
EE	:	13.6	14.2	14.3	83.7	80.9	46.6	35.4	42.9	6.5	7
IE	11	12.2	14.7 ^(b)	11.5	82.5	86.7	5.5	37.9	29.1	5.5 ^(b)	7.6
EL	24.4	27.7	18.2	14.7	79.3	82.1	24.1	:	40.9	1	2.1
ES	16.3	25.7	29.1	31.0	65.9	61.1	16.6	31.5	30.0	4.1	10.4
FR	15.2	21.7	13.3	12.7	81.6	82.4	7.4	30.8	27.9	2.8	7.4
IT	18.9	26.4	25.3	19.3	68.8	76.3	36.3	36.6	37.1	4.8	6.2
CY	:	:	18.5	12.6	78.9	85.7	66.7	31.0	35.9	3.1	8.4
LV	30.1	21.2	19.5 ^(b)	16.0	76.8	80.2	25.0	31.4	32.4	7.3 ^(b)	7.1
LT	:	25.7	16.7	8.7	77.9	89.0	43.9	35.9	31.6	2.8	5.3
LU	35.1	22.9	16.8	15.1	77.5	70.9	:	:	:	4.8	7
HU	22.7	20.6	13.8	10.9	83.6	84.0	20.8	22.6	27.9	2.9	3.6
MT	:	:	54.2	37.3	41.0	55.5	50.0	26.3	30.1	4.5	6
NL	9.5	15.1	15.5	12.0	71.7	76.2	40.8	17.6	18.4	15.5	16.6
AT	19.3	21.5	10.2	10.9	84.7	84.1	50.7	19.9	24.5	8.3	12.8
PL	23.2	16.2	7.9 ^(a)	5.0	87.8	91.6	117.8	35.9	39.2	4.3 ^(a)	5.1
PT	26.3	24.9	42.6	36.3	42.8	53.4	88.1	41.9	39.7	3.4	4.4
RO	41.3	53.5	22.3	19.2	75.8	77.4	108.2	35.1	38.6	0.9	1.3
SI	:	16.5	7.5 ^(a)	4.3	87.0	91.5	7.7	22.8	25.7	7.3 ^(a)	14.8
SK	:	27.8	5.6 ^(b)	7.2	94.4	91.3	102.1	30.1	34.8	8.5 ^(b)	3.9
FI	7.0	4.8	8.9	7.9	87.8	86.5	17.8	27.3	29.9	17.5	23.4
SE	12.6	15.3	7.7	8.6	85.2	87.2	23.9	32.1	34.4	21.6	32.4
UK	12.8	19.0	18.4	17.0	76.4	78.1	-1.1	32.1	30.8 ^(c)	20.5	20

(a) 2001, (b) 2002, (c) 2005, (d) 2006

Source: Low achievement in reading: PISA; early school leavers, youth attainment and participation of adults in LLL: Eurostat, EU labour force survey (LFS); mathematics, science and technology graduates: Eurostat, UOE data collection.

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Towards a European era of vocational education and training

This third review of joint work to modernise VET endorsed in 2002 by European countries, the European Commission and European social partners indicates that the coordinated approach in the Copenhagen process is driving change forward.

Since 2006, work on common principles, guidelines and tools has significantly progressed. European and national agendas for VET are aligning. Countries have worked on quality, attractiveness and good governance to make VET more equitable and more relevant to labour market needs. But progress varies.

Policy learning and support are gaining in importance. Looking to the future, countries see a need to continue work on current priorities. To ensure Europe will have the highly skilled workforce it needs in an ever uncertain future requires even stronger focus on education and training. Investing more in skills in times of economic downturn is paramount to be ready for the recovery.

Cedefop's analysis is based on country self-assessment reports from Directors-General for Vocational Education and Training, reports provided by Cedefop's reference network (ReferNet) and other available expertise and evidence, including Cedefop and other research findings and statistical data.



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