

Zooming in on 2010

Reassessing vocational
education and training

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Patrycja Lipinska
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Cedefop

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Foreword

European countries, social partners and the European Commission are working closer than ever towards a shared policy agenda, to inspire developments, reforms, and common concepts and tools for vocational education and training (VET). However, to cope with Europe's socioeconomic challenges and make the vision of highly-skilled citizens come true, more remains to be done. Education and training needs to provide the right skills for both younger and older generations in time to prevent future skill shortages. Hence, the priorities set to modernise VET and make it more attractive as a tool for excellence and social inclusion, remain valid. It is important to keep the focus.

This was Cedefop's main message at the education ministerial meeting in December 2006, confirmed by the Helsinki communiqué. The Helsinki meeting was the second review of the Copenhagen process, which aims at developing European VET systems to make Europe socially cohesive and more competitive. In Helsinki and at the follow-up Agora conference it organised in April 2007, Cedefop presented the progress achieved at national level since the Maastricht communiqué (2004) based on the main findings of this report.

The biggest policy shift is evident. Work on national qualification frameworks, sparked off by a proposal for a European qualifications framework (EQF) has brought to the fore related trends such as basing qualifications on learning outcomes and ensuring quality to generate trust among countries, learners and employers. Increasingly, countries understand that validating work-experience or other forms of non-formal learning are important ways to improve employability. Apprenticeships are no longer targeted only at young, non-academic learners but at everyone, including the adult unemployed and students in higher education. Access to learning for the low-qualified, migrants and people beyond the age of 40, is becoming key, but still needs more attention. This is where guidance becomes more important as a lifelong accompaniment to learning. Raising the proportion of highly-skilled workers requires both higher education and continuing vocational training. Anticipating the skills needed is a prerequisite. All parties involved must see education and training as an investment in their and Europe's future.

To design comprehensive strategies and effective policies, it is important to understand socioeconomic developments and challenges and consider the interplay between different policy areas. This report is not simply an inventory of progress in VET. It offers a more holistic view, reflecting VET as an interface between education, innovation, employment, economic and social developments and policies. To support policy-makers in their decision-making, statistical data and research findings underpin the conclusions of this report and examples from non-EU countries illustrate the status and role some of Europe's competitor countries assign to VET.

This report constitutes another element in Cedefop's wide range of activities to support the Copenhagen process, whether through expertise and assistance to develop common tools and principles (the European qualifications framework, the European credit transfer system for VET, Europass, the common quality assurance framework, guidance and counselling, etc.) or its contributions to clusters and peer learning (teachers and trainers, financing, etc). In addition to other opportunities for policy-learning, reports on VET development and progress can assist countries in gauging their own progress to adjust measures and pace, thus complementing their self-assessments.

The views of Member States as to their own progress in implementing VET priorities is a major element of this report. Cedefop would therefore like to thank the Directors-General for VET for their valuable contributions. The Helsinki communiqué has given Cedefop the mandate to monitor policy developments and progress for the next review of the Copenhagen-Maastricht-Helsinki process in 2008. Cedefop is ready to embark on this interesting task as follow-up to the reports prepared in the first phase of VET's way towards the Lisbon goals. In cooperation with the French Presidency, European Commission, ETF, our reference network (ReferNet), social partners and various stakeholders, in particular Directors-General for VET, Cedefop will collate and analyse data from its sources and partners inside and outside the EU.

Aviana Bulgarelli
Director

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CHAPTER 1

Executive summary: from Lisbon via Copenhagen and Maastricht to Helsinki

1.1. Looking back

Policy debates on education and training at European level have significantly intensified since the launch of the Lisbon strategy (Council of the European Union, 2000) which addressed the need for a competitive knowledge-based economy and a socially cohesive society. To make Europe more competitive and help create more and better jobs by 2010, the Lisbon European Council identified education and training as a forceful policy lever. Hence, the Council called on Member States to modernise their education and training systems. The Barcelona objectives (Council of the European Union, 2002b) and the Education and training 2010 work programme (Council of the European Union, 2002a) set the roadmap to ensure easy access to high quality education and training for all throughout their lives. The Bologna process, which aims at creating a European higher education area, is part of this policy framework.

Vocational education and training (VET) plays a fundamental role in Europe's quest for excellence and inclusion. It is clearly an interface of education, innovation and employment as well as economic and social policies. This is also evident from the Partnership for growth and jobs (European Commission, 2005c) and Europe's employment guidelines. 'Investing more in human capital through better education and skills' and 'improving the adaptability of workers' are among the action priorities.

Figure 1. **Priorities for cooperation in vocational education and training**

Copenhagen – Maastricht – Helsinki	
Copenhagen Declaration 2002	<ul style="list-style-type: none"> • Strengthen the European dimension • Improve transparency, information & guidance systems • Recognise competences & qualifications • Promote quality assurance
Maastricht Communiqué 2004: national & EU-level priorities	<ul style="list-style-type: none"> • Put Copenhagen tools into practice (quality assurance, validation, guidance & counselling; Europass) • Improve public/private investments, training incentives, use of EU funds • Address the needs of groups at risk • Develop flexible & individualised pathways, progression • Strengthen VET planning, partnerships, identify skill needs • Develop pedagogical approaches & learning environments • Expand VET teachers' & trainers' competence development • EQF, ECVET; identify TT learning needs; improve VET statistics
Helsinki Communiqué 2006	<ul style="list-style-type: none"> • Improve image, status, attractiveness of VET; good governance • Develop further, test & implement common tools by 2010 (EQF, ECVET, CQAF/ENQA-VET, Europass) • More systematic mutual learning; more & better VET statistics • Take all stakeholders on board to put Copenhagen into place

The joint effort of Member States, EEA/EFTA and candidate countries, European social partners and the European Commission to develop their VET policies as a contribution to the Lisbon agenda started in 2002. The partners committed themselves to making VET systems more transparent and effective and agreed on cooperating more closely in the Copenhagen declaration (European Commission, 2002). Reviewing progress in what became known as the Copenhagen process, the Maastricht communiqué (European Commission, 2004b) defined new priorities and strategies to guide VET reform both at European and, for the first time, also at national levels. The Helsinki communiqué (European Commission, 2006e), as a result of the second progress review, reaffirms these priorities with specific emphasis on the quality and attractiveness of VET and good governance.

1.2. Facing Europe's socioeconomic challenges

As well as a means to drive the Lisbon agenda forward, VET policies are affected by the socioeconomic challenges Member States encounter in their attempt to increase Europe's competitiveness worldwide. Significant demographic change with serious impact on social cohesion, sectoral changes, fast-evolving technologies, globalised production and distribution processes constitute some of these challenges that call for immediate action.

Though European countries' performances vary, several score high on skill-related competitiveness indicators, alongside Australia, Canada, Japan and the USA. Of the working age population in the EU-27, 47 % have upper secondary and post secondary qualifications, mostly acquired in VET. However, Europe scores lower on academic qualifications and considerably higher on low skills than Canada, Japan, Russia and the USA, for instance. In 2006, 30 % of the working age population, or 24 % of the employed, did not have the qualification levels to cope with the needs of the labour market – also a major challenge for the future. Occupational change clearly favours skilled and highly-skilled workers. Lower-skilled people are facing ongoing job losses. Sectoral changes, with declining employment in agriculture and industry, will aggravate the situation. This has a notable impact on training requirements, particularly in the services sector and occupations which lack skilled labour.

Younger people are usually higher skilled than older generations, but demographic decline in Europe raises concern. It will have profound effects on VET and the labour market. Around 2009, there will be fewer 15 to 24 year olds than those aged 55 to 64. Labour markets will have to rely increasingly on older workers, migrants and women returning to work. More people from a wider range of groups will need to participate in education and training. This also means matching skills demand and supply more accurately. Lower participation in initial VET could release the capital necessary to design adequate training opportunities and ensure VET provides the skills needed on the labour market.

1.3. Taking stock of progress in vocational education and training

The Maastricht priorities were used as a basis to collect data and structure analysis for this report. Cedefop undertook a survey among Directors-General for VET and drew on other stock-taking activities and studies carried out to support the Copenhagen process. To underpin and complement the information, various statistical data and research findings from Cedefop, EU and international sources were used. The report also includes examples from non-European countries to understand the status they assign to VET and their respective policies. This will help to gauge EU progress in an international perspective.

1.4. Setting the framework to:

Given the challenges, it is crucial to ensure VET fulfils its role as a major pillar of lifelong learning and contributes effectively to the Education and training 2010 work programme and the Lisbon agenda.

(a) **make VET more attractive**

Most Europeans would recommend vocational training/apprenticeship after compulsory or secondary education (European Commission, DGPC, 2005). Enrolment statistics confirm this trend: overall, more than 60 % of learners at upper secondary and 80 % at post secondary level are in VET. However, its low status in several countries has given rise to concern. There is consensus that VET needs to be more flexible to enable citizens to progress to continuing and higher education and training and to combine different types of qualifications throughout their lives. Countries' efforts focus mainly on improving access to (continuing) training, providing more differentiated options and making their systems more coherent. Several are diversifying their post-secondary sector and/or are introducing non-university tertiary VET programmes. But progression to higher education from VET is still generally low. Countries have not reported much progress in this area. To ensure VET gives access to higher education, thus opening up more options for later, it is crucial to make it more attractive. Overarching qualification frameworks, credit transfer and recognition of prior learning can support the process.

Motivating European citizens to take up continuing training, however, requires more than putting access routes and programmes in place. They need to know which skills they might need. Time made available during working hours and financial support or incentives as well as guidance could encourage them to undertake more training.

(b) **ensure cooperative governance**

Policy responses to the challenges comprise manifold measures, but there is a trend towards more strategic approaches and policy packages. In some cases they are part of lifelong learning strategies or national reform programmes and regional development plans. Only a few countries set quantitative or qualitative targets and indicators to assess the effectiveness of their policies. Several countries are strengthening cooperation between ministries, in particular education and employment, and administrative bodies at different levels. Policies should be comprehensive and combine different policy areas to address multidimensional challenges (for instance, education and training issues linked to welfare and employment). However, strategies that cover more than two areas are scarce.

With increasing decentralisation and autonomy, a broader range of stakeholders can take an active role in shaping VET, for instance in content, financing, recruitment of staff: notably the social partners, as well as teachers and trainers, learners and parents. Strong social dialogue, generally understood as key to develop and implement successful VET policies, however, still remains a challenge. Hence, cooperation needs to improve further. Several policies specifically aim at improving the modes of governance as well as public and private investment.

(c) **improve funding and financing mechanisms**

Implementing VET reforms requires adequate resources. As data available for the first time show, countries spend between 0.3 and 1.1 % of GDP on (pre)vocational programmes at secondary level. Generally, this is less than on general education. Facing budgetary constraints, countries seek ways to allocate and manage funds more efficiently, for instance through decentralised or performance-based funding or partnerships to pool and make best use of resources. Training funds, vouchers or individual learning accounts are initiatives used to raise additional private resources, i.e. from enterprises and individuals. As

individuals, companies and society as a whole yield material and non-material benefits from (vocational) education and training, beneficiaries should also contribute towards costs. This calls for policies aiming at balanced cost-sharing and developing cofinancing mechanisms. As stipulated in the Maastricht priorities, several countries also use support from EU funds, mainly the European Social Fund (ESF), to improve their VET systems. Countries should aim at making the best possible use of these funds.

Designing effective and efficient funding policies requires a clear understanding of the benefits that education, training and skills can bring to individuals, enterprises, and society as a whole. Research shows that education and training contributes to economic growth, competitiveness and social cohesion. Thus, there is not necessarily a trade-off between education and training, and social and economic policies. Further awareness raising and research is needed to make these benefits visible to all actors.

(d) support evidence-based policy-making

For VET policy-makers to devise appropriate and effective strategies and measures, they need solid empiric and research evidence as well as reliable statistical data to support and underpin their decisions. Availability and quality of VET statistics have improved but little is known, for instance, on participation in initial and continuing VET and subsequent career pathways, costs and benefits as well as teachers and trainers. To improve scope, coverage and comparability of data, the European statistical infrastructure needs strengthening.

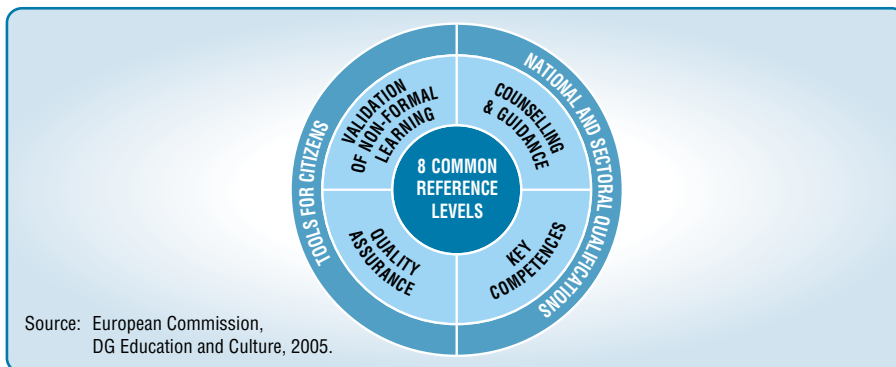
1.5. Improving quality, transparency and recognition

The joint effort to develop a European qualifications framework (EQF) which is based on learning outcomes and which will make it easier to compare and transfer qualifications in different sectors across Europe, has obviously had a significant impact on national VET policies. Increasingly, countries are using the common principles and tools developed at European level to support their policy development.

Besides the few Member States with established national qualifications frameworks (NQFs), most countries have either embarked on developing an NQF or intend to do so to make their systems more transparent and flexible,

and improve access and progression. Very few expressed doubts on the need for NQFs. As NQFs rely on trust in the value of learning outcomes, increasing emphasis is being placed on what learners know and/or are able to do. As a precondition for trust in learning outcomes, quality assurance has become one of the main issues in most countries. Work on NQFs and quality frequently goes hand in hand. The focus on learning outcomes and competences also leads to increasing emphasis on developing standards for VET. Qualification registers, mandatory quality assurance plans and provider accreditation are becoming ever more important. Several countries recommend that their VET establishments apply the common quality assurance framework (CQAF) guidelines. To support progress in quality assurance, it is necessary to promote a quality culture and develop relevant indicators.

Figure 2. **Prerequisite for mutual trust**



As countries are making VET more flexible and inclusive, guidance and validation of non-formal and informal learning are also moving to the fore, in particular in national lifelong learning strategies. To become more aware of their own skills and competences and to be able to build on them and select suitable learning and career pathways, citizens need more and well targeted assistance. More and more countries are setting up national validation systems, applying, in particular, the portfolio approach. Validation is also becoming increasingly important for companies and sectors. Progress in setting up lifelong guidance systems to make high quality services accessible to all citizens varies. However, most countries are addressing priorities outlined in the Council resolution. Many focus on making their guidance systems more transparent and coherent and providing better services, for

instance by setting up electronic forums, establishing new guidance units and providing professional development to staff. None the less, work still needs to be done to implement fully-integrated career guidance systems to meet demand.

1.6. Meeting the skill needs of individuals and the labour market

1.6.1. Those who drive change and promote learning

With increasing decentralisation and blurring boundaries between initial and continuing VET, teachers' and trainers' responsibilities are expanding. They also play a key role in shaping policy and implementing reforms. Their skills and competences are becoming subject to scrutiny, as more attention is paid to learning outcomes. To assure quality, countries are raising entry requirements and devising standards for VET teachers and/or trainer registers. However, methodology for VET learning, in particular for adults, seems neglected. Teacher shortage is one of the main concerns. In several countries retaining and recruiting VET teachers and trainers is difficult, as esteem is low and career opportunities are limited. Geographical and job mobility opportunities, which might help to alleviate the situation, are scarce. Data on the specific situation and conditions of VET teachers and trainers, in particular those working in enterprises and continuing vocational education and training (CVET), are lacking. Several countries have set the policy framework for professional development, including training rights and duties, financial incentives or career advancement opportunities. Nevertheless, ensuring equal access is still a challenge. Only a few countries adopt more strategic approaches with increased investment and cooperation of national and regional authorities and other players.

1.6.2. Identifying and providing the skills needed

The patterns of current and future skill shortages suggest a European-wide problem. However, there is no common tool at European level to measure and anticipate shortage or surplus occupations as well as types and levels of education required. Only a few European countries have a long tradition in forecasting skill and competence needs. Others have recently introduced such initiatives, but approaches and methods differ widely. This calls for common actions, such as pan-European forecasts and enterprise surveys to

improve information on skill shortages and future skill needs. Cedefop's network 'Skillsnet' has embarked on developing a European skill needs forecasting system to devise a common approach to complement national and sectoral initiatives.

Current employment and demographic trends generate labour shortages in both highly skill-intensive and elementary occupations. However, technological change and innovation raises demand for higher-skilled people across all occupations. Apart from technical, language or ICT skills, social and personal skills are increasingly required on the labour market. None the less, only some countries reported on their initiatives to develop key competences in VET, mainly entrepreneurship. Workplace learning is key for skills and competence development. Of European employees, 71 % think they acquire new knowledge at work. It also seems particularly suitable for small and medium-sized enterprises (SMEs). Several countries are reintroducing or expanding apprenticeship or are developing it further into new forms of alternating learning, for adults and the unemployed as well. Internships and other company-based learning models in cooperation with industry are also used in higher education. Workplace learning therefore supports the pursuit of both excellence and inclusion.

As low-skilled people have fewer opportunities to participate in further learning, upskilling and reducing the number of school drop-outs require targeted measures. Learners from migrant backgrounds are more likely than their native peers to leave education and training without the necessary skills for successful transition into the labour market. This calls for reinforced actions to ensure adequate (language) support. Shrinking younger age cohorts requires developing the skills and competences of older workers to improve their employability and counteract their discrimination on the labour market, which many experience as early as from 40 to 45. To avoid wasting people's talents and ensure skilled migrants are adequately integrated into the labour market, it is necessary to validate and recognise their skills. Countries have stepped up their measures to improve retention rates in education and training and increase access to training for (disadvantaged) adults. They range from basic skills provision to specific CVET programmes or targeted training, often linked to guidance and counselling and skills validation. The general trend is to include these measures in (C)VET reforms, lifelong learning strategies or national reform programmes for growth and jobs. VET policies should be designed to tap and develop people's potential. To this end, it is essential to have a clearer understanding of the target groups and their specific needs.

1.6.3. Learning and working by leaving

Mobility in VET can be a powerful tool to develop key competences, employability, intercultural understanding and future labour market mobility. However, few countries have reported on progress in the past two years and national mobility policies are scarce. Still, fewer than 1 % of young people in VET benefit from placements abroad, mainly through the Leonardo da Vinci programme. Overall intra-EU labour market mobility is also low and likely to remain at around 3 %. Regional mobility tends to be higher (18 %). Some new Member States may face a brain drain, which could affect their national economies. It is mainly job and income prospects that encourage citizens to move abroad. Generally, personal ties and welfare State models are more decisive. Young and well educated people tend to be more mobile than others, but migrants with high educational attainment from outside the EU are less likely to get adequate jobs.

To support mobility for learning and working, a clearer view of the socioeconomic impact on the places people leave or go to and the incentives, barriers and long-term effects on their personal and professional lives is needed. VET establishments, specifically SMEs, need more assistance. More emphasis on quality assurance, foreign language learning in VET and the guidelines of the European quality charter for mobility (Council of the European Union, 2006) are among the ingredients for success. Cross-border partnerships, Europass instruments and in the future also EQF and ECVET, can help make learning outcomes visible, portable and recognised. Countries seem aware of Europass's potential for guidance and counselling but tend to underrate the value of certificate supplements for cross-border mobility.

1.7. Concluding and looking ahead

Education and training has been recognised as a powerful policy lever to make a more competitive Europe with more and better jobs and greater social cohesion a reality. To support this endeavour, comprehensive lifelong strategies were to be in place by 2006, but not all countries managed to do so. Five benchmarks to be achieved at European level until 2010 ought to help countries compare development and progress in modernising education and training. Three of these are particularly relevant for VET policies:

- (a) reduce the share of early school-leavers (18 to 24 years) to 10 %;
- (b) ensure a minimum of 85 % of 20 to 24 year olds have completed at least upper-secondary education;

- (c) ensure at least 12.5 % of adults (25 to 64 years) participate in lifelong learning.

While achieving the benchmark for youth attainment seems realistic (77.8 % by 2006), the benchmark for early school-leavers is out of reach (2006: 15.3 %). With only 9.6 % adults participating in lifelong learning in 2006, there is still a long way to go.

Since training and skills are beneficial to society, economic growth and competitiveness, VET plays a key role in contributing to the Lisbon agenda. As youth attainment proves, it can contribute substantially to achieving the benchmarks. VET is an important route to excellence and inclusion, as it caters for young people who strive for tertiary level qualifications as well as those who otherwise risk leaving education and training.

1.7.1. What has worked

- The Copenhagen process with its comprehensive European VET agenda and common objectives has helped compare VET policies, identify common priorities and agree on common principles and measure progress.
- All are working closer than ever towards a shared European VET policy agenda, which is inspiring policies, reforms, strategic approaches and common European tools for VET. Different stakeholders, in particular the social partners, have an active role and contribute substantially to steering and governing VET.
- Countries continue to modernise their VET systems to raise the image, attractiveness, quality, relevance and efficiency of VET. The policy areas where countries themselves consider they have progressed considerably are:
 - national qualifications frameworks;
 - validation of non-formal and informal learning;
 - quality assurance;
 - integrating learning with working;
 - improving access to VET;
 - guidance and counselling.

Though the stage of development varies, progress areas are clearly in line with several of the Maastricht priorities. Countries themselves underline the necessity to consolidate the work initiated so far.

1.7.2. What has proved a challenge

- The benefits of VET for society and economic growth, company performance and individual employability are not yet as visible to all actors as they should be.
- Finding the right balance between central policy-making and monitoring on the one hand, and decentralised decision-making and autonomy of education providers on the other.
- Ensuring VET systems are equitable and efficient. In several countries resources for VET are very limited or not well targeted.
- Despite substantial progress, the vision of a Europe with highly-skilled people, a flexible and adaptable workforce with a high degree of social inclusion, is far from reality.

1.7.3. Stay focused

- Continue to:
 - adequately invest in VET;
 - improve lifelong learning opportunities for those at risk;
 - support teacher and trainer development;
 - coordinate with other policy areas;
- There is a need to change mindsets. If education and training does not provide the right skills for both younger and older generations in time, skill shortages will continue to occur or even intensify. The Maastricht priorities to modernise VET remain valid. Hence, it is important to maintain the focus.
- The challenges VET faces require systemic policy changes, not ad hoc policy tweaking. To understand progress and inform on policy impact, research that systematically accompanies and evaluates reforms is required.
- Anticipating skill needs, ensuring the quality of skills available, providing sufficient continuing training and validating skills acquired through non-formal and informal learning are a *conditio sine qua non* to cope with demographic decline and ever changing skill requirements.
- ‘A move towards a European area of vocational education has become evident’, the Finnish Presidency concluded in preparing the Helsinki communiqué (European Commission, 2006). ‘To make it happen, implementing common European tools and reaching out to all involved in VET is crucial’.

CHAPTER 2

Lisbon-Copenhagen-Maastricht-Helsinki: looking back to see ahead

2.1. How to become world-class

The challenges European countries are facing on their way towards knowledge-based societies by 2010 are manifold: social cohesion, demographic development, sectoral change, emerging new technologies and globalised production and distribution processes. Worldwide competition is increasing, also in terms of the skills of populations and the labour force.

The Lisbon European Council conclusions 2000 identified education and training as one of the policy levers to address Europe's challenges, as it brings clear benefits to society and the economy. It became a priority area to foster growth and competitiveness, together with innovation, research and development after the Lisbon strategy's relaunch in 2005. 'Investing more in human capital through better education and skills' and 'improving the adaptability of workers' are among the priorities in the integrated guidelines for partnership for growth and jobs (European Commission, 2005c) between the European Commission and Member States. The European employment strategy, a key component of the streamlined approach, highlights the fundamental role of VET in achieving a knowledge-based economy. The 2006 Spring European Council reiterated that education and training is crucial for the EU's long-term competitiveness and social cohesion.

The Barcelona objectives of 2002 and the Education and training 2010 work programme set the roadmap for Europe's aim to become a world reference for education and training through easier access for all to high quality systems which open up to the wider world ⁽¹⁾. Coherent comprehensive lifelong learning strategies were to be in place by 2006, an objective that not all countries managed to achieve. The Joint interim report (Council of the European Union, 2006a) on progress in implementing the work programme called upon Member States to ensure education and training systems are both equitable and efficient.

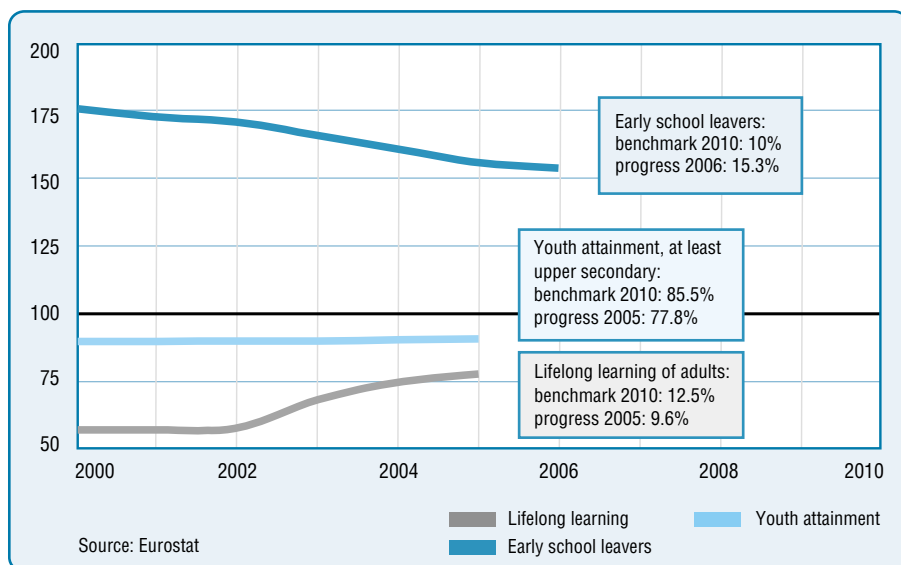
⁽¹⁾ See Table 1 of annex.

In 2003 (Council of the European Union, 2003), the European Council set five benchmarks for education and training to be reached by the EU as a whole by 2010. Three of these are particularly relevant for VET policies:

- (a) countries should reduce the share of early school-leavers (aged 18 to 24) to 10 %;
- (b) a minimum of 85 % of young people (aged 20 to 24) should have completed at least upper-secondary education;
- (c) at least 12.5 % of adults (aged 25 to 64) should participate in lifelong learning.

Which countries had approached these benchmarks to which extent by 2006, four years before the ‘deadline’? Figure 3 and Table 2 in annex present the current state of affairs for the EU as a whole.

Figure 3. **Achievement of benchmarks for education and training in EU-27, 2000-06 (in % of target 2010).**



Early school-leavers: the benchmark will probably not be achieved: in 2006, 15.3 % in EU-27. Until 2006, the benchmark for youth attainment had largely been approached (77.8 %) despite some stagnation. Lifelong learning of adults: there is still a long way to go (the steep increase after 2002 was caused by a break in the time series), 2006: 9.6 %.

2.2. VET – A key to the future

To support Europe's quest for competitiveness countries committed themselves to increasing their cooperation in VET in the Copenhagen declaration. Their aim was to make Europe's VET systems more transparent, ensure their quality and strengthen their European dimension. The declaration also called for better guidance and counselling and more opportunities for people to get their competences and qualifications recognised. The so-called Copenhagen process has helped to compare VET policies, identify common priorities and agree on common principles and measures.

Biennial reviews and updates are part of the process. The first review in 2004 led to the Maastricht communiqué which reaffirmed VET's key role in labour market and social integration. For the first time, Ministers of 32 countries, the European social partners and the Commission also set priorities for action at national level to guide VET reform. The conclusions of

Figure 4. **From Lisbon to Helsinki**

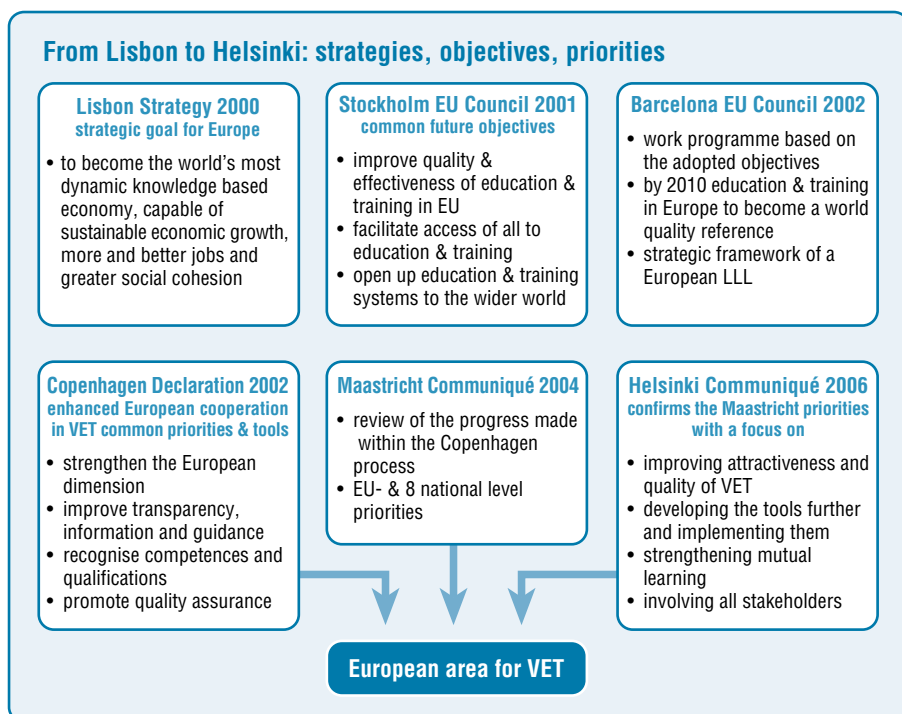
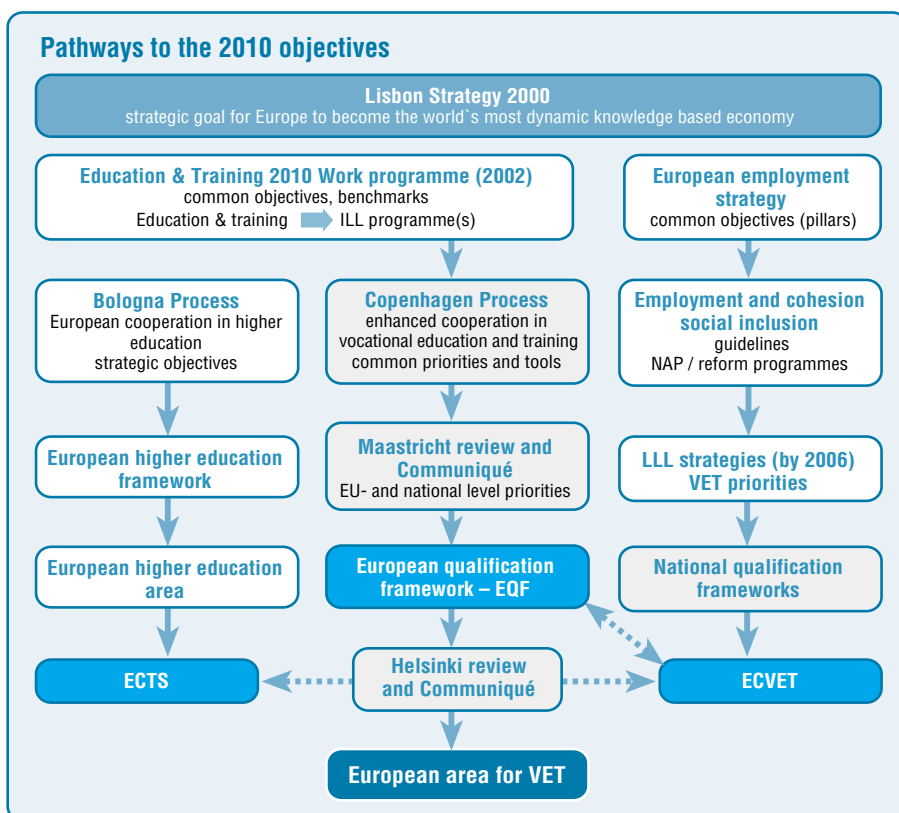


Figure 5. **Pathways to 2010**

a study assessing the contribution of VET to the Lisbon goal (Leney et al., 2004) formed the basis for these priorities. Countries agreed to implement common European tools (see below), develop teachers' and trainers' competences and improve investment in VET. They also decided to make VET more flexible, ensure it responds to new workplace requirements and meets the needs of those at risk of being marginalised. Modernising VET to reach these goals is a request echoed in the employment guidelines 2005-08. VET is thus at the heart of interrelated policies.

The Helsinki communiqué, the result of the second progress review, confirms the priorities set in Maastricht in 2004. Its specific focus is on improving VET's attractiveness and quality. It also underlines the need for good governance. Work on developing and implementing common tools for more transparency and recognition of vocational qualifications needs to

continue. To contribute to both, Europe's economic growth and its social objectives, VET needs to become more attractive to young and adult learners, employers, decision-makers and society in general. The communiqué advocates more systematic mutual learning and more and better VET statistics to provide evidence for policy-making.

'A move towards a European area of vocational education and training (VET)', is what the Finnish Presidency concluded from a survey among Directors-General for VET to evaluate the significance of the Copenhagen process in preparing the Helsinki communiqué. To make it happen, all stakeholders need to be on board.

Figure 6. Priorities for cooperation in vocational education and training

Copenhagen – Maastricht – Helsinki	
Copenhagen Declaration 2002	<ul style="list-style-type: none"> • Strengthen the European dimension • Improve transparency, information & guidance systems • Recognise competences & qualifications • Promote quality assurance
Maastricht Communiqué 2004: national & EU-level priorities	<ul style="list-style-type: none"> • Put Copenhagen tools into practice (quality assurance, validation, guidance & counselling; Europass) • Improve public/private investments, training incentives, use of EU funds • Address the needs of groups at risk • Develop flexible & individualised pathways, progression • Strengthen VET planning, partnerships, identify skill needs • Develop pedagogical approaches & learning environments • Expand VET teachers' & trainers' competence development • EQF, ECVET; identify TT learning needs; improve VET statistics
Helsinki Communiqué 2006	<ul style="list-style-type: none"> • Improve image, status, attractiveness of VET; good governance • Develop further, test & implement common tools by 2010 (EQF, ECVET, CQAF/ENQA-VET, Europass) • More systematic mutual learning; more & better VET statistics • Take all stakeholders on board to put Copenhagen into place

Monitoring and reporting on progress require closer cooperation among all stakeholders. The Copenhagen declaration and the Maastricht communiqué granted Cedefop a supporting role in the Copenhagen process. Cedefop has contributed to designing Europass and the European qualifications framework (EQF) and is involved in work on a European credit system for VET (ECVET). Its expert advice has helped shape European principles for

guidance and counselling, validation of non-formal and informal learning and quality assurance. Clusters, peer learning activities, networks and working groups receive technical support from Cedefop. For the 2004 review, Cedefop produced a synthesis of progress and challenges (Tessaring and Wannan, 2004). Similarly, it prepared an overview of developments for the second review in 2006. Cedefop's specific role in monitoring and analysing progress was reaffirmed and expanded in the Helsinki communiqué endorsed in December 2006 under the Finnish presidency.

This report constitutes Cedefop's contribution to monitoring progress in achieving the Copenhagen-Maastricht objectives. It confirms that cooperation to a shared European VET policy agenda, which is inspiring policies, reforms, strategic approaches and common European tools for VET, is closer than ever.

The report draws mainly on contributions received from Directors-General for VET in Member States ⁽²⁾ and associated countries in response to a Cedefop survey in 2006 (see Chapter 4). Cedefop also drew on other stock-taking activities and studies carried out to support the Copenhagen process. To identify future challenges, underpin questionnaire analysis and provide complementary information, the report also includes findings from contributions to Cedefop's forthcoming fourth research report and studies carried out in its regular research and reporting activities. It also draws on relevant statistical data, surveys and research from a wide range of European and international sources (for instance, OECD), contributions from partner organisations in non-European countries and European Commission documents related to education and training, employment and social policies and the Lisbon strategy.

⁽²⁾ At this stage Bulgaria and Romania were still candidate countries.

Challenges

Demographic downturn, structural change and globalisation are among the key drivers for change in our societies. They also affect future labour markets, employment and skill needs. Thus, education and training becomes key to prepare younger and older people to cope with the manifold challenges Europe is facing. A particular challenge is to upskill Europeans. Internationally seen, the share of low-skilled people in Europe is too high. This chapter provides some data on competitiveness in Europe's economic, labour market and skill performance.

3.1. How competitive is Europe today?

The Lisbon goal to increase Europe's competitiveness requires improvement in various policy areas. Advanced education systems, a highly-skilled labour force, human and social capital as well as social and legal infrastructure form important prerequisites. There are numerous indicators to measure performance of countries in different areas. Examples are: economic and employment performance; social cohesion; education, training and human capital; efficiency of public services and infrastructure. Given their different systems, cultures and stages of development, countries vary in their performance. Thus, comparing the EU as a whole with single non-EU countries such as Australia, Canada, Japan or the USA, gives a biased picture.

Tables 3a and b in annex provide selected indicators of international competitiveness with a focus on employment, education and training, and science and technology ⁽³⁾. They show that several European countries, particularly the Nordic countries, score rather high on the competitiveness scale, alongside Australia, Canada, Japan and the USA. This is particularly true for educational attainment, expenditure on upper secondary education, student-teacher ratios and student performance.

⁽³⁾ Based on contribution from Tessaring in Cedefop (forthcoming) fourth research report.

3.2. Demographic change – not just a threat

Almost all industrialised countries have declining birth rates and increasing proportions of older people (see Table 4 in annex). The average age of Europeans will rise considerably according to UN population projections: from 39 years in 2005 to 47 in 2050 (Table 1 below). The share of younger age cohorts (aged between 15 and 24) is expected to drop from 13.9 % to 10.2 % in Europe, and the share of older people (aged 65 and more) will increase from 15.9 % to 27.6 %. Subsequently, a change in the old-age dependency ratio is anticipated: 100 people of working age will have to support 50 people older than 65, compared to 23 in 2005. While these changes are most pronounced in Europe, similar developments are projected for non-EU countries, in particular Canada, Japan and Korea. In Africa ageing populations are rather modest. Asia and Latin America, which had relatively higher shares of younger and lower shares of older people at the outset, will need to adapt to a much faster demographic change than Europe ⁽⁴⁾.

Table 1. **Population prospects by world regions 2005-50**

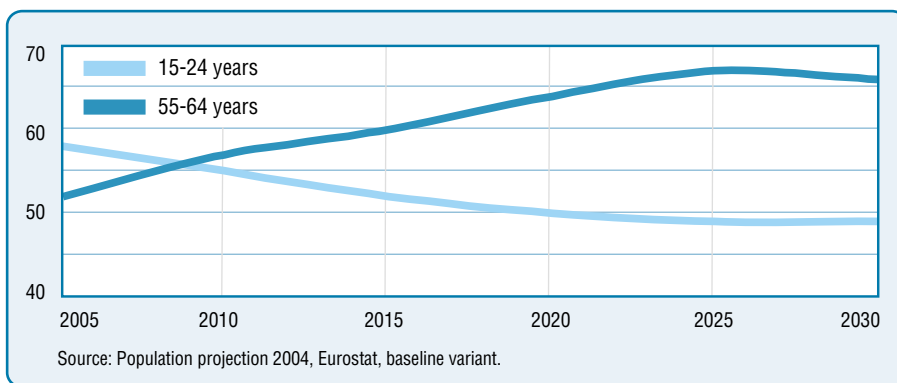
Region	Median age (years)		Population aged 65 and more (%)		Population aged 15-24 (%)		Old-age dependency ratio	
	2005	2050	2005	2050	2005	2050	2005	2050
Africa	18.9	27.4	3.4	6.7	20.8	18.1	6	10
Asia	27.7	39.9	6.4	17.5	18.2	12.5	10	27
Europe	39.0	47.1	15.9	27.6	13.9	10.2	23	48
Latin America	25.9	39.9	6.1	18.4	18.8	12.6	10	29
Northern America	36.3	41.5	12.4	21.1	14.2	12.0	18	34

Source: *Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. World population prospects: the 2004 revision and world urbanization prospects: the 2003 revision.* <http://eso.un.org> [cited 13.12.06].

⁽⁴⁾ The difference in the shares of older or younger people between 2005 and 2050 (in percentage points) is similar to that in Europe. For details by individual country, see annex.

According to the 2004 Eurostat population projection (baseline variant), the number of young people aged 15 to 24 in EU-25 will fall below those aged 55 to 64 by 2009 (Figure 7 below). By 2030, the number of younger people (15 to 24 years) will fall by 9 million (by 11 million for EU-27).

Figure 7. **Population in EU-25 aged 15 to 24 and 55 to 64, 2005-30 (in million)**



If participation rates do not change, the number of younger people in VET at upper, post-secondary and tertiary levels (ISCED 3-5) will decrease by more than two million in this period. In addition, extended education and training will delay the entry of young people into the labour market. These changes will also have implications on the number and type of training places as well as teachers and trainers needed.

This development will change the labour market profoundly. It will become much more dependent on older workers, migrants and women returning to work. If education and training does not provide in-time the right skills both for younger and older generations, skill shortages will continue to occur or even be reinforced. Prosperous economic sectors, for instance in the field of new technologies, are likely to suffer particularly from a shortage of young talents.

Policies should be designed to serve this change and provide more education and training opportunities for these target groups. Similarly, ensuring that shrinking labour markets can meet skill needs of employers will require additional policy attention. Lower numbers of young people in education and training should release the capital needed for adequate policy responses to harness the human capital of all the working age population.

3.2.1. Conclusions

Anticipating skill needs, ensuring the quality of skills available, providing sufficient continuing training and validating skills acquired through non-formal and informal learning thus become a *conditio sine qua non* to cope with demographic decline and ever changing skill requirements.

Demographic decline should not only be seen as a threat. It is also an opportunity to improve the quality of education and training. Budget relief could be used for improved early childhood education, better buildings and technological equipment, smaller classes and student-teacher ratios, and could provide more scope for the training of disadvantaged or other specific target groups. Rather than ad hoc policy tweaking, however, the demographic development and its implications on education and training and the labour market will require systemic changes.

3.3. Sectoral and occupational change – risks and opportunities

Sectoral change in the EU-27 displays a decrease in jobs in agriculture and industry by 2.5 million each in the period 1995-2005, while jobs in services increased by almost 22 million (Table 2 below). In 2005, more than two thirds of all jobs were in the services sector.

Table 2. **Employment change 1995-2005 and share 2005 by economic sector, EU-27**

Sector	Employment change 1995-2005 ^(a)		Employment share 2005 ^(b)
	Million	%	
Services	+ 21.75	+ 17.3	68.8
Industry	– 2.46	– 4.4	25.1
Agriculture	– 2.54	– 16.5	6.0
Total employment	+ 16.97	+ 8.6	100.0

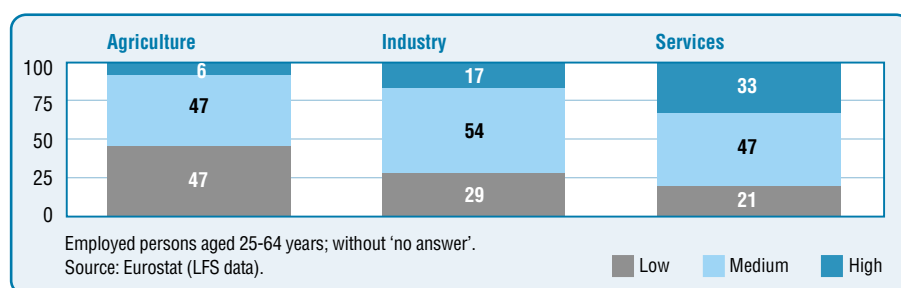
^(a) Employed persons aged 25-64 years; ^(b) without 'no answer'.

Source: Eurostat (LFS data).

Almost half the workers in agriculture were low-skilled, while in the services sector only every fifth had qualifications below upper secondary level. The skill structures depicted in Figure 8 below and development of the

sectors outlined above suggest that future changes will favour skilled and highly-skilled workers. Ongoing job losses for lower-skilled people can be anticipated.

Figure 8. **Sectoral qualification structures 2005, EU-27**



A similar picture appears when looking at occupational change. In the EU-15 ⁽⁵⁾, mostly skilled and higher skilled occupations (ISCO88 classification) increased in number over the past 11 years (Figure 9).

Box 1. International Standard Classification of Occupations

The International Standard Classification of Occupations (ISCO) groups jobs together mainly by similarity of skills required to fulfil the tasks and duties of the jobs. Two dimensions of the skill concept are used:

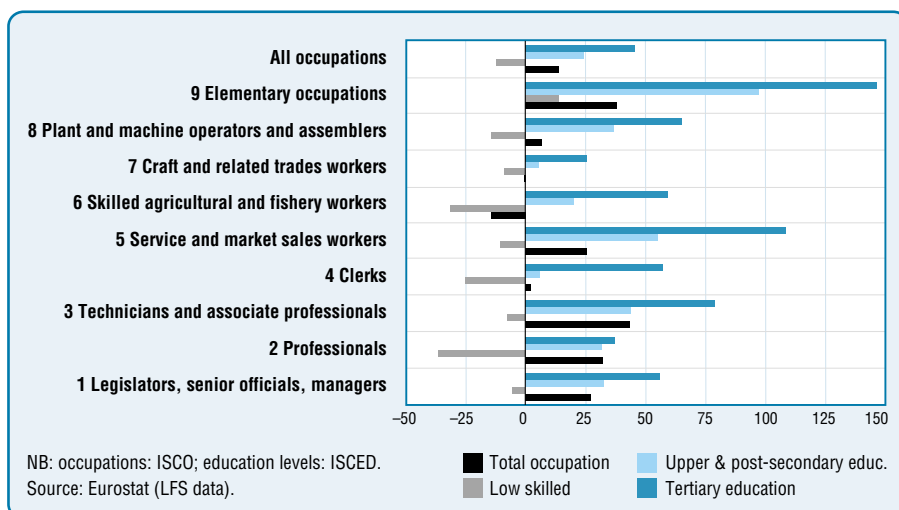
1. skill level, which is a function of the range and complexity of the tasks;
2. skill specialisation, which reflects the type of knowledge applied, tools and equipment used, materials worked on, or with, and the nature of the goods and services produced.

Source: ILO (www.ilo.org/public/english/bureau/stat/isco88/index.htm) [cit. 14.02.07].

These were in particular: technicians and associated occupations; professionals; legislators, senior officials and managers; and service workers. However, some skilled occupations such as plant/machine operators, clerks, craft workers and skilled agricultural workers increased only marginally or even decreased.

⁽⁵⁾ Combined statistical data by occupation and educational attainment for the period 1996 to 2006 are only available for the 'old' Member States (EU-15).

Figure 9. **Employment change 1996-2006 by occupation and highest level of education attained, EU-15, 1996 = 100**



It is worth noting that elementary occupations (ISCO 9) increased substantially, by 38 % between 1996 and 2006. This is the second highest increase among all occupational categories.

Box 2. **Elementary occupations (ISCO88, 9)**

Elementary occupations require the knowledge and experience to perform mostly simple and routine tasks and only limited personal initiative or judgement, for instance: selling goods in streets, door keeping, property watching, cleaning, and working as labourers in mining, agriculture, construction and manufacturing.

Source: ILO (www.ilo.org/public/English/bureau/stat/isco/isco88/publ4.htm) cited 14.2.2007.

But a closer look at the qualification structure reveals that even in ISCO 9, employment of skilled and highly-skilled workers increased whereas employment growth for low-skilled workers was much lower. To understand the reasons and cause of this phenomenon (for example, increasing skills requirements; 'overeducation'; employment of specific groups, as for instance second job holders, women, immigrants in jobs that do not relate to their qualifications or experience) further research is needed.

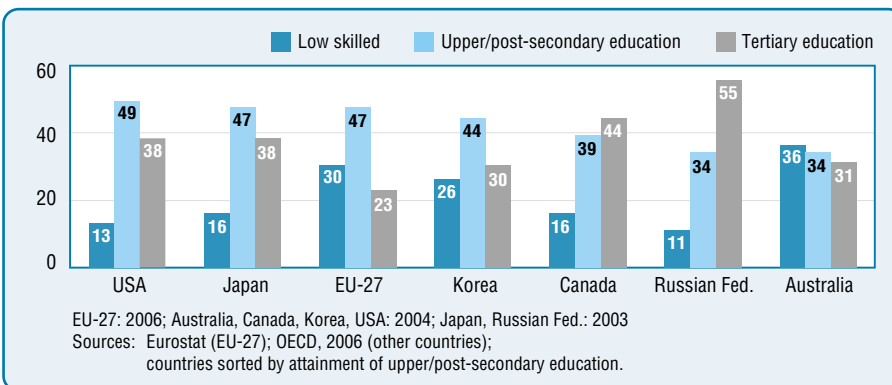
3.4. Skills and employment

3.4.1. Educational attainment of adults

In international comparison, the EU-27 score is relatively high at medium-skill levels (Figure 10 below): 47 % of the population of working age have upper and post-secondary level qualifications. However, the share of people with academic qualifications is lower than in the other countries compared.

As for the numbers of people with at least upper secondary education, European countries such as the Czech Republic, Denmark, Germany, Norway, Poland, Slovakia, the UK, and are among the top performers worldwide, together with the Canada, Japan, the Russian Federation and the USA.

Figure 10. **Educational attainment of the adult population (25-64 year olds) by highest level of education attained (%)**



Medium-skills at upper and post-secondary educational levels comprise skills acquired mostly in VET. These qualification levels are considered the minimum to actively participate in social and economic life. Particularly vocational skills acquired in upper and post-secondary education and training are necessary for small and medium-sized enterprises (SMEs) which employ most workers in the EU. The diffusion of new technologies (for instance ICTs, nano- ⁽⁶⁾ and biotechnology applications) will require adequately skilled workers also below academic levels (Abicht et al., 2006).

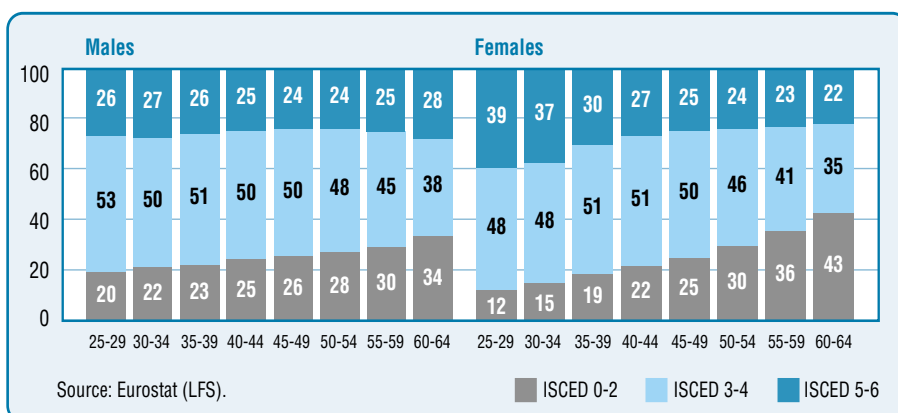
⁽⁶⁾ The authors conclude: 'Nanotechnology as production technology is currently in a transitional phase from basic research or applied science to production. At this stage of development only first attempts can be defined regarding the medium-term demand for personnel with intermediate-level qualifications' (p. 47).

Several research studies confirm this, most recently a study by Chardon and Estrade (2007) for France. They conclude that by 2015 France will require practitioners from a wide range of trades and qualifications. 'These trades will not be limited merely to those linked with the advent of a knowledge society [...]. In countries where the ageing of the population is gathering pace and individualism is making ever greater inroads, the human services sector in particular is a source of potential employment, as will be a whole series of more traditional jobs (butcher, plumber) in which there is already a skills shortage' (Chardon and Estrade, 2007). This seems also to be the case in China. The President of Beijing University, Mr Xu Zhihong (2007), states: 'As (Chinese) universities are rapidly expanding, we tend to overlook which professions are mainly in demand. At present, for example, we need more highly qualified skilled workers and experienced technicians'.

3.4.2. Challenge: low-skilled people

Policy initiatives to increase participation and retention in education and training in the past two or three decades have paid off in so far as younger age cohorts have achieved higher education levels. As a result, European skills and labour markets are characterised by a 'heritage' of low-skilled mainly among older people, and considerable numbers of younger people with higher skill levels. This is particularly true for women: among people with higher education qualifications they have outnumbered men, and their share among low-skilled workers is significantly lower (Figure 11 below).

Figure 11. **Employment by highest level of education attained, gender and age, 2006, EU-27 (%)**



The number and share of low-skilled people of working age (25 to 64 years) in Europe (EU-27), although decreasing, is high. In 2006, almost 80 million people of working age (i.e. as many as the inhabitants of Ireland, France, Austria and the Baltic States together), of which 45 million were in employment, had a qualification below upper secondary level. They represent 30 % of the working age population and 24 % of all employed people (Table 3 below).

Table 3. **Low-skilled ^(a) adults 2000 and 2006 in working age population ^(b) and employment, EU-27**

Year	Population (millions)	Population (%)	Employed (millions)	Employed (%)
<i>Total (aged 25-64)</i>				
2000	89.3	35.7	48.9	28.5
2006	79.7	30.1	45.1	24.0
<i>Younger people (aged 25-49)</i>				
2000	51.0	29.8	33.5	25.3
2006	44.6	25.2	29.9	21.4
<i>Older people (aged 50-64)</i>				
2000	38.3	48.4	15.5	39.2
2006	35.1	39.9	15.2	31.4

(^a) Educational attainment: ISCED 0-2 and 3C short; without 'no answer'; (^b) age 25-64 years.
Source: Eurostat (LFS), 2006 second quarter.

EU countries with a significant share of low-skilled people of working age are (2006): Malta (72.9 %), Portugal (72.4 %), Spain (50.8 %), Italy (48.9 %) and Greece (41.3 %). Below, or equal with, the share of low-skilled populations of the USA (16 %) are: the Czech Republic (9.7 %), Slovakia (11.3 %), Lithuania (12.2 %), Estonia (12.3 %), Poland (14.3 %), Sweden (16.0 %), Latvia (16.1 %) and Germany (16.4 %).

3.4.3. Employment and unemployment

The relaunched Lisbon strategy had called for an increase in the employment rate, in particular of the least qualified, and the youngest and oldest members of the workforce (guideline 18).

However, there is well-known bias in favour of skilled and higher skilled people (Table 4 below): employment rates are considerably higher, and

unemployment rates lower for skilled people. The ‘gap’ in employment rates between the highest and lowest qualifications (2006) is 18 percentage points for men and 37 points for women. Unemployment rates have similar ranges.

Table 4. Employment and unemployment rates ^(a) 2006 by gender and highest level of education attained, EU-27 (%)

Level of educational attainment	Men	Women	Total
<i>Employment rate</i>			
Low	69.9	44.7	56.6
Medium	80.2	66.7	73.6
High	88.0	81.3	84.6
Total	79.0	62.5	70.7
<i>Unemployment rate</i>			
Low	8.9	11.5	10.0
Medium	6.7	7.9	7.2
High	3.7	4.5	4.1
Total	6.5	7.8	7.1

^(a) People aged 25-64 years.
Source: Eurostat (LFS).

Employment of low-skilled people declined by 9 % between 1995 and 2006 in EU-15, whereas the employment of medium (+31 %) and higher-skilled people (+58 %) increased considerably (Table 5 below). Job gains for women with medium or higher skills have been much higher than for men, equally job losses for low-skilled women. However, many of these jobs were part-time jobs.

Table 5. **Employment change 1995-2006 by educational attainment ^(a) and gender, EU-15**

Level of educational attainment	Men	Women	Total	Men	Women	Total
	Change (million people)			Change in %		
Low	– 2.39	– 1.40	– 3.79	– 9.1	– 7.7	– 8.6
Medium	+ 7.17	+ 8.65	+ 15.82	+ 24.0	+ 41.8	+ 31.2
High	+ 6.70	+ 8.98	+ 15.68	+ 41.9	+ 79.7	+ 57.5
Total	+ 11.48	+ 16.23	+ 32.40	+ 15.9	+ 32.4	+ 22.7

^(a) Without people with unknown educational attainment.
Source: Eurostat (LFS).

3.4.4. Conclusions

The link between education and training levels and employment rates has a notable impact on training requirements, in particular in the service sectors and those occupations where there is a shortage of skilled labour. An education and training strategy has to take this into account and to train predominantly low-skilled young and old people to fill these positions (*Centre d'analyse stratégique*, 2007). Similarly, tighter labour markets caused by demographic decline have a considerable impact on education and training. They require higher participation of a wider range of groups and a more accurate matching of skills demand and human capital supply. Information on future occupational skill requirements will become ever more important for VET policy-makers to revise curricula and provide training places and staff accordingly. The time lag of five to 10 years between identification of a change in skill needs and provision of new skills (first adequately trained cohort entering the labour market) must become shorter. The emerging European labour market also requires comparable and consistent anticipation methods across Member States to meet future labour market demands and prevent unemployment ⁽⁷⁾.

⁽⁷⁾ See more on this issue in Section 6.2.

CHAPTER 4

Lisbon-Copenhagen-Maastricht-Helsinki: taking stock of progress at national level – Setting the framework

Given the economic and social developments and challenges Europe faces, it is crucial to ensure VET fulfils its role as a major pillar of lifelong learning and contributes effectively to the Education and training 2010 work programme and the Lisbon agenda. While some of the education and training benchmarks (see Figure 1) are also relevant to VET, its complexity and the nature of the commonly agreed priorities require more comprehensive information to be able to evaluate progress.

To take stock, Cedefop undertook its own national surveys (see Chapter 2) and used findings of other stock-taking activities and studies carried out to support the Copenhagen process. Countries were asked to: highlight up to five policy areas where they had progressed since Copenhagen; explain how they ensured close collaboration between the different policy areas related to VET, for instance economic, social, employment and youth policies. Another set of questions was linked to Europass, EQF and countries' expenditure on education and training. The main section of the questionnaire focused on the state-of-play in addressing the Maastricht priorities. To underpin the analysis and complement the information, various data from other Cedefop activities, different EU and international sources were used (see Chapter 2). The Maastricht priorities formed the basis for the data collection and the structure of this analysis. Examples from non-European countries are included to outline objectives, policies and challenges that EU countries share with their competitors.

4.1. Progress – in brief

Countries continue to modernise their VET systems to raise the image, attractiveness, quality, relevance and efficiency of VET. The policy areas where countries themselves consider they have progressed considerably are:

- national qualifications frameworks;
- validation of non-formal and informal learning;
- quality assurance;
- guidance and counselling;
- integrating learning with working;
- improving access to VET.

Though the stage of development varies, progress areas are clearly in line with several Maastricht priorities.

Within these areas a wide variety of policy-measures is evident. None the less, a trend towards more strategic policy approaches and packages to make VET more attractive and efficient is apparent. Countries usually aim at improving coherence and increasing access opportunities, differentiation and flexibility. New or amended qualification structures and national qualifications frameworks, educational or VET standards and quality assurance management are also parts of countries' strategies and reforms. These tend to focus on continuing VET (for instance in Denmark, Hungary, Romania) and on improved supply to meet people's needs. In some countries these measures are elements of their overall lifelong learning strategies, others develop VET-specific strategies (Bulgaria, Denmark, Estonia, Spain, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Austria, Slovakia, the United Kingdom). Some Member States design them in the framework of EU-national reform programmes (European Commission, 2005) and regional development plans (Italy, Cyprus, Latvia; see also Section 4.4). Only a few countries set quantitative or qualitative targets and have a clear view on indicators for success, which would help them assess the effectiveness of their policies.

However, various obstacles hamper countries' progress in modernising their VET systems. The analysis reveals common challenges which confirm the necessity to reach out to all actors. They need to be aware of the benefits and understand the importance of their own contributions to modernising VET.

Box 3. Strategic approaches for VET – selected country examples

Country	Policy/measure
Germany	Revising existing and devising new training profiles, making the system more supple: tiered training and modular final exam; flexible arrangements between schools and enterprises to create more training places; recognition of skills acquired in programmes for disadvantaged, and of fully school-based VET towards apprenticeship, access to end of apprenticeship exams; combining VET and general education qualifications; additional qualifications and progression into higher education for the higher skilled.
Italy	Reform of education and training as well as labour market programmes, focus on individualising pathways, learning outcomes, transparency and certification, portability, validation, innovation in teaching and learning.
Luxembourg	Coherent approach in line with lifelong learning strategy; main elements: progression, guidance, validation; partnership between State and industrial chambers.
Spain	Better access and more flexible pathways, national qualifications register and occupational standards.

Source: Cedefop, DGVET survey 2006.

Box 4. What hampers progress

<p>Overall challenges that countries face in their endeavour to modernise VET:</p> <ul style="list-style-type: none"> • finding the right balance between central policy-making and monitoring on one hand and decentralisation and autonomy of education providers on the other; • little awareness of the benefits of training, in particular among SMEs; • very limited or not well targeted resources for VET; • engaging stakeholders, although several, in particular the social partners, contribute substantially to steering and governing VET; • providing adequate (number of) training places and ensuring communication between VET establishments and enterprises; • communication with other education sectors. <p>Source: Cedefop, DGVET survey 2006.</p>

Some of the Maastricht priorities have achieved low scores on the progress list:

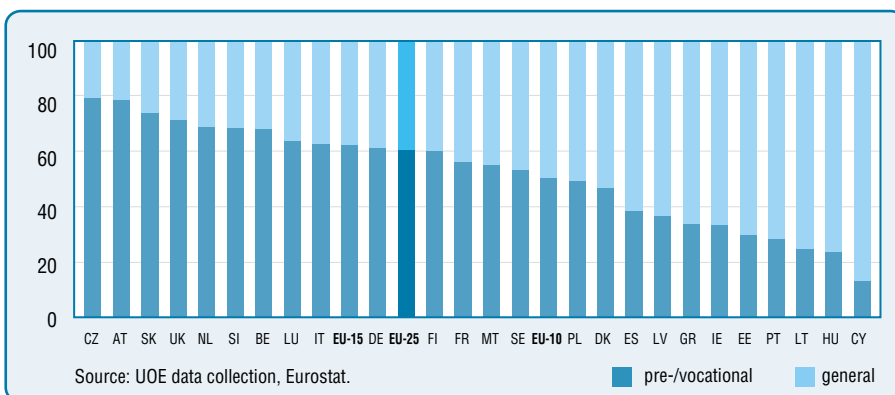
- ensuring progression from VET to higher education;
- learning-conducive environments;
- comprehensive implementation of Europass instruments and mobility issues (for instance certificate supplements or language learning).

These areas are, however, important to improve permeability and progression within education and training systems, as requested in the Maastricht communiqué. Parity of esteem with general education and mutual recognition of qualifications from both VET and general education were identified as major objectives. This aim implies equal access and progression through different and flexible pathways. The Maastricht communiqué therefore underlined the necessity to make VET more attractive.

4.2. Image matters

Attractiveness of VET is usually discussed in comparison with general/academic education. Country traditions, occupational career and social status are among the criteria that influence people's perceptions of different education and training options. The Helsinki ministerial meeting in December 2006 reaffirmed that VET is an important route for young people who strive for tertiary level qualifications and those who otherwise risk leaving education and training early. Citizens need to become more aware of its benefits.

Figure 12. **Students in general and (pre)vocational programmes as a percentage of all students at ISCED 3, 2004 (%)**



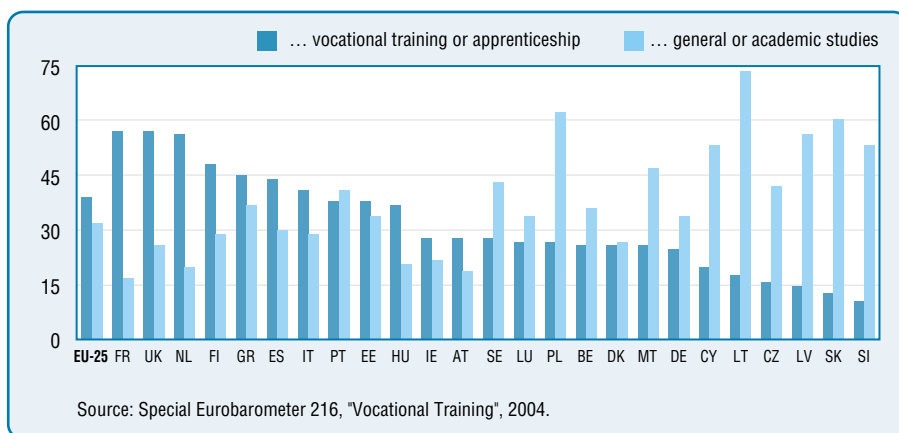
Enrolment rates of 2004 show that more than 60 % of learners at upper secondary level (ISCED 3) and 80 % of those at post secondary level are in VET. However, participation varies significantly between countries, from nearly 80 % in the Czech Republic to below 15 % in Cyprus.

As evident from Eurostat data and the Progress report (European Commission, 2006c), participation rates in VET have remained relatively stable, though they have been decreasing in the new Member States in favour of general and academic education. Despite the evidence that countries with strong VET systems have lower youth unemployment rates (Tessaring and Wannan, 2004), several countries are also facing high drop-out rates from their VET pathways.

4.2.1. How European citizens rate initial VET

A Eurobarometer survey ⁽⁸⁾ on vocational training in 2004 (European Commission, DGPC, 2005) revealed that more Europeans would recommend vocational training/apprenticeship after compulsory or secondary education: on average, 39 % would recommend VET against 32 % who would advise to take up general or academic studies. Generally, citizens in the old Member States are more in favour of VET (42 %) than those in EU-10 (25 %). The preference for VET is very pronounced in Finland, France, the Netherlands, and the United Kingdom.

Figure 13. **What citizens would recommend to a young person finishing compulsory or secondary education**



⁽⁸⁾ In these surveys, people are asked to react spontaneously to the questions and are not given any further explanations.

The bias towards VET or academic education cannot always be correlated with the country tradition (for example in Germany, Greece and Spain). Germany, where people favoured general/academic education despite its strong tradition and high enrolment rates in VET, is among several other countries (Austria, Belgium, the Czech Republic, Denmark, Hungary, Ireland, Luxembourg and Slovenia) where a high number of people (35 to 47 %) would tailor their advice to suit the individual.

Responses are shaped by geographical access to education and training, own educational background and employment status, though there is no information about other motives for people's recommendations, as for instance perceived labour market perspectives, career opportunities or salaries. Preference for VET/apprenticeship is higher in rural areas, among unemployed people, manual workers (45 %) and the self-employed (42 %). Higher education graduates' preference for general education/academic studies is less distinct than one might expect (35 % versus 33 %).

4.2.2. How European citizens rate continuing training

According to the European Commission report on progress towards the Lisbon objectives (European Commission, 2006c), many people are unaware of new skills that might be necessary for their work (26 % of EU-25 citizens). 20 % believe they do not have time for training, 18 % feel appropriate training is not on offer and 17 % think employers do not make the necessary time or funding available.

For almost two in five European citizens, financial support would be an incentive to undertake more training, but on average it matters more in the new Member States (50 %) than in the old ones (37 %). Also time made available during working hours by employers (30 %) and recognition of certified skills and qualifications (24 %) could encourage them to train. Tax relief schemes appear to be a key incentive for the self-employed (30 %). Continuing training is becoming less popular with age. Of those older than 55, 33 % do not know what would encourage them to undertake more training.

While only 15 % of EU citizens would consider guidance an incentive to train more, the Eurobarometer findings suggest a positive relationship between guidance provision and participation in training, mainly in the work context. People who receive guidance have a more positive attitude towards training, which also leads to higher benefits. This confirms the importance of guidance as an integral element in a lifelong learning policy package.

4.2.3. How non-EU countries rate initial VET

If Europe wants to improve its competitiveness and aims at becoming a world reference for quality in education and training, it seems worth looking at non-European countries to understand the status they assign to VET and their respective policies.

As in several European countries, VET is not highly esteemed in several non-European countries. In Korea, for instance, the image of VET has undergone a drastic change since the 1980s. The focus now is on general education, while VET is considered second rate. It caters mainly for students who are excluded from general education helping them integrate into society. VET graduates are at a disadvantage in terms of promotion, wages, and equal opportunities at the workplace. This leads to even lower social recognition and a general reluctance among students to go into VET (Krivet, 2006).

The reverse trend can be observed in Australia. In the past, VET was generally perceived as the 'poor cousin' of higher education. While this view still exists to some extent, the image of VET has improved in recent years (NCVER, 2006).

Box 5. Raising the image of VET in Australia

Initiatives that have contributed to raising the image of VET:

- VET institutions increasingly offer higher level qualifications;
- skills shortages in the trades and other technology-based occupations leading to higher demand for VET qualified personnel and higher wages being offered by employers to retain them;
- VET institutions put more emphasis on career guidance, which leads to increased participation in VET pathways;
- VET pathways are increasingly being recognised by the school system – particularly in schools that now offer 'VET-in-schools' programmes;
- opportunities for transition between VET and higher education have increased (interestingly, transition numbers from higher education to VET are about three times those from VET to higher education);
- clear 'branding' of VET programmes to promote the training they offer and improve the public image of VET.

Source: Country report, NCVER, 2006.

In the USA, however, broadening the scope of VET to prepare for post-secondary level and high skill, high-wage careers has not really succeeded in making VET more attractive. To change parents' and employers' mindsets, accompanying measures and specific funding have been devised, for example, vocational education national programmes to support research, evaluation, information dissemination, and other activities which aim at improving the quality and effectiveness of VET; awards to learners and teachers in VET.

India is also embarking on long-term initiatives to make citizens and enterprises aware of the benefits of skills development, for example, through information programmes and campaigns in the media (Khanna, 2006).

4.2.4. What non-EU countries do to make VET attractive

Comparing the strategies European countries develop to modernise VET and make them more attractive with countries outside Europe, the similarity in objectives, priorities and policy measures is striking. As evident from the examples below, timelines and articulation of the strategies, however, vary. Quantitative targets, as used in China, are less common among EU countries.

Box 6. Strategies for VET and lifelong learning in non-European countries

Australia: national strategy for vocational education and training 2004-10

The strategy is based on four main objectives:

- (a) industry will have a highly skilled workforce to support strong performance in the global economy;
- (b) employers and individuals will be at the centre of VET;
- (c) communities and regions will be strengthened economically and socially through learning and employment;
- (d) indigenous Australians will have skills for viable jobs and their learning culture will be shared.

To achieve these objectives the following priorities were set:

- increase participation in VET and improve performance of learners (particularly employed people);
- improve access to information, guidance and counselling;
- raise image of VET and improve public recognition of its employment outcomes;
- achieve equality in VET participation and learner attainment;

- make sustained investment in technical and further education institutions (TAFE) and other registered training organisations;
- promote partnerships between training providers and industry to drive innovation;
- implement flexible funding models and planning and accountability approaches;
- develop sustainable funding and encourage cost-sharing;
- strengthen industry's role in anticipating skill needs and developing products and services to meet them;
- improve learning pathways and transition from school to work;
- improve quality of VET;
- simplify access to international VET markets.

China: targets for vocational education and training

'The decision of the State Council on making great efforts to push forward the reform and development of vocational education' (2005) set the following quantitative targets:

- train 22 million secondary vocational school graduates and 8 million higher vocational college graduates within the next five years (focus on (senior) skilled workers) to adjust to economic and technological developments;
- train 3 million people who lost their jobs and 50 million people employed in cities per year;
- increase enrolment in secondary vocational schools in rural areas from current 2.5 million to 3.5 million within the next five years; increase training of labour force in rural areas from current 87 million to 150 million people per year; every year train 8 million who have moved from rural areas to cities;
- increase enrolment in secondary vocational schools in western parts of China (where VET student numbers are decreasing in favour of general education) up to 1.2 million each year.

Sources: Country report by NCVER, 2006, Country report by CIVTE China, 2006.

4.3. Open and flexible pathways for excellence and inclusion ⁽⁹⁾

4.3.1. Moving from VET into higher education

As the Progress report (European Commission, 2006c) states, progression from VET programmes to higher education is generally low, even in countries where systems' structures and qualifications allow direct access (for

⁽⁹⁾ Based on contribution from Dunkel and le Mouillour in Cedefop (forthcoming) fourth research report.

example, in Slovakia only 50 % as opposed to nearly 100 % in 2004). The apparent low motivation of VET graduates to take up tertiary level studies might be influenced by the distinct missions of programmes. The characteristic features of the labour market and respective job opportunities might be another cause.

Besides, training for particular occupations may take place in higher education in some countries, but at secondary or post-secondary level in others (for example, nursing). This is also evident from the directive on recognition of regulated professions (Directive 2005/36/EC). Depending on countries' traditions and structures, learners might have the opportunity to move to post-secondary level programmes. In fact, several countries allow progression but limit it to VET programmes at post-secondary, non-university tertiary or tertiary level, even in current reforms. In contrast, Austria, for instance, provides general access to higher education irrespective of type or level of studies.

4.3.2. Blurred boundaries

Despite ISCED classifications and ongoing adaptation to the three-tier Bologna structure, it is not always easy to identify the borderlines between post-secondary non-tertiary and tertiary level programmes. Generally, the boundaries are blurred and the missions are similar: to ensure the employability of their graduates.

Several countries are diversifying their post-secondary sector and/or are introducing non-university tertiary VET programmes to meet better demands of the world of work. This leads to a 'vocational drift' in the higher education sector. These programmes also increasingly include 'dual track' learning, combining classroom-based learning and work-based learning. Higher education institutions are also expanding more into continuing training. Their market share in CVET can reach up to 5 % and is likely to increase. At the same time, in several countries, non-university institutions are striving to acquire university status or have already done so.

In parallel, 'postponing' initial VET to these levels is being discussed in some countries, while others are differentiating their VET offers at secondary level, to cater for different learner needs.

The need for lifelong learning and continuing skills development requires education and training systems which allow smooth transition into the work of world and offer progression and (re)entry opportunities for people to combine different pathways and qualifications throughout their lives. Systems with limited access to higher/tertiary education risk generating

structural barriers rather than creating incentives for people to acquire higher-level qualifications also later in their lives. Having access to tertiary education can also entice learners to take up VET (Austria, Finland, Germany, Liechtenstein, Portugal, Spain, Sweden).

Box 7. Ingredients for smoother progression from VET to higher education

Smoothing access and building bridges between VET and higher education:

- regular entry routes via vocational upper secondary schooling: school-based or apprenticeship;
- opportunities to take up higher education later in life after vocational training or some time on the labour market for those with traditional entry qualifications;
- expanding access to those who acquire the required qualifications through alternative routes or entrance exams for adults with professional experience;
- increasing opportunities for adults to participate in higher education through distance education, part-time studies and specifically targeted programmes;
- continuing education and training: advanced degree programmes, continuing professional education, staff training.

Source: Dunkel and le Mouillour contribution to Cedefop (forthcoming) fourth research report.

Notwithstanding several initiatives to make VET systems more flexible, improving progression routes from VET to higher education had low scores on countries' progress list since Maastricht. Norway, for instance, has recently opened up study programmes with an engineering focus for holders of a journeyman's certificate. Germany, Luxembourg and Malta are building or improving progression routes in their VET reforms.

4.3.3. Conclusions

- Opening access to higher education can make VET more attractive and improve lifelong learning opportunities;
- VET must be even more flexible and allow both young people with lower skills to start and complete a VET programme and also motivate well-qualified young people to complete a VET programme;
- building bridges and smoothing access from VET to higher education for young people and adults requires closer cooperation among stakeholders.

Overarching qualification frameworks and ensuring credit transfer and recognition of prior learning by VET and higher education providers are important ingredients to support the process;

- the future EQF with its common European descriptors of knowledge, skills and competence can help the process.

4.4. Improving governance

To respond to the challenges of globalisation, technology and demographic change, countries continue to modernise their VET systems. Yet, public budget constraints entail greater emphasis on efficient allocation of resources. Some countries have focused on developing coherent and coordinated modes of governance, while improving public and private investment to combine efficiency with equity.

4.4.1. Cooperation among national and regional authorities

Rapidly changing labour market needs, ageing populations or social inclusion are common concerns for VET and other policy areas, for example employment, social affairs or finance. To address broader but interconnected economic and social aims effectively and ensure synergy between policy responses, the relaunched Lisbon strategy advocates comprehensive strategies and multidisciplinary policy approaches.

4.4.1.1. *Inter-, and intra-ministerial collaboration*

Most countries are reinforcing cooperation within the education and training sector as a whole and link their VET objectives to those for higher education or lifelong learning in general. Integrated policy approaches are also used to set new management structures of VET. Different ministries, levels of government, social partners, sectoral bodies and other non-governmental organisations increasingly cooperate.

Interministerial collaboration tends to focus on education and employment (Box 8 below). Links between VET and social policies are less frequent. Some countries opt for multidisciplinary approaches in the framework of EU national reform programmes. In these cases, they link, for instance, objectives for VET with those for social and labour market inclusion and also involve regional players; or they combine information society objectives with those for education and training, employment, entrepreneurship policies and civil participation.

Box 8. Ministerial collaboration – selected country examples

Country	Policy/measure
Belgium (Flanders)	<p>New management structure (since 2006) to ensure integrated lifelong learning policy, including VET; responsibility for training divided across several different policy areas (education and training; work and social economy; culture) and several administrations and organisations; three levels:</p> <ul style="list-style-type: none"> • policy decisions (ministerial committee on education and training); • policy support (interdepartmental steering group with representatives of administration from three policy domains); • implementation of policy (with platform for public training providers).
France	<p>Establishing a committee to develop validation of prior learning (2005) chaired by a general delegate for employment and vocational training at interministerial level; the committee involves 13 ministerial departments; others can be invited when appropriate.</p>
Germany	<p>Initiative for structural development of VET (2006) at the interface of education and employment; all actors in VET involved– a high level group (with representatives of the Federal Government, <i>Länder</i>, social partners, companies and training institutions) supported by technical working groups and researchers.</p>
Austria	<p>Cooperation between VET and higher education in the field of quality assurance (initiated/ reinforced in 2006).</p>
Source: Cedefop, DGVT survey 2006.	

4.4.1.2. Decentralisation and cooperation at different levels

Continuing decentralisation and cooperation between administrative institutions at different levels are to ensure more efficient decision-making and better responses to regional and local needs. Governments devolve more power to individual VET establishments to shape VET content, recruit staff and make budgetary decisions and/or raise additional funding, (Box 9 below).

Box 9. Cooperation at different levels – selected country examples

Country	Policy/measure
Spain	Cooperation between the State and the autonomous communities: <ul style="list-style-type: none"> • to improve lifelong guidance (piloting); • to develop regulation on vocational training centres and centres for experimentation and innovation in VET (network of national reference centres in all autonomous communities, specialised in different production sectors).
Lithuania	Changing status of vocational schools into self-governing institutions (eight schools in 2003; six schools in 2006) and including different stakeholders in the management of the schools (e.g. enterprises, governors of counties, municipalities).

Source: Cedefop, DGVT survey 2006.

4.4.2. Involvement of social partners and other stakeholders

Although strong social dialogue still remains a challenge, social partners play an increasing role in steering and developing VET at national, regional, sectoral and local levels (Box 10 below). Either on a consultancy basis or being directly involved in tripartite decision-making, social partners shape VET policy and participate in a broad range of activities: development and validation of qualifications and standards, design and assessment of VET programmes, ensuring financial mechanisms to encourage participation in VET, guidance and counselling, improving quality assurance, etc.

Among the four priorities for action agreed by the European social partners in 2002 (ETUC, 2002), identification and anticipation of competences and qualifications generated the highest number of initiatives (108) (ETUC, 2006). These were followed by mobilisation of financial resources for training (100) and recognition and validation of competences and qualifications (89). Actions related to providing information, support and guidance were taken to a lower extent (53).

There are several initiatives to engage other stakeholders in VET development, including students, parents, teachers and trainers, the voluntary sector and local actors. New structures aim at giving all actors the possibility to express their opinions on VET issues and take an active role in policy-making.

Box 10. **Involvement of stakeholders – selected country examples**

Country	Policy/measure
Norway	New model of tripartite cooperation within VET (since 2004): one national council for cooperation in VET (representatives of working life: social partners and education authorities; ministry are equal members) and nine trade specific VET councils.
Romania	Creation and consolidation of social dialogue structures at sector level (sectoral committees) to ensure full participation of the social partners in VET development; the committees are to assist the sectors in accessing ESF funds; 16 sectoral committees are established, involving 23 sectors; involvement of other sectors is being discussed; process of consolidating sectoral committees with National Authority for Qualifications is taking place (under 2004-06 Phare project).
France	Establishing <i>maisons de l'emploi</i> (employment houses, based on the law for social cohesion of 2005) to improve employment services (one-stop-shop); converging public employment, vocational training and social policies at local level; coordinating involvement of various public and private stakeholders to meet better the needs of individuals and enterprises; employment houses can benefit from State support upon completion of national provisions, including obligatory cooperation of four stakeholders: local level actors, State, national employment services (ANPE) and unemployment insurance system managed by social partners (Assedic); 128 houses established (January 2006); 200 to be set by the end of 2006, 300 by the end of 2007.
Luxembourg	Reorganisation and change of the mission of the Vocational Training Committee in line with the envisaged VET reform (draft law); the committee will be tripartite instead of a consultative body; representatives of students and parents might be invited to discuss themes such as guidance and counselling; the objective is to provide a platform for all actors concerned with VET issues: government representatives, schools, professional chambers, employers and trade unions.
Netherlands	Developing competence requirements for educational staff by professional group of teachers (at the request of the Ministry of Education, Culture and Science); representatives of the Dutch teachers' unions and professional associations supervised and gave advice to the professional group of teachers during this process; piloting/implementation phase.

Source: Cedefop, DGVt survey 2006.

4.4.3. Conclusions

Despite considerable progress, cooperation across ministries, different levels of governments, social partners, sectoral and (other) non-governmental organisations needs to improve further. Policy strategies need to be comprehensive to address common objectives in several policy areas, combining, for instance, education and training measures with those for welfare and employment.

4.5. Financing and social/economic benefits

Research studies have confirmed the clear material and non-material benefits of education, training and skills. However, these benefits for society and economic growth, company performance and individual employability are not yet as visible to all actors as they should be ⁽¹⁰⁾. As is generally the case with investment in education, all countries provide public funding for a minimum level of VET, for instance IVET or training for unemployed people. However, public support for CVET varies across countries, especially for training which allegedly is mainly in the interest of enterprises.

4.5.1. Level of expenditure ⁽¹¹⁾

Between 2000 and 2003 total public expenditure on education as % of GDP increased in most EU countries, except Lithuania, Latvia and Austria (Figure 16 below), on average by 0.5 percentage points (similar to the US). Cyprus, Hungary and Poland showed the highest increase (1.92, 1.44 and 0.75 percentage points respectively).

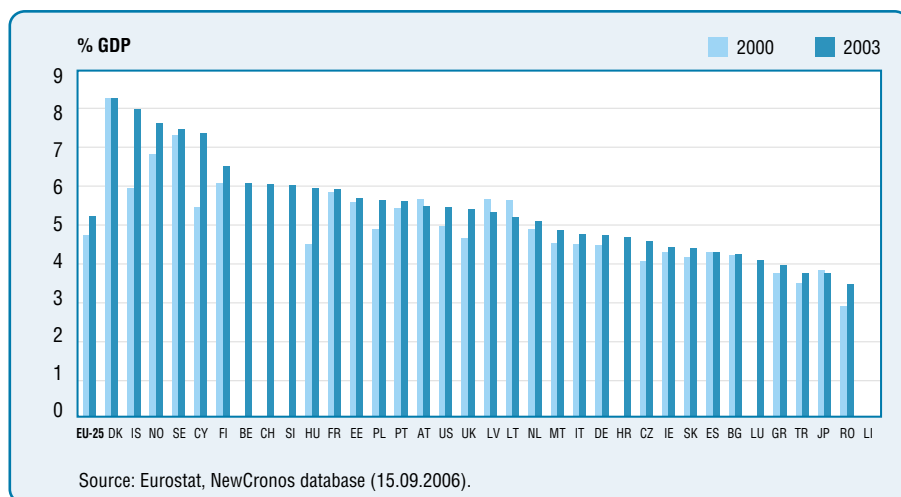
In 2003, public expenditure on education was estimated at 5.21 % of GDP in the EU, compared to 5.43 % in the US and 3.71 % in Japan. Denmark had the highest expenditure at around 8 % (similar to Iceland), followed by Sweden and Cyprus (as well as Norway) at over 7 %, while Greece spends slightly less than 4 % (similar to Romania and Turkey).

Private expenditure on educational institutions, as a percentage of GDP, has remained stable in the EU since 2000, at around 0.6 %. This compares unfavourably with the USA (2.08 %) and Japan (1.26 %). Only in Cyprus and Malta private spending on educational institutions exceeds 1 % of GDP.

⁽¹⁰⁾ See for an updated compilation of this research: Descy, P. and Tessaring, M., 2005.

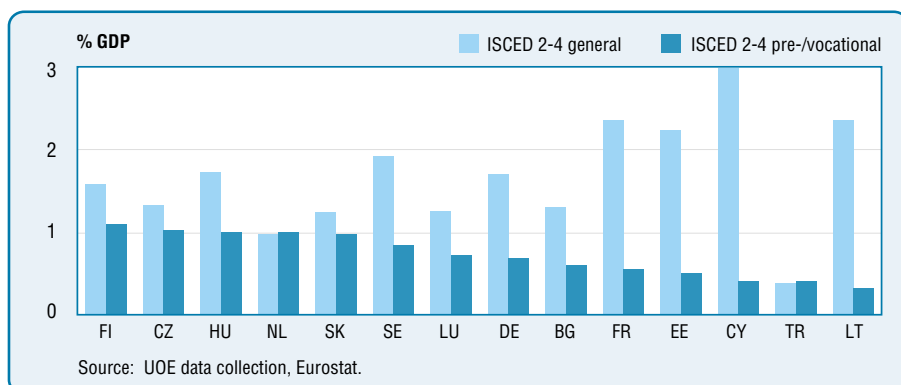
⁽¹¹⁾ According to Eurostat UOE data collection NewCronos database extracted on 15.9.2006.

Figure 14. **Total public expenditure on education and training as % of GDP, 2000, 2003**



EU public expenditure on secondary education (lower-, upper- and post-secondary levels; ISCED 2-4) reached 2.4 % of GDP in 2003 (Figure 15 below). Data available at EU level for the first time show countries spent between 0.3 % (Latvia) and 1.1 % of GDP (Finland) on (pre)vocational programmes, which, overall, is less than on general education. The Czech Republic, Hungary, the Netherlands and Slovakia spent around 1 % of GDP.

Figure 15. **Total public expenditure on education and training at secondary level, by programme orientation, as % of GDP, 2003**



For expenditure on training activities by enterprises, the most recent information available at EU level, dates back to 1999 (Eurostat's second continuing vocational training survey, CVTS2). New data, based on the third CVTS, will not be available before autumn 2007. However, as pointed out in the 2006 Joint interim report, 'there is little evidence of an overall increase in employer investment in continuing training' (Council of the European Union, 2006a).

4.5.2. Policy trends and issues

Despite the slight upward trend in public expenditure on education, 'most governments seem to recognise that necessary reforms cannot be accomplished within current levels and patterns of investment'. Facing the challenge of budgetary constraints and a relatively low level of private expenditure, countries continue to strive for more efficient allocation of funds and for finding ways to encourage investment from companies and individuals. Efforts to improve public and private investment should be further increased as VET objectives can only be achieved if sufficient resources are available and they are appropriately allocated.

4.5.2.1. *Improving efficiency*

Policy approaches to improve efficiency include (Box 11):

- (a) decentralisation of public funding and improving institutional management;
- (b) implementing new mechanisms to allocate resources (more accurate formulae in calculating inputs, introducing performance criteria);
- (c) partnerships – cooperation between VET actors to pool and make better use of resources;
- (d) targeting funds to train certain groups of people and certain skills (perceived as necessary, in short supply on the labour market).

Box 11. Measures intended to improve efficiency – selected country examples

Country	Policy/measure
Bulgaria	Gradual decentralisation of public funding to local level; financial responsibility for schools delegated to municipalities (Decision of Council of Ministers of 19 January 2006); training all principals (headmasters) and accountants of VET schools on management of delegated budgets.

Estonia	Funding procedure amended (2005 and 2006): new coefficients for study fields (particularly in technical, industrial and technological areas); raising expenditure per student in VET (ratio in funding vocational versus general education: formerly 1:1, currently 1.2:1, from 2008 1.5:1).
Finland	Integration of performance-based financing scheme into the core funding system (since 2006); 2 % of the total amount of funding allocated for vocational education is based on performance, measured by graduation rate and placement of qualification-holders in employment and further studies; the scheme comprises outcome grants and quality awards.
Belgium (Flanders)	<ul style="list-style-type: none"> • making better use of available high technological infrastructure for VET (e.g. in schools, training centres for SMEs) through cooperation between training providers (responsibility of regional training centres, since 2005); • extra funding for VET secondary schools for investment in basic equipment is conditional upon cooperation between schools of the same region (2005-06); • premium (EUR 235) to students who choose a discipline/occupation where shortages need to be filled, to help them cover costs for specific equipment they need for their training (school year 2005-06).
Source: Cedefop, DGVT survey 2006.	

4.5.2.2. *Raising additional resources*

Policies aimed at raising additional funding ⁽¹²⁾ from other sources than national public sector budgets are being constantly developed. Measures include creating training funds, frequently involving social partners, or promoting apprenticeship, where employers and apprentices share the training costs in line with the traditional financing approach. Countries also stimulate private investment from individuals and companies using financial incentives such as vouchers, tax relief or individual learning accounts. Nevertheless, still greater efforts are required to encourage the private sector to invest more.

⁽¹²⁾ For more details see Descy and Tessaring, 2005 and Cedefop (forthcoming) fourth research report.

Box 12. Measures intended to raise additional resources – selected country examples

Country	Policy/measure
Poland	Introduction of a training fund instrument (2004), based on employers' voluntary contributions of at least 0.25 % of the payroll; State support is available through reimbursement of: 50 % of the training costs for employees threatened with redundancy; 80 % of the training costs of employees on training leave for more than three weeks; salary of the unemployed person replacing an employee on training leave (up to 40 % of the average monthly salary); training allowance (non-obligatory), paid to the redundant employee during his/her training, up to six months.
Italy	Creating multisectoral training funds (10 established in 2003, two established recently); mandatory employer contribution: 0.3 % of the payroll; association with a fund is voluntary.
France	Increase in employers' mandatory contributions to finance training (levy scheme) – change in calculation method; current obligation: 1.6 % of total payroll for companies with 20 or more employees; 1.05 % for those with 10-19 employees; 0.55 % for those with less than 10 employees.
Austria	Creating additional apprenticeship places in companies and training facilities through lump-sum payments to cover training costs (2004/05). First year of apprenticeship: EUR 400; second: EUR 200; third: EUR 100 per month.
Belgium (Flanders and Wallonia)	Training vouchers for employers; in Flanders since 2002, in Wallonia since 1998; instrument addressed to all companies but aimed to stimulate training in SMEs; value: EUR 30, 50 % paid by government and 50 % by employer; maximum number of vouchers per year per company: 400 in Wallonia, 200 in Flanders; employers must inform the work council or trade union delegation of the number and value of the vouchers purchased. Training costs are to be included in the review of the company's social measures.
Netherlands	Individual learning accounts (ILA); two experiments during 2001-03; targeted at employees and job-seekers; 2 750 individuals, 100 companies involved; government contribution: EUR 450, other stakeholders might contribute; savings to be used only for training purposes; next experiment: 2006-08; contributions from government and branches: EUR 500 each.
UK (Scotland)	Individual learning account (ILA); those with a yearly income of GBP 15 000 or less can receive up to GBP 200 a year; those with an income above GBP 15 000 can claim up to GBP 100; learners have to contribute GBP 10 and follow a course delivered by a provider approved by ILA Scotland;

Lithuania

Draft law amending the Law on residents income tax; expenses for VET can be deducted from taxable income. If expenses are paid from loans, the part of the loan returned during the taxable year can be deducted from income. In some cases, if learners cannot use tax allowances, their family members can instead.

Source: Cedefop, DGVT survey 2006.

Box 13. Measures intended to raise additional resources – selected non-European countries

China

- All companies are required by law to provide training for their staff and potential employees. For this purpose, companies should spend 1.5 % of total wages. Companies which require high qualified employees and have high profits can spend up to 2.5 %. The government has the right to collect money from companies which do not provide training; the funds are used for vocational education.
- VET students have to pay tuition fees. The government encourages financial institutions to provide loan schemes, in particular for VET students from poor families and those who intend to open their own businesses.

Australia

- Tuition fees for VET students range from AUD 300 to AUD 1 000 per year (for full-time VET students). Tuition fees for apprenticeships are lower, however some courses have additional charges for course materials. Tuition fees at publicly funded training and further education (TAFE) institutions are generally lower than those at universities. Most VET providers require students to pay their fees up-front. Concessions are available and some TAFE institutions offer loans. Unlike those available to university students through the higher education contribution scheme (HECS), repayment of loans for VET students is not due until recipients are employed and earn a specified minimum salary.
- Employer contributions include wages paid to trainees in apprenticeship or participating in VET courses.

Source: Country report, CIVTE, China; Country report, NCVER, Australia.

4.5.2.3. Use of European funds

To complement their resources, Member States tap EU funds to achieve VET objectives. The European Social Fund (ESF) has been used to improve employability and adaptability of individuals and to provide equal opportunities.

Measures in the programming period 2004-06 focused on those in need of assistance: early school-leavers (France, Ireland), low-skilled (Denmark, Estonia), (long-term) unemployed (Ireland), people aged over 45 (Spain), women seeking labour market reentry (Spain), students from rural areas (Poland), people with disabilities (Latvia, Poland), employees of SMEs (Spain). The ESF also supported developing qualifications structures or systems (Ireland), guidance and counselling and individualised pathways (France), quality assurance, validation of non-formal and informal learning (France), training of teachers (Cyprus, France) and anticipation of skill or educational needs (Finland). In some countries investment in VET also stemmed from the European Regional Development Fund (ERDF) (Estonia, Latvia) and preaccession instruments (Phare in Bulgaria, Latvia) to improve infrastructure (technical equipment and facilities in schools).

The new financial framework 2007-13 introduces a new concept of ESF, reinforced links with EU employment and social inclusion priorities and in particular VET. Compared to the 2000-06 period, the budget proposal shows increased emphasis on education and training. From 2007 to 2013, the EU will invest more than EUR 37 billion, almost half of the ESF total budget, into actions directly or closely linked to VET. Initial analysis suggests that more than EUR 15 billion (national cofunding not included) will be allocated to adaptability and EUR 22.5 billion to improving human capital.

As in the previous programming period, the ESF will address a wide range of VET objectives. According to Cedefop's survey ⁽¹³⁾, countries will use ESF to develop and implement VET tools and principles: qualification frameworks and systems (Estonia, Cyprus, Lithuania, Hungary, Poland), quality assurance (Lithuania, Hungary), guidance and counselling (Lithuania, Poland). Funds will be allocated to promote lifelong learning (implement lifelong learning strategies), (Slovakia), including measures to increase employee participation in CVT (Belgium Flanders, the Netherlands). ESF will, in particular, support disadvantaged groups to promote their employability (Belgium Flanders, Denmark, Cyprus, Austria, Slovakia, the UK).

Countries will also aim at better links between the education system and the labour market (Italy, Poland) by promoting partnerships between industry and key regional actors (Denmark). Development of work-based learning (Estonia, Finland) and support for training in micro-, small- and medium-sized enterprises is a focus in some Member States (Estonia, Cyprus). Some countries will devote funds to capacity building of VET providers (Denmark,

⁽¹³⁾ Cedefop survey addressed to Directors-General for VET, spring/summer 2006.

Malta), development of infrastructure (modernisation of technical base in Latvia), creating regional integrated training centres (Hungary) or networks of sectoral training centres (Lithuania). ESF will also fund measures to develop key competences (Austria), including foreign languages in VET and to ensure continuing training of teachers and trainers in VET and adult learning (Hungary).

4.5.2.4. *Providing training time*

Target groups for VET policy, in particular CVET, differ from other target populations for social policy since many are in employment. For them the costs of participating in CVET are relatively high and provision of financing resources is not always appropriate. For many, time is the primary resource they lack. Many countries have introduced educational and training leave schemes, either through statutory or voluntary arrangements. Some are combined with financial incentives to overcome both time and money obstacles (Elson-Rogers, 2001). An example is Luxembourg which has launched a draft law on individual training leave (consultation phase) targeted at employees, self-employed and liberal professions; the measure covers a broad range of training activities.

4.5.2.5. *Equity*

Effective targeting of new or existing resources (for instance financial support, time available) is important to underpin equity aims which public policy should strive for. For example, evidence suggests that adult learning tends to reinforce skill differences resulting from inequalities in participation in initial education and training. In response, some countries pursue approaches to finance and stimulate participation of disadvantaged people in VET (Box 14). Nonetheless, 'insufficient priority and funding is being dedicated to increasing access to adult learning opportunities, especially for older workers [...] and low-skilled' (Joint interim report, Council of the EU, 2006).

Box 14. Measures intended to increase equity – selected country examples

Country	Policy/measure
Belgium (FI)	<p>Introduction of new measures in the voucher scheme for employees (maximum amount of the voucher: EUR 250 per year; 50 % paid by government and 50 % by employee):</p> <ul style="list-style-type: none"> • low-skilled employees who follow second chance education can get a contribution of 50 % of the used training voucher reimbursed (since 1 September 2004); • for employees who at the moment of their request for career guidance belong to a vulnerable target group, the ceiling of EUR 250 can be increased by the costs for career guidance (since 1 September 2005).
Denmark	<p>Government proposals in 2006 to improve financing and participation in CVT; several initiatives target in particular the low-skilled.</p>
UK (Wales)	<p>Individual learning account (ILA); aimed at people who need most assistance, in line with the Welsh Assembly's equal opportunities policy for learning. Those who receive income related benefits are eligible for 100 % funding of the course cost, up to GBP 200. Low qualified are eligible for 50 % funding of the course costs, up to GBP 100. Learners need to follow a course delivered by registered providers.</p>
Source: Cedefop, DGVt survey 2006.	

4.5.2.6. Benchmark on expenditure in (vocational) education and training?

One way to foster investment in VET could be to introduce a benchmark on expenditure in VET similar to the one set for research and development, an issue already discussed in several countries. The majority of respondents to Cedefop's survey consider it a potentially important or useful tool, which could:

- help to set new targets, increase expenditure on education and training (Greece, Cyprus) and stimulate research and active investment policies in education and training (Romania);
- show progress (Austria);
- enable comparison between countries' achievements (Iceland, Ireland, Italy, Spain), level of expenditure on (vocational) education and training (Belgium Wallonia, the Netherlands), political support and quality of education (Slovakia);

- draw up recommendations for financing general and vocational education (Estonia);
- contribute to increasing the quality, quantity and attractiveness of education and training and thus increase competitiveness (Cyprus);
- help to evaluate VET systems, prevent waste of resources and (re)adjust priorities (Portugal).

Italy suggests an additional benchmark: expenditure on VET in relation to total public expenditure. However, countries have also expressed some concerns:

- defining and measuring the benchmark might be difficult as this requires:
 - agreeing on the kind of costs and forms of learning to be considered (Belgium Flanders),
 - agreeing on the level of expenditure to be set (Belgium Flanders),
 - considering many different stakeholders involved in funding VET (Austria),
 - overcoming lack of reliable (Austria) and comparable (Denmark) data;
- the benchmark would not bring about significant changes in countries whose expenditure on education and training is above the EU average (Denmark, Hungary); it could, however, be useful in specific VET areas (teachers' further education or mobility of teachers and trainers) (Denmark);
- the benchmark would be 'against the spirit of Treaty articles governing competence in education and training' (the UK);
- small States may find it difficult to allocate funding to reach the benchmark (Malta);
- the benchmark would not necessarily reflect or increase quality (Austria, the Netherlands, Norway) and efficiency (Austria) of the systems or improve parity of esteem of VET (Norway).

The following alternative solutions have been proposed:

- ensure consistent data and improve information on funding mechanisms first (Finland);
- introduce an efficiency indicator of investment in VET (Slovenia) before determining the benchmark;
- introduce a benchmark on the ratio of young persons enrolled in VET to those in general programmes (Norway);
- focus on qualitative progress rather than quantitative measures (France).

4.5.3. Benefits of investing in education and training

The benefits of education and training (Descy and Tessaring, 2005) must be assessed more rigorously and be better understood if society is to be persuaded to improve its investment. Lifelong learning is not just beneficial for the individual concerned, it is also profitable for employers and for society.

4.5.3.1. *Benefits for enterprises*

Most studies in Europe find a significant impact of training on productivity. The estimates for different countries are difficult to compare, however, as studies tend to use different measures of training, for instance training incidence, number of employees trained, number of training days and training expenditures (see Box 15).

Box 15. Effects of training on firm productivity – recent empirical findings in Europe

- an increase of five percentage points in the proportion of employees following training, leads to 4 % increase in productivity (Dearden et al., 2000, using various data sources, including the British labour force survey);
- an increase in the number of general training days by 1 % leads to a labour productivity increase of 3 % in Irish firms (Barrett and O'Connell, 2001);
- in Germany, continuing vocational training in the form of formal external courses have the largest positive impact on productivity (28 %). Quality circles also have a positive impact. Formal internal courses, seminars and talks, job rotation and self-learning do not have a significant impact. Surprisingly, on-the-job training has a significantly negative impact on productivity. Zwick (2005) explains this result by the fact that firms that provide more on-the-job training often have a higher turnover or are restructuring, which both reduce productivity. According to another study an increase in training intensity by one percentage point increases productivity by 0.76 percentage points (Zwick, 2006);
- Groot (1999) finds that average productivity growth of training is 16 % for Dutch firms;
- in Portugal, an increase in the amount of training per employee of 10 hours a year leads to an increase of current productivity of 0.6 % (Almeida and Carneiro, 2006 based on a census of large manufacturing firms 1995-99);
- Brunello (2004) finds that a 10 % increase in the average number of hours training per head increases productivity in the sample by 1.32 % (survey of 97 large Italian enterprises).

Source: Smits contribution to Cedefop (forthcoming) fourth research report.

4.5.3.2. *Benefits for individuals*

Individuals profit from investment in education through higher earnings but are not always aware that rates of return to education (between 6 and 17 %) yield far higher returns than other personal financial investments (savings, for example, lead to a return higher than 5 % only in exceptional cases). Those who continue to study are better off in the labour market. Other personal benefits are also closely associated with education and training, such as better health, better parenting, life quality and avoidance of social exclusion. Participation in education and training and upgrading skills have increasing and cumulative effects for occupational careers and personal development. Studies also find that continuing training has considerable positive impact on wages (see Box 16).

Box 16. **Estimated wage growth due to training**

In the UK the estimated wage growth due to training is high, ranging from 3 % to 17 %, depending on the type of training and the specification used in the study (Blundell et al., 1999). Estimates of wage returns in Germany range from very moderate (3 %, Pischke, 2001) to quite high (15 %, Kuckulenz and Zwick, 2003). Bassanini et al. (2005) use the European community household panel to estimate wage returns by country: the impact on training incidence on hourly wages is zero or insignificant for the Netherlands, France, Ireland, Spain and Austria while the wage returns are quite high for Portugal (10 %) and Greece (6 %).

Source: Smits contribution to Cedefop (forthcoming) fourth research report.

4.5.3.3. *Benefits for society*

Society gains from investing in education and training as it is closely linked with economic prosperity. There is increasing evidence that education and training contribute to aggregate productivity and economic growth, partly through positive effects on the rate of technological progress. In the EU, one year of additional education would increase aggregate productivity by 5 to 6 % in the short term, and 3 to 5 % in the long term (De la Fuente and Ciccone, 2002; De la Fuente, 2003). Research demonstrates, however, that the quality of human capital matters more for growth than years of schooling or level of education. Therefore, beyond raising the attainment level of the population, the quality of education should also be at the centre of policies.

There is a wealth of evidence on the macrosocial benefits of education on health, reduction of crime, equality and social cohesion in general.

Educational equity is positively associated with several measures of social cohesion (Box 17) including general trust. Countries with low inequality in skill distribution have high levels of trust and those with high inequality have low levels of trust. It is plausible that education equality is a key mechanism in maintaining social cohesion.

Box 17. **Social benefits of equity in education**

Separate schooling for immigrant groups increases social polarisation (Gradstein et al., 2005). Analyses of social exclusion demonstrate that it is good practice to integrate immigrants into mainstream VET provision.

There is a strong and significant negative relationship between educational inequality and civil and political liberties. The conclusion for European countries is that educational equity contributes to the maintenance of civil and political liberties.

In terms of promoting social mobility, selective and tracking systems that orient young people at an early age into VET or general pathways – as has been recently demonstrated by the PISA results – these systems do neither lead to better performance of pupils. Increasing the school leaving age and postponing early age selection provide pupils from lower classes more opportunities for learning and selecting educational tracks that reduce social inheritance effects.

Source: Preston and Green, Tsakarissianos, contributions to Cedefop (forthcoming) fourth research report.

4.5.3.4. *Benefits of VET*

While benefits of education in general are well documented in many studies, there has been less research on the benefits of VET. Whether investment in VET is more beneficial to individuals than investment in other types of education has not yet been sufficiently examined. However, across Europe VET has been found to increase wage returns, reduce periods of unemployment and increase other non-pecuniary workplace benefits such as status at work (see Box 18 for non-monetary benefits of VET).

The vocational orientation of an education system over time does appear to be connected to educational equality. A correlation between vocational orientation of systems and educational equality has been found in four European countries (Belgium, Denmark, France, Sweden) ⁽¹⁴⁾. In as much as vocational qualifications can redress earlier inequalities in education, they may have a role to play in improving general educational equity, having in turn positive effects on social cohesion.

⁽¹⁴⁾ Based on contribution from Preston and Green in Cedefop (forthcoming) fourth research report.

Box 18. Individual and non-monetary benefits of VET

Bassanini and Martin (2005) find that:

- (a) the young and workers with good initial qualifications are the major beneficiaries of CVT in terms of wages;
- (b) older and poorly educated workers are the major beneficiaries of CVT in terms of job security.

Feinstein et al. (2003) examine the relationship between acquiring vocational qualifications and on-the-job training between the age of 33 and 42 and significant life-course changes. Adult learning (including VET) is found to have small but positive and significant effects on social capital, political attitudes and health (smoking and exercise). Accredited vocational qualifications and work-related training also lead to beneficial changes in social and political attitudes – decreasing racism, authoritarianism and political cynicism.

Feinstein and Duckworth (2006) show that the intergenerational impact of VET on child outcomes has been of importance in the UK. Parents staying on to study VET courses post-16 are found to have a significant effect on their children's verbal ability and produce a more educationally stimulating home environment.

Jæger and Holm (2006) hypothesise that in Denmark, and other Scandinavian countries, non-monetary assets such as VET qualifications (human capital) are more powerful forces in intergenerational mobility than economic capital due to the small (and relatively inefficient) private sector in Scandinavian education.

Source: Preston and Green contribution to Cedefop (forthcoming) fourth research report.

4.5.4. Conclusions

Education and VET generate substantial material and non-material benefits for individuals, enterprises and society. These effects may be direct or indirect – through access to economic capital or reducing poverty. A better understanding of these effects, their size, associated costs and benefits and the mechanisms at work will help devise effective and efficient policy interventions.

The contribution of education and training to growth, social cohesion, competitiveness, access to economic capital, occupational and social inclusion and other social benefits (such as health and crime reduction) indicates that in a societal budget, investments in education and VET should not necessarily be seen as a trade-off for other social and economic policies.

Leaving lifelong learning provision to market forces endangers equity. But Europe must give its lower-skilled people the opportunity to train and learn to help them adapt and (re)gain employability. Unless equity is assured, skill

shortages and low productivity will affect Europe's economies. Excluding high numbers of people from the labour market is very costly to welfare systems in the long term. Inequitable distribution of lifelong learning may seriously impinge on Europe's social cohesion.

4.6. Statistics, indicators and benchmarks

4.6.1. Lack of evidence for policy-making

In the Lisbon strategy, countries agreed to monitor policy implementation with the help of commonly agreed structural indicators and benchmarks. In May 2003, the Council had adopted five benchmarks (Council of the EU, 2003) and 29 indicators that national experts participating in the Commission's Standing Group on Indicators and Benchmarks (SGIB) considered relevant to analyse progress in education and training (see also Chapter 2).

The Maastricht study revealed the problems and limitations of statistics and indicators on VET. Consequently, the Maastricht communiqué identified 'the improvement of the scope, precision and reliability of VET statistics' as a priority, arguing that 'adequate data and indicators are the key to understanding what is happening in VET and what additional interventions and decision-making are required by all parties involved'.

4.6.2. VET statistics and data sources – state of play

The present report shows that the availability and quality of VET statistics have improved over the past years.

Despite this progress in VET statistics, considerable drawbacks still exist:

- (a) data do not have a satisfactory scope and coverage, are partly not comparable and inconsistent;
- (b) methodological and technical changes in surveys and data collections hamper monitoring trends over time.

Further or new developments are required to meet the needs of several key issues (more details in Descy et al., 2005):

- (a) data on expenditure on VET need to be refined to distinguish between different types of expenditure and sources of funding;
- (b) currently VET participation and graduation rates are partly inconsistent and not easy to obtain. The two main sources, the Unesco-OECD-Eurostat (UOE) administrative data collection and the EU labour force survey (LFS), lack sufficient comparability and lead to discrepancies;

- (c) data on transitions of VET graduates to the labour market, to post-secondary or to higher education are currently not available from a standard source;
- (d) more detailed data on mobility (geographical as well as occupational, sectoral and social/intergenerational mobility), specifically of VET graduates, are necessary to understand the dynamics of employment and unemployment in the European labour market;
- (e) there are no detailed comparable data on skill shortages and mismatches, qualification requirements and skill needs in sectors or occupations;
- (f) given their key role as change agents, we need detailed statistical information on individual characteristics, earnings, status, roles, duties and continuing training of VET teachers and trainers and other staff involved in training;
- (g) currently, there is no adequate source at European or international level to analyse in sufficient depth the efficiency and effectiveness of education and training systems, programmes and measures, and in particular to specify outcomes of VET compared to general education;
- (h) VET statistics and indicators need to be considered in a lifelong learning perspective. We regularly need detailed data on lifelong learning, covering types, subjects and duration of learning, types of training providers, characteristics of participants and non-participants, impacts on further life, career and participation in learning activities.

The key sources to develop VET statistics and indicators at EU and Member State levels are the harmonised data sources of the Statistical Office of the European Communities (Eurostat). Calling for more and better data thus means – first and foremost – to exploit fully and assess all available sources. The call for more and better data also has to be addressed to data providers, the Member States. They are the first link in the chain setting the ground for high-quality VET statistics at EU level. Therefore, all relevant authorities, both in the Member States and at European level need to strengthen the statistical infrastructure.

In the coming years several new surveys or new rounds of surveys from Eurostat will improve the availability and quality of data, for example:

- (a) the third continuing vocational training survey (CVTS), with its first result expected for autumn 2007, will allow to identify trends in training in enterprises; for the first time, the CVTS will also supply basic data on initial VET;
- (b) the adult education survey (AES) will provide comparable data on participation in various forms of learning as well as on obstacles to and

attitudes towards learning; it will include key data on self-perceived language and ICT skills; first results are expected for the beginning of 2008;

- (c) the multiannual approach of UOE data collection will improve the quality and availability of data on VET, including VET finance data;
- (d) the EU survey on income and living conditions (EU-SILC; 2004 onwards) is a longitudinal survey which includes variables related to income, poverty, social exclusion, living conditions, employment, health and educational attainment;
- (e) the European household budget survey (HBS; reference year 2005) might provide further insights into households and individual spending on education and training (first results to be expected after 2006).

4.6.3. The future of VET statistics

Refining existing surveys by increasing the level of detail could also help to 'isolate' various VET-specific aspects (more detailed breakdown by educational attainment, occupations, industrial sectors, by fields of training and more detailed characteristics of individuals). Obstacles to overcome might range from availability of detailed national data to methodological problems, such as sample sizes and cost.

In spring 2006, Eurostat launched a reflection process with users and stakeholders at different levels to establish what Eurostat and national statistical offices can realistically achieve with VET statistics in the foreseeable future, and what will be the ultimate limits.

Improving VET statistics requires active involvement of all players in the field. Quality of data, stable time series, extended coverage and sustainability, avoidance of double work, international comparability and affordability form the underlying principles of a statistical infrastructure with harmonised data sources, instruments and methods. Its assets are quality, regularity and multiple functionalities. However, this system also has its price: it is rather heavy and slow.

Improving VET statistics also entails considering all aspects of the education and training process, for example skills as outcomes of learning and the way teaching methods and content influence them. The future will show whether official statistics will be in a position to measure these aspects in the strict sense of the word, which is different from, for example assessing skills.

Box 19. Cedefop's future strategy in VET statistics

The reflection process might reveal that data sources outside Eurostat's reference (for example, from the OECD) could be used to complete the picture on VET. An important OECD initiative is the programme for the international assessment of adult competences (PIAAC) aiming at measuring adult skills. Cedefop will collaborate with the OECD in developing adequate tools to measure a wide range of generic skills used on the job. Cedefop is strongly involved in Commission and Eurostats activities to improve the scope and quality of statistics and indicators on VET. The close cooperation with CRELL will open new horizons in VET research and statistics. Additionally, Cedefop intends to develop specific methods and tools to complement VET statistics and to fill some of the data gaps. As a starting point, Cedefop has launched studies to evaluate and assess relevant data sources, to explore the feasibility of a specific poll on IVET and to develop methods to complement data on in-service training.

4.6.4. Improving the quality of VET statistics

To improve the quality of VET statistics means:

- (a) to improve their comparability across countries and over time, and their reliability. This requires harmonised surveys in Member States and use of common concepts, definitions, classifications and guidelines, also in surveys which include additional or background variables on education, training and skills and could provide complementary information on VET, for example existing enterprise surveys;
- (b) finding flexible solutions to be able to respond quickly to ad-hoc questions;
- (c) improving access to and use of existing data and statistics as some are not yet fully exploited. Though progress has been made, easy and user-friendly access to Eurostat data and statistics is still lacking.

4.6.5. Towards a coherent framework of statistics and indicators for education and training

In 2005, the Council asked the Commission to assess progress made in establishing a coherent framework of indicators and benchmarks and reconsider the suitability of existing indicators (Council of the European Union, 2005a). In June 2006, the SGIB agreed on a Commission proposal for a framework of 10 benchmarks and other targets, and 22 key indicators that cover VET aspects. The new key indicators proposed refer to the educational level of the whole population; education and training of students

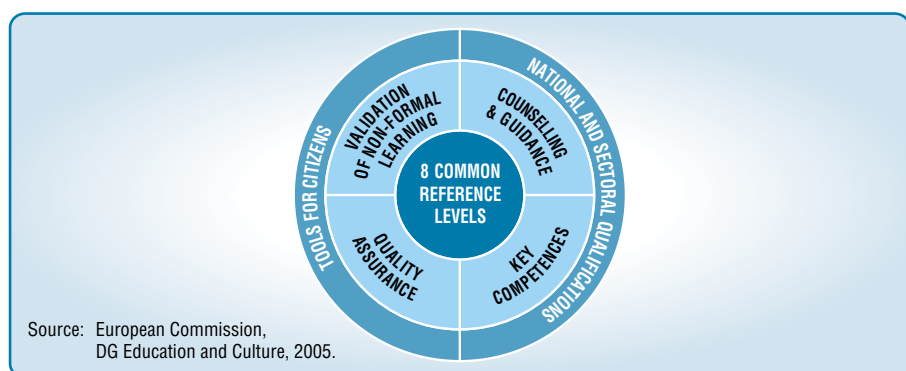
with special needs, employability; socioeconomic outcomes and the education/training process. The Centre for Research on Lifelong Learning (CRELL) at the Joint Research Centre (JRC) of the Commission support this work focusing on the coherence of indicators and benchmarks and the construction of composite indicators.

CHAPTER 5

Implementing tools and common principles at national level

The joint effort to develop a European qualifications framework (EQF) which is based on learning outcomes and which will make it easier to compare and transfer qualifications in different sectors across Europe, has had a significant impact on national VET policies. Increasingly, countries are using the common principles and tools developed at European level to support their policy development. Analyses of countries' progress areas, they increasingly devise qualifications structures and frameworks, and develop standards and quality assurance systems. More and more countries recognise validation of non-formal learning as important to making their systems more flexible, and the need to strengthen guidance and counselling services, in particular for people who have less access to lifelong learning.

Figure 16. **Quality assurance - a prerequisite for mutual trust**



5.1. EQF setting the trend – national qualification frameworks (NQFs)

NQFs have moved to the forefront of debates on how to make lifelong learning a reality and promote progress in education, training and learning. NQFs are classifications of qualifications according to a set of criteria for levels of learning achieved. NQFs are expected to overcome barriers between different parts of national systems of education and training (for example VET – higher education or initial – continuing VET). They are a precondition for national systems to refer to each other in a European meta-framework.

The learning outcomes (competence based) approach – fundamental to the EQF and NQF – is widely accepted and is a policy goal in many countries. Denmark, Finland, Iceland, the Netherlands and Norway have made substantial progress. The shift towards learning outcomes is closely linked to the need to increase transparency and accountability of qualifications. These are critical conditions to transfer and combine learning outcomes from different settings and may be seen as necessary for implementing lifelong learning.

The current developments of NQFs have the following objectives to:

- establish national standards for learning outcomes;
- promote quality in education and training;
- act as a way of relating qualifications to each other;
- promote access and progression to learning.

In addition to being part of national strategies to reform national qualifications systems, the recent rapid and widespread development of NQFs (especially during 2005-06) is closely – but not exclusively – linked to development of the EQF from 2004 onwards. Countries need to ‘speak with one voice’ when relating their NQFs to the EQF.

Box 20 shows four countries have already implemented NQFs (Ireland, France, Malta and the UK). The majority of remaining countries have expressed a clear intention (through legal or political statements) to develop NQFs or are considering the question in different forms, for example through research, studies, working groups. Several NQF blueprints have been presented. Belgium, the Czech Republic, Lithuania, Slovakia and Turkey opt for an eight level framework, corresponding to the EQF. The Netherlands, Finland and Sweden have not yet committed themselves to develop an overarching NQF. This seems partly linked to capacity reasons but also to

concerns that NQFs are not relevant to national needs. Very few countries have expressed explicit doubts regarding the need for NQF, although Cyprus is a particular case.

Box 20. NQFs – state of play across Europe

Country	Stage of development
Austria	Agreement of stakeholders on the need to develop NQF; working groups set up, summer 2006.
Belgium (Flanders)	Blueprint for NQF with 8 level structure developed; formal decision to set up NQF yet to be taken.
Belgium (Wallonia)	Formal decision to set up NQF taken, March 2006.
Bulgaria	NQF to be in place a year after a final decision on the EQF; registers for all secondary and higher education being developed.
Croatia	Framework for VET being analysed; NQF development expected to take around five years.
Cyprus	Sceptical about NQF.
Czech Republic	NQF being developed; deadline: 2007.
Denmark	Formal decision on NQF yet to be taken; framework for higher education to be implemented in 2007-10; inclusion of other systems (in particular VET) to be considered.
Estonia	Legal basis for the education and training system under review; new qualification system will '[...] embrace the entire spectrum of lifelong learning'; proposals for NQF made; discussions on the number of levels taking place.
Finland	Work on a framework for higher education and to develop competence based VET system ongoing. An overarching NQF not seen as an option for the moment.
France	NQF in place.
Germany	Intention to create NQF for all areas of education and training; studies and technical preparations began autumn 2006; first outline of NQF expected spring 2007.
Greece	Reaction to EQF inconclusive; initial discussions on NQF started, September 2006.

Country	Stage of development
Hungary	Commitment to develop NQF; part of a national development plan 2007-13.
Iceland	Commitment to develop NQF for higher education; question of overarching NQF yet to be addressed.
Ireland	NQF in place.
Italy	Work on NQF started.
Latvia	Proposal to integrate existing VET (5 levels) and higher education (3 levels) levels into one structure.
Lithuania	Work on NQF with 8 level structure started (2006); pilot phase planned in 2007.
Luxembourg	NQF under discussion.
Malta	The basic elements of NQF in place by establishing of a National Qualifications Council, October 2005.
Netherlands	No plan to develop and introduce an overarching NQF.
Norway	Preparatory work on a possible overarching NQF started, autumn 2006; working groups (including VET, higher education, adult learning) set up; preliminary report produced, October 2006.
Poland	Readiness to undertake work on NQF; work to be linked to the national reform plan 2005-07, start in 2006.
Portugal	Formal decision on the establishment of NQF taken (2006); development of NQF expected to take 3-5 years.
Romania	Development plan for NQF prepared; 5-8 estimated to implement proposal.
Slovak Republic	Development of NQF expected to take 3-4 years.
Slovenia	Positive towards the development of NQF.
Spain	A NQF of 5 levels for VET in place.
Sweden	NQF under discussion, 2006-07.
Turkey	The main elements of NQF in place; development of NQF expected to take 3-5 years.
UK	NQFs in place.

Source: based on Bjørnåvold and Coles (forthcoming).

Box 21. The Australian qualifications framework

The Australian qualifications framework was introduced in 1995 and fully implemented in 2000. It:

- is based on reference qualifications (in contrast to EQF which is a descriptor-based framework);
- relates all qualifications across Australia's federal states by defining the characteristics of a common set of qualifications across schools, vocational education and training and higher education.

Characteristics of VET qualifications:

- vocational qualifications are industry-based, with specified combinations of units of competency required by each industry for each qualification;
- qualifications are designed in a sequence, allowing students to move steadily from one qualification to the next; it is possible to mix and match units of competency: units accumulate on the student's record of achievement;
- to be assessed as competent for a vocational qualification, students must prove they can use their skills and knowledge under working conditions; students can be assessed for the skills and knowledge gained informally in previous work (RPL);
- Registered training organisations (RTOs) are accredited to provide training and issue qualifications according to the requirements of the AQF.

Source: Ecotec (forthcoming).

5.2. Validation of non-formal and informal learning

5.2.1. European trends

Validation (identification, assessment and recognition) of non-formal and informal learning is firmly on the political agenda of the majority of countries and is a centrepiece in VET/lifelong learning strategies.

The development of validation methodologies is intrinsically linked to the concept of learning outcomes. More and more countries reformulate their qualifications with an emphasis on what a learner knows and/or is able to do at the end of a learning cycle (in contrast to a focus on duration and location of learning). Validating non-formal and informal learning is generally seen as a way to increase flexibility of formal education and training institutions, making it possible to reach a formal qualification through various routes.

So far validation has predominantly been linked to the formal vocational education and training qualifications awarded at (the proposed) EQF levels 2-4. However, it is increasingly being developed in higher education, in particular allowing individuals with relevant practical work experience to enter formal education and training. Increasingly, validation is seen as an important instrument for enterprises and sectors, providing a more efficient approach to recruitment of skilled employees and of using existing knowledge, skills and competences in an organisation.

5.2.2. State of play

While some countries remain at the level of debate and planning, others have introduced specific measures allowing individuals to have their non- and informally acquired learning outcomes assessed and recognised. Depending on the stage of development, countries can be categorised as (European inventory in validation of non-formal and informal learning, European Commission 2004a and 2005b):

- (a) *experimental*: ad hoc methods and approaches have been set up to gain experience; a more permanent approach has still to be formulated and decided (Germany and Greece);
- (b) *emerging*: a national approach has been decided; full implementation has yet to take place (Belgium, Denmark and Sweden);
- (c) *established*: permanent systems have been established and are in use (Finland, France, Ireland, the Netherlands, Norway and Portugal).

The number of countries categorised as 'emerging' or 'established' has increased steadily in the last few years.

5.2.3. Convergence of methods and approaches

Certain convergence in developing methods for identification, assessment and recognition can be observed. This reflects a systematic exchange of experience between countries and a shared understanding of the challenges faced.

The portfolio approach can be seen as a predominant methodology. It reflects a need to capture various learning forms and modes experienced by individuals that are to be assessed. Declarative methods (inviting and supporting individuals to record their learning outcomes) are gaining importance. Though being more focused on identification of competences, in some cases they can be a first step towards formal recognition. Tests and examinations in the formal education and training system are increasingly open to individuals with non-traditional (non-formal and informal) learning

experiences (*Berufsreifeprüfung*, Austria, *Externenprüfung*, Germany, Section 20 examinations, Norway). Since traditional methods such as written exams might not capture specific learning outcomes, observation and simulation play a key role in many approaches to validation.

The extensive experience gained during the last decade about methods for identification and assessment of non-formal and informal learning has been important in strengthening the credibility of the process and reducing the risk of first and second class certificates and diplomas.

5.2.4. Quality assurance in validation of non-formal and informal learning

Following the agreement on common European principles for validation of non-formal and informal learning in 2004 (which can also be seen as an effort to promote quality assurance in validation), many countries have used the principles as a basis for developing their own national systems. This applies in particular to Belgium, Ireland and the Netherlands but also to Denmark, Norway and Sweden. The Dutch Quality Code for EVC (Validation of prior learning) is one of the first comprehensive quality assurance approaches of this type in Europe. Follow-up work to the common European principles has begun and European guidelines will be presented for debate in 2007.

5.3. Boosting quality in VET

Quality assurance is a precondition for trust in the value of learning outcomes among learners, employers and other education and training providers (see Section 5.2). This is a must for European education and training to become a 'world quality reference' by 2010 (Council of the European Union, 2002a). The Integrated guidelines for growth and jobs (European Commission, 2005b) underline the need to improve the quality and efficiency of education and training systems.

With increasing decentralisation and devolution of authority to regional, local and institutional levels, VET becomes increasingly diverse. VET providers must become more versatile to meet a larger variety of individual needs and demands of the world of work in a fuzzy environment where boundaries between initial and continuing VET as well as higher education are blurring. At the same time, VET is expected to become more effective and efficient and pursue both excellence and inclusion. The outcome-oriented approach makes VET providers more accountable.

5.3.1. A common understanding on quality assurance

Developments in 2006 ⁽¹⁵⁾ proved that quality in VET is becoming a major issue in most countries. In some it is an integral component of VET reform or lifelong learning strategies (Bulgaria, Latvia, Norway, Romania, Slovenia). Two approaches seem predominant. One provides common frameworks, recommendations and/or standards for individual VET providers to apply to local needs. The other, centralised approach involves national inspection, audits, quality labels or awards. Qualifications registers, mandatory quality assurance plans and provider accreditation, especially for continuing VET, are gaining in importance. Increasingly, quality assurance measures tend to be linked to financing, resources and efficiency of VET. Several countries recommend the Common quality assurance framework (CQAF) ⁽¹⁶⁾ as a guide for their VET establishments and some emphasise their participation in the European network ENQA-VET ⁽¹⁷⁾ (Ireland, Spain, the Netherlands).

Box 22. Translating CQAF-elements into practice

- Developing and implementing national strategies:
 - comprehensive quality management system in all upper secondary VET including all administrative levels (schools, inspectorate and administration at regional education boards and in the ministry) (Austria);
 - cooperation with the social partners and the counties (responsible for initial VET) to develop quality assurance across all levels and county borders (Norway);
 - monitoring and evaluation of quality and effectiveness, which combines external evaluation with mandatory self-evaluation; stakeholder involvement and professional teacher development (Czech Republic);
- National quality assurance framework in line with CQAF:
 - quality assurance and publication of selected approach, self-evaluation results and follow-up mandatory for all VET providers (since 2000), indicators and external monitoring through a national evaluation centre; in case of poor performance, funds can be withdrawn (Denmark);

⁽¹⁵⁾ See for instance, discussions among the Directors-General for VET and Cedefop's survey.

⁽¹⁶⁾ Council conclusions on quality assurance in vocational education and training adopted by the Council on 28 May 2004.

⁽¹⁷⁾ Cedefop supports the work on quality assurance through its virtual community and the expertise it provides to the ENQA-VET participants: AT, BG, CY, CZ, DE, DK, EE, ES, FI, FR, HU, IE, IS, IT, LT, NL, NO, PT.

ENQA-VET aims to identify reference points in the member countries to identify and disseminate activities and results at national level; ENQA-VET reference points (operating up to end 2006): ES, SL, NL, DK, SE, PT, DE, RO, FI.

- quality management recommendation (in cooperation with VET providers and the social partners) with practical examples to help VET providers apply the CQAF in their local context (voluntary); brings existing quality assurance elements together and includes excellence as a conscious goal; combination of internal and external evaluation (Finland);
- combining internal and external evaluation:
 - Estonia (for general education and VET), Lithuania (for initial and continuing VET), Romania (Phare, ESF and Cohesion Fund support);
 - mandatory procedures (since 1999), provider registration through quality assurance agreement, objective to provide certification (Ireland);
 - Indicators to show impact of VET and to support long-term development and steering (Slovenia), Finland (2 % of the funding performance-based), Italy (to evaluate regional and local training co-financed by ESF);
 - National quality assurance network to develop common quality principles and indicators (Spain);
 - Quality awards based on the European Quality Award Criteria (EFQM): Estonia (since 2003), Finland;
- Programme/provider accreditation/certification:
 - Cyprus, Hungary (adult learning), Italy (condition for public grants), Portugal (certifying quality, to be linked to financing and to tap ESF support);
- Adaptation, testing and dissemination of the self assessment manual developed at EU-level: Italy;
- Combination of mandatory annual quality reports, consultation with the social partners, inspections, national tests, national evaluations, collection and publication of statistics: Sweden;
- External quality assurance systems for all qualifications, inspections of schools, colleges and work-place learning: UK.

Source: Cedefop, DGVT survey 2006, selected country examples.

Finding the right balance between central regulation and devolved decision-making on approaches, methods and implementation to regional, local or institutional levels is a challenge countries are facing. The quandary over internal and external evaluation, and collation of data suitable to judge the quality of VET are among the issues of debate.

5.3.2. Quality, learning outcomes approach and qualifications frameworks go hand in hand

Policy areas in which countries indicate considerable progress since 2004, clearly highlight that work on quality assurance and development of

qualifications frameworks go hand in hand. This will be decisive for the success of the latter, and in particular the EQF ⁽¹⁸⁾.

National qualifications frameworks (NQF) normally address four main aims; to establish national standards and level of learning outcomes; promote quality of education and training; to facilitate relating of qualifications and promote access to, transfer of and progression in learning. Development of NQFs and quality assurance is mutually dependent and very much focused on making implicit aspects of education and training more explicit and, consequently, more accountable. Mutual trust, a pre-condition for transfer and accumulation of learning outcomes across national and institutional borders, depends on pursuing increased transparency, which to a certain extent can be described as opening up the ‘black box’ of education and training. The success of emerging qualifications frameworks, including the EQF, depends on the ability to carry through coherent quality assurance strategies promoting mutual trust.

When redesigning their qualification systems (for instance by developing NQFs), countries, increasingly set standards for VET and design competence-based curricula. They move towards assessing learning outcomes and validating non-formal learning to ensure accountability and promote trust (see Section 5.2). In this context, some also address the quality of teaching and the training of VET teachers or trainers.

Box 23. Quality assurance initiatives that (could) underpin NQF/EQF

- national qualifications framework based on learning outcomes to include quality assurance requirements: Denmark, Spain, Malta; IE (linked to recognition of prior learning, credit accumulation and transfer, European transparency tools);
- linking national qualifications and quality assurance frameworks, for example by: ensuring coherent initial and continuing VET standards and assessment; norms and indicators for accreditation; competence-based modular continuing training programmes validated by social partners and sectoral bodies: Romania; piloting new qualifications and accountability structure and quality measures to ensure learning outcomes: the Netherlands;
- developing or updating VET standards: Estonia, Spain, Hungary, Italy, Malta, Portugal; occupational area-oriented competence model, skills and knowledge dimensions aligned to EQF; language learning standards in line with the Common European reference framework (*): Austria;

⁽¹⁸⁾ See, for instance, Maastricht communiqué and the general approach endorsed by the Council on the *Proposal for a recommendation of the European Parliament and of the Council on the establishment of the European qualifications framework for lifelong learning* (November 2006).

aligning national requirements for occupational qualifications to EQF in cooperation with the social partners: Bulgaria;
 research-based occupational standards as a basis for national VET programmes, accreditation and regular updating; ESF support: Latvia;
 sector analyses-based VET standards also to be used for recognition of non-formal and informal learning, ESF support: Lithuania;
 occupational qualification standards based on employer and social partner surveys, as instrument for the central examination board: Poland;

- competence-based curricula/programmes: Denmark, Cyprus, Hungary, Latvia, Malta, Norway, Slovenia, Slovakia;
 Belgium (for the unemployed); Portugal (continuing VET based on competence framework);
- more emphasis on the quality of learning process and outcomes: Bulgaria, Germany, Portugal;
 Finland (skills demonstration, national assessment), Latvia (training also social partners), Romania (continuing VET).

(*) See http://www.coe.int/t/dg4/portfolio/Default.asp?L=E&M=/main_pages/welcome.html,
http://europass.cedefop.europa.eu/europass/preview.action?locale_id=1

Source: Cedefop, DGVET survey 2006, selected country examples.

In addition, countries also made progress in more conventional areas to improve efficiency in VET. Examples include revising and updating their structures and qualifications (Sweden, UK); upgrading adequate facilities and resources (Bulgaria with Phare support, Latvia) and creating networks or regional centres (Belgium, Estonia, Hungary).

5.3.3. Conclusions

Countries have clearly embarked on quality assurance and development, a *conditio sine qua non* to boost attractiveness and to promote mobility. To maintain momentum, it is important to:

- promote a quality culture and develop relevant indicators;
- support VET providers in developing quality assurance systems and promote training of all involved;
- make stakeholders aware that quality assurance in VET at all levels and common principles to support the process, are a prerequisite for mutual trust and, thus, for the success of qualifications frameworks and credit systems within and across regional, sectoral and national borders;
- promote partnerships between VET and higher education, similar to the

links initiated between the European networks ENQA-VET and ENQA ⁽¹⁹⁾; this could support building pathways and links between VET and higher education qualifications;

The European network ENQA-VET could provide guidance to the countries when implementing common principles to quality assurance.

5.4. Information, guidance

The increasing diversity and complexity of learning opportunities make guidance ever more important. 'In the context of lifelong learning, guidance refers to a range of activities that enables citizens of any age and at any point in their lives to identify their capacities, competences and interests, to make educational, training and occupational decisions and to manage their individual life paths in learning, work and other settings in which these capacities and competences are learned and/or used' (Council of the European Union, 2004a).

As a Cedefop report (Sultana, forthcoming) ⁽²⁰⁾ suggests, countries are at different stages of development in implementing lifelong guidance. None the less, most try to address the priorities in the Council Resolution 2004 and have introduced a wide range of initiatives to deliver guidance in coherent, transparent and professional ways, provide individuals with the skills to manage their career and learning pathways and ensure that guidance services are more accessible and quality assured.

The Council Resolution identifies five interlinked areas that are deemed to be priority actions: (a) implementing lifelong guidance systems; (b) broadening access to guidance in ways that facilitate service delivery to citizens whenever needed; (c) strengthening quality assurance mechanisms; (d) refocusing guidance delivery so as to support the development of career self-management skills, and (e) strengthening structures for policy and systems development at national and regional levels. Box 14 documents some of the initiatives European countries are undertaking to address these central issues.

⁽¹⁹⁾ In 2006, during the Austrian Presidency, a conference was held on quality assurance in higher education and VET which, for the first time, brought together the relevant European networks on quality (ENQA and ENQA-VET); a study on good practice examples to promote cross-sectoral and cross-national learning in the Bologna and Copenhagen processes.

⁽²⁰⁾ Cedefop report on progress in implementing the Council Resolution on guidance throughout life. The questionnaire (designed by the Finnish conference organisers) was sent to 31 countries, 20 responses have been received (AT, CY, CZ, DK, EE, ES, FI, DE, IE, IT, LV, LT, LU, MT, NL, NO, RO, SE, SI, UK).

Box 24. Implementing lifelong guidance – state of play

Implementing lifelong guidance systems:

- (a) improving coordination through (re-)designing inter-ministerial strategies (Latvia, Lithuania), legal instruments (Czech Republic, Spain, Luxembourg), service procedures (Denmark), or inter-ministerial delegations or commissions (France, Finland);
- (b) adopting holistic approaches drawing together different service providers: offering wide range of services to various clients ('all age' services, the UK [Northern Ireland, Scotland, Wales]; 'integrated centres', Spain);
- (c) setting up guidance forums or Councils to promote national and regional partnerships (Austria, Czech Republic, Denmark, Estonia, Germany, Finland, Ireland, Latvia, Malta, Poland, Slovenia, the UK).

Broadening access:

- (a) expanding services, new guidance units, self-service modes of delivery, partnerships;
- (b) targeting specific groups: disadvantaged youth (Denmark, Finland), early school-leavers (Denmark, Ireland), immigrants (e.g. Finland), travellers (Ireland), offenders (the UK), disabled (Spain, the Netherlands, Sweden);
- (c) enhancing the use of ICT: new guidance services via email (Denmark, the Netherlands, the UK), call centres (e.g. Germany, the UK [England]), video conferencing (to reach remote communities);
- (d) marketing services (Austria, the UK).

Strengthening quality and quality assurance mechanisms:

- (a) professionalising staff: providing training with increased investment at initial, induction and in-service stages (Denmark, Estonia, Ireland, Italy, Cyprus, Malta, Austria, Romania, Finland.); experimenting with innovative delivery methods such as e-learning (Czech Republic, Ireland), internet forums (Denmark, Lithuania, Finland, Sweden, the UK); establishing registers of qualified practitioners;
- (b) carrying out client satisfaction surveys and system evaluative surveys (Germany, Estonia, Ireland, the Netherlands, Austria, Finland, Sweden). Developing quality assurance manuals and guidelines (Denmark, Ireland), indicators of effectiveness, e-survey and online evaluation tools to collect data and establish benchmarks (e.g. Denmark, Finland).

Supporting the acquisition of learning and career management skills:

- (a) reforming curricula: introducing career education subject, developing self-awareness and self-management skills (Estonia, France, Cyprus, Latvia, Malta, Poland, Slovenia, Finland);
- (b) restructuring pedagogical approaches to encourage autonomous learning (Ireland, Austria);
- (c) involving students in personal career planning (Denmark, Italy, Luxembourg, Norway, Sweden, the UK).

Strengthening structures for policy and system development:

- (a) creating professional associations, research and leadership centres (Denmark, Spain, Lithuania, Finland.);
- (b) setting up strategic bodies/networks at local/regional/national as well as transnational level, for example Nordic-Baltic Euroguidance centres, the South European Initiative for Guidance, European Guidance and Counselling Research Forum.

Source: Sultana (forthcoming).

Despite progress made, much remains to be done. Europe still lacks a fully implemented, integrated career guidance system, and demand for career guidance far exceeds the supply of services. Comprehensive quality assurance mechanisms have been introduced only in few countries and large groups of students, in particular in VET, have limited support in managing careers and learning.

There is an urgent need to ensure more effective guidance to support individuals in making adequate choices, thus improve efficiency of VET.

As research ⁽²¹⁾ suggests, regret of initial educational choices results in high costs (dropping education, choosing another field of study, postponing transition from school to work) and causes capacity losses for a country. Policies are needed to encourage students to create a realistic picture of their future working life to improve the quality of their initial educational choice and reduce costly regret. Surveys reveal that many people do not know which training to take to reduce skill deficiencies at work and have difficulty in deciding when to take training. Managers and VET professionals can support employees to make the right decisions in choosing training courses. Given the importance of informal learning, managers should guide employees to benefit from learning opportunities at work. Mentoring can thus be an efficient way to provide counselling in an organisation.

Box 25. Guidance and counselling in Australia

The increased importance placed on career guidance in Australia in recent years has led to significant developments. These include:

- the *Career and Transitions Framework* (launched by a Ministerial Council on Education, Employment, Training and Youth Affairs Taskforce) - aimed to guide jurisdictions, non-government sector agencies and practitioners to plan and provide services to support

⁽²¹⁾ Based on contribution from Borghans and Golsteyn in Cedefop (forthcoming) fourth research report.

young people in making career-oriented transitions within school and between school and post-school destinations;

- the *Australian Blueprint for Career Development* (introduced by the Department of Education, Science and Training, 2006) – a national framework to develop nationally consistent career services and career service products to assist all Australians in planning and pursuing careers throughout their life.
- formation of organisations to support career guidance services and practitioners, including:
 - the Career Industry Council of Australia (CICA) – to develop professional standards for the industry and give the career industry in Australia a national body representing 12 practitioner associations;
 - Career Advice Australia (CAA) – to provide a comprehensive national career and transition support network underpinning provision of government careers services and programmes for all young Australians from 13 to 19 years;
 - the Australian Association of Career Counsellors (AACC), a national practitioners' organisation promoting and supporting the professional provision of career services;
- the Australian Government, with the AACC and CICA, works to implement national standards for career advisers and to continue progress in developing a national accreditation system for career practitioners.

Source: Country report, NCVER, Australia, 2006.

Box 26. Guidance and counselling in Korea

The main recent developments in guidance and counselling in Korea are:

- introduction of career education into the school curriculum (e.g. 'occupation and career' since 2002);
- setting-up local career information centres to provide career-counselling services, training for teachers and consult on career education for schools in their area;
- extending the target of public employment service (PES) from the unemployed to youth. 'PES innovation strategy' (2005) aims to support career guidance in schools by providing working experience ('Job School' programme) and psychological test services;
- introduction of the Plan for innovating employment services (2005) promoting one-stop services from training to employment. The aim is to establish an infrastructure of 'back-to-work' integrated services: 'unemployment benefit ➡ vocational training ➡ information ➡ in-depth counselling ➡ job placement'. In case of long-term unemployed, services are provided until finding a job and further continued for 100 days (to help individuals in back-to-work adjustment).

Source: Country report, KRIVET, Korea, 2006.

CHAPTER 6

Meeting the skill needs of individuals and the labour market

6.1. Teachers and trainers in VET: the forgotten change agents?

6.1.1. A complex family ⁽²²⁾

VET professions comprise various profiles and categories. While considerable information is available on qualifications, status and role of VET teachers, the picture of VET trainers is less clear.

Entry requirements and status of VET teachers are usually legally defined. Where this is not yet the case, countries are integrating VET teacher training into higher education in the framework of the Bologna process (Belgium, Germany, Austria and Finland). Teachers are either employed by VET providers or by national or regional governments, sometimes as civil servants.

Qualifications and status of VET trainers are less regulated. Frequently, training is a task added on to a master craftsman's or skilled worker's regular job. Some countries (Belgium, the Czech Republic, Denmark, Germany, France, the Netherlands, Austria, Poland and Portugal), however, have regulations and/or mandatory entry exams. The demand for pedagogic skills is usually low.

However, opportunities to move between these two distinctive functions of VET practitioners are scarce.

6.1.2. The invisible majority

VET teachers and trainers represent both continuity and the driving force of progress ⁽²³⁾, they act as change agents in VET reform and development. As Table 13 shows, one to two thirds of all upper secondary teachers work in pre-vocational and vocational programmes (ISCED 3), according to the size

⁽²²⁾ Based on Cedefop (forthcoming) fourth research report and Cedefop (2006).

⁽²³⁾ Swedish response to Cedefop, DGVET survey 2006.

of the VET sector in the different countries. At ISCED 4, which counts as upper secondary in some countries, but post-secondary non-tertiary in others, the figures for seven Member States range from 52.2 % to 100 %. There are no up-to-date comparative figures available for those working as (CVET) trainers.

Table 6. Teachers in pre-vocational and vocational upper secondary and post-secondary non-tertiary education, in % of the total at ISCED 3 and ISCED 4, 2003

	ISCED 3 %	ISCED 4 %		ISCED 3 %	ISCED 4 %
AT	71.4	100.0	PL	59.8	100.0
FI	65.9	m	SK	76.0	100.0
FR	38.8	m	SE	64.9	52.2
DE	45.6	68.9	TR	50.0	m
EL	44.6	100.0	UK	47.2	m
HU	50.4	79.9			
IT	66.0	m	JP	27.4	m
NL	33.2	m	KR	33.6	m

m: data not available;

Source: OECD 2006a and Cedefop, 2006.

Statistics and analyses usually either inform on teachers in general or focus on those working in general education. They do not take account of VET teachers' different working environments, workloads, tasks and needs which even vary among specific teacher categories, sectors or subject areas. It can be difficult to single out relevant data, as teachers might be working in both VET and general education. Cedefop's training of trainers network – TTnet ⁽²⁴⁾ and ETF's activities contribute to greater awareness of these specificities.

⁽²⁴⁾ The training of trainers network (TTnet) was set up by Cedefop in 1998 as a pan-European forum for key players and decision-makers in VET teacher and trainer training and professional development; http://trainingvillage.gr/etv/Projects_Networks/TTnet/.

6.1.3. High demands – low esteem? ⁽²⁵⁾

Ensuring sufficient numbers of skilled teachers is a common concern within and outside the EU. Cyprus, Portugal, and Finland are among the few countries where the supply of new VET teachers currently outnumbers demand.

Retaining and recruiting new VET teachers and trainers may become problematic. This is most likely in countries where, in contrast to Finland for instance, VET teaching is not highly esteemed and career opportunities in the private sector are much more attractive. Especially as status, salaries, pay scales and working conditions weighed against those of other high-skill occupations are among the criteria which influence people's career choices. As teachers' salaries make up the largest share of educational expenditure, policy-makers need to weigh budgetary constraints and incentives. Hence, trade-offs between salaries, student-teacher ratios, teaching hours, overall working time and responsibilities are likely (OECD, 2005).

There is little evidence that job or geographical mobility can overcome VET teacher and trainer shortages. Opportunities to move flexibly from VET teaching into training and vice versa or combine a career in the private sector with VET teaching and training are scarce. Cross-border mobility initiatives reported by countries refer to short term stays in the framework of EU programmes (Austria, the Netherlands, Norway, Slovenia, Slovakia) or bilateral agreements (Austria, Denmark, Norway) ⁽²⁶⁾. Comprehensive mobility policies seem to be lacking or might not always be effectively implemented at institutional level. Only two countries (Ireland and Lithuania) underlined the potential of national qualification systems to foster 'labour market' mobility in the teaching profession. Austria considers adapting to the Bologna degree structure an important step to promote mobility for all teacher categories.

With increasing demand for teachers and trainers to assist learners to succeed as active European citizens in an international and ever more competitive labour market, their skills and competences are becoming subject to scrutiny. More attention on quality assurance and learning outcomes (see Chapter 5), requires highly competent teachers and trainers who can bridge training effectively with the world of work.

⁽²⁶⁾ Based on contribution from Parsons et al. in Cedefop (forthcoming) fourth research report and Cedefop (2006).

⁽²⁷⁾ Cedefop, DGVTV survey, 2006.

Increasing decentralisation and new forms of VET governance lead to more autonomy and new roles for teachers and trainers in shaping development at institutional level (Austria, Denmark, Finland, Hungary, Latvia, the Netherlands, Norway). Their roles and responsibilities in curricula design (including national curricula, as for instance, in Austria and Finland) and selection of teaching content and methodology are expanding. In some cases, teachers can contribute to VET and teacher training policy development through their unions and professional associations.

VET reforms also entail teacher training. In several countries, reforms have generated new functions for teaching staff (the Netherlands). Increasingly teamwork across different disciplines is required. However, countries hardly comment on the challenges to upgrade VET teachers' skills and attract people to the profession.

Box 27. Towards a more attractive VET teaching and training profession

- package within legal regulations to signal the social importance of VET teachers' tasks (Spain);
- specific advertising campaigns (UK);
- financial incentives: competitive salaries (e.g. Estonia); career development prospects linked to financial incentives (Bulgaria, Estonia, Poland, Romania);
- nationally recognised qualifications to allow geographical mobility in the country (Austria, Sweden);
- professional mobility: mutual recognition of competences between regions (Italy); between different education and training sectors (Portugal);
- opening up access to VET teaching or training: e.g. professional standards for VET teachers and on-the-job training to attract people from business and industry (Estonia); training: recognition of competences acquired elsewhere (Austria); specific initiatives to attract migrant entrepreneurs (Austria, Germany) and workers over 45 (Belgium, Equal) as trainers;
- career development prospects (Portugal, Sweden);
- professional development to enhance competences: training for new subject areas and learning environments, (Austria); work-experience and staff exchange between VET establishments and enterprises (Finland, Malta, Netherlands); sectoral training (Norway).

Source: Cedefop, DGVT survey, 2006.

6.1.4. Developing competence in service

In 2004, nearly all EU countries recognised the need to improve VET teachers' and trainers' competence levels. The Maastricht study (Leney et al., 2004) called for comprehensive policies to boost esteem and attractiveness of the teaching profession.

Two years later, few countries included teachers' and trainers' professional development in the list of five VET policy areas in which they had made substantial progress (Lithuania, Malta, Romania and Slovenia).

In several countries, for example the Czech Republic, Estonia, Hungary, Latvia, Lithuania and Slovakia, the obligation and minimum requirements for professional development are laid down by law. In Finland, it is covered by collective agreements for civil servants. In other countries, it is in principle voluntary, or the teacher's own obligation (Iceland). The latter is also the case in Austria, however, a minimum requirement has been set for teachers within apprenticeship.

For teachers working in continuing VET, regulations and opportunities for professional development are often identical with or similar to those for teachers in initial VET (Austria, Belgium, Cyprus, Estonia, Finland, Hungary, Iceland, Luxembourg and Sweden). Professional development of trainers in initial and continuing VET is voluntary in almost all EU countries.

In several countries, national authorities set the policy framework for professional development of VET teachers but the responsibility to ensure access lies with regional or local authorities, or the VET establishment. Several countries have specific (national) training institutes catering for VET teaching staff, in others courses can be purchased from different providers.

Measures and packages to promote professional development include training rights and duties (Spain, Italy) sometimes linked to career advancement and/or financial incentives (Bulgaria, Estonia, Poland, Romania, Sweden), competence standards ⁽²⁷⁾ (Germany, Italy, the Netherlands, Poland), credit systems (Estonia, Hungary and Romania), or reference frameworks for initial training and professional development (Italy and Portugal). In some countries, where VET providers must be accredited, professional development for staff is one of the criteria that apply (Ireland, Italy), other countries are drawing up registers of qualified teachers and/or trainers (Bulgaria, Greece). These somewhat patchy policies are often aligned to complex, diverse and widely distributed funding systems.

⁽²⁷⁾ Usually those set for pre-service training serve as a basis.

Professional development ranges from skills-updating, acquisition of additional formal teaching qualifications (Austria, Germany and Norway, for instance, clearly differentiate between these two), and support to implementing reforms, through to a general trend of new approaches and working methods such as coaching, mentoring and supervision. In Finland, VET teachers are also offered company-based training periods (in 2005, 22 % had spent at least two months in an enterprise during the preceding five years).

Italy, Norway and Sweden are among the few countries that report more strategic approaches with increased investment and cooperation of national and regional authorities as well as other bodies. In Italy, the strategy is included in ESF supported human resources' development policies. Sweden considers teacher competence development essential to meet local and national goals and to attain equally high-quality teaching standards and has thus made it legally binding.

6.1.5. Common challenges ⁽²⁸⁾

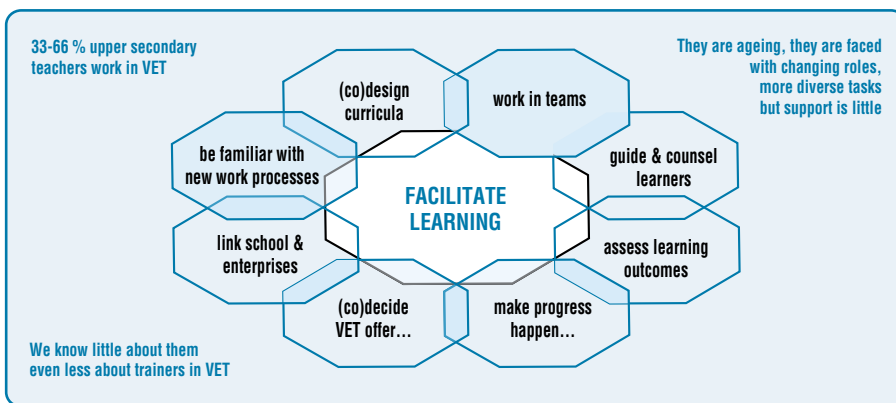
While diversity in categories, employment status and continuing training opportunities makes comparisons difficult, some common challenges and trends are evident:

- (a) higher entry requirements into the profession lead to 'academisation' of VET teachers, which might become a barrier for qualified technicians or master craftsmen; several countries, in particular newer Member States, are developing frameworks and standards for VET teachers' qualifications and competences;
- (b) although pedagogical entry requirements are increasing, there is little mention of target-group oriented VET learning or pedagogical methods for adult learners; some countries, though, are formalising CVET trainer training (for instance Luxembourg and Hungary) and/or are including pedagogy;
- (c) in the context of lifelong learning and blurring boundaries between initial and continuing VET, teachers' and trainers' responsibilities are expanding. The workplace is becoming a backbone for their competence development (for instance, in Finland, Latvia, Lithuania, Norway, Portugal, Spain), but comprehensive policy strategies or strategic partnerships between schools, training centres, higher education institutions and companies to support their professional development are few;

⁽²⁸⁾ Based on contribution from Parsons et al. in Cedefop (forthcoming) fourth research report and Cedefop (2006).

- (d) a balance is needed between centralised policy-measures and decentralised responsibilities at regional, local or institutional (i.e. VET establishment) level to meet specific needs. It should also ensure that teachers and trainers have equal access to professional development. In several newer Member States pre-accession initiatives for professional development need mainstreaming, but resources are lacking.

Figure 17. **Forgotten change agents?**



Box 28. **Towards adequate support to those who drive change**

- recognise the value of teachers and trainers as change agents in VET to attract and retain highly qualified and committed teachers and trainers;
- validate and reward experience gained at work and in the profession;
- ensure continuing development is both mandatory and equally accessible to all VET teachers and trainers; assure high standards but also allow competence development in line with institutional needs;
- improve the training of in-company trainers and encourage mutual learning between them and VET teachers, preferably with periods of work-experience for the latter;
- provide the financial resources for effective teacher and trainer training; also consider the needs of non-teaching staff and provide adequate training to middle managers;
- involve all stakeholders in defining teachers' future roles and in designing teacher and trainer training, i.e. industry, unions and, in particular, the teachers and trainers themselves to ensure a sense of 'ownership';
- provide better statistical data on VET teachers and trainers, their earnings and working conditions in relation to comparable professions; provide more information on what enables and hampers retention and recruitment of teachers.

6.2. Labour market skill needs

6.2.1. Current skill needs and skill shortages

Current employment and demographic trends generate labour shortages in both, highly skill-intensive and elementary occupations. Healthcare professions, IT specialists, managers, marketing specialists, financial analysts, scientists, engineers, teachers, construction workers, hotel and catering professions, truck drivers, childminders, sales representatives, cleaners are examples of occupations with current shortage identified by countries.

Technological change and innovation create a demand for higher skilled people across all occupations, including elementary. As evidence suggests, apart from technical (i.e. industry and occupation specific) skills, ICT or language skills, social and personal ('soft') skills are required in the labour market. These include: team working, interpersonal communication, creativity, initiative, leadership and management, presentation skills and ability to learn. Flexibility, motivation, loyalty, commitment or self-presentation are among the personal characteristics considered important. Several recent initiatives at EU level ⁽²⁹⁾ have underlined the need to promote key competences to ensure a competitive European labour force.

However, not all countries reported progress in initiatives to develop key competences. Entrepreneurship was promoted by Belgium, Bulgaria, Latvia, Hungary, Malta, Austria and Slovakia. Bulgaria and Austria reported on initiatives to combine occupational content with foreign language learning.

6.2.2. Future prospects

The ageing workforce has significant impact on employment. Each year, 2 to 3 % of employed people retire, which is two to three times higher than net additional jobs likely to be created in the coming decade (Alphametrics 2005). 'Ageing' occupations (those involving high number of people over 50) include agricultural and fishery workers, legislators, senior officials and managers, professionals and elementary occupations. These occupations in particular may experience labour shortages. 'Ageing' economic sectors are agriculture, education, healthcare and social work. Employment in agriculture is expected to fall, but healthcare and social work and education sectors, characterised by good growth prospects, are likely to face labour shortages.

⁽²⁹⁾ E.g. Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning (2006/962/EC); Communication from the Commission to the Council, Framework for the European survey on language competences, COM(2007) 184 final 13.4.2007.

The other potential high-growth sectors and emerging industries, likely to create new jobs in the future are: aerospace, audiovisual industries, aviation, banking and insurance, defence, the eco-economy, information technology, pharmaceuticals, security, space, telecommunications, transport, travel and tourism (see also Chapter 3).

6.2.3. Solutions

Current and future skill shortages on labour markets are a European-wide problem and need European-level policy measures.

Many EU countries have introduced pro-active immigration policy measures to compensate for demographic decline and shortages. Skills supply alone, however, can not always address skills shortages. Measures such as wage policy, institutional efficiency, general labour market strategies, better economic and social conditions, including family-friendly provisions and improvement of childcare facilities might equally play important roles. Our knowledge on skill shortages and future skill needs in Europe must be improved, for example through comparable vacancy statistics, enterprise surveys and pan-European forecasts.

Box 29. Anticipating skill needs in Europe

Only a few European countries have a long tradition of anticipating skill and competence needs on the labour market (France, Finland, Germany, Ireland, the Netherlands, the UK). Many other countries, however, have recently started to implement approaches and methods. Forecasts are usually based on quantitative methodology, often combined with qualitative approaches, such as experts' predictions (the Czech Republic), qualitative confrontations with sectoral studies (France), in-depth interviews or surveys with employers (Greece). However, national activities to anticipate skill needs are mostly not comparable.

There is no common tool at European level to measure and anticipate shortage (and surplus) occupations and types/levels of education. Cedefop's network 'Skillsnet' works on developing a European skill needs forecasting system, concentrating on the demand side and using available standardised European data (results are expected by the end of 2007). Although such an approach is limited, it will help to identify data gaps and methodological problems. Later, the project intends to involve all European countries in developing a common approach to forecasting skill needs in Europe, including the supply side. The exercise will not replace national forecasting efforts but be a complementary source of information providing a broad picture on future skill needs and potential shortages for the whole EU.

6.2.4. Integrating learning with working ⁽³⁰⁾

Research shows that learning in real work situations, where people have to perform tasks, master specific situations and problems and learn from others, has significant learning effects. Some 71 % of European employees consider they learn new things in the context of their work (Eurofound, 2006b).

Policy attention often focuses on formal learning, partly because it is, easier to see, measure and, therefore, also control. However, workplace learning is key for skills and knowledge development, as people acquire most of their vocational competences in work environments. People are often unaware of these competences, as they can be tacit, holistic and behavioural in nature. The division between working and learning is expected to blur, and project-based and practice oriented learning forms will predominate. This might boost the esteem of workplace learning and improve career opportunities.

Learning at the workplace includes a wide variety of models, for instance: job rotation, coaching, apprenticeship, e-learning or quality circles. It is also a way of learning that seems to suit SMEs. Nevertheless, relatively little is known about its nature, forms, drivers, barriers or effects as regards the individual and/or the enterprise.

6.2.5. Revitalising apprenticeships

Countries appear increasingly aware of the significance of work-based learning. Based on the traditional apprenticeship model, several policy measures and initiatives are emerging. Several countries have reintroduced or expanded apprenticeship and developed it into new forms of alternating learning (France, Liechtenstein, the Netherlands and Sweden). Some have introduced incentives for companies to provide placements.

Interestingly the different models are not just targeted at those who risk dropping out of education or being marginalised. In its VET reform, Luxembourg, for instance is aiming for excellence in apprenticeship. Apprenticeships are offered in a wide range of sectors, including knowledge-intensive ones like ICT (in Germany and Austria). They start at various age levels, are open in some countries to those with higher education qualifications and are increasingly also used for adult learners. Even when used in active labour market measures, they also target unemployed university graduates as well as the low-skilled (in Poland).

Higher education institutions use internship or sandwich models and new forms of partnership and cooperation with industry to design tailor-made

⁽³⁰⁾ Based on contribution from Obberholzner and Mandl in Cedefop (forthcoming) fourth research report.

courses which include work placements to acquire high level skills (as in Italy).

Greater awareness and understanding of the nature and effectiveness of learning activities at the workplace is needed at company and policy level to be able to foster such learning.

6.3. Addressing the lifelong learning divide through VET is high on the agenda

The Maastricht communiqué urged Member States to combine targeted investment, assessment of prior learning and tailored learning provision to meet the needs of those who risk labour market or social exclusion, especially early school-leavers, low-skilled, migrants, persons with disabilities and the unemployed.

Early school leaving, employment of older workers and regional cohesion indicators are used to gauge social inclusion (Council of the European Union, 2007). Many who risk being marginalised fall into more than one of the above categories, yet not all of them are automatically socially excluded, and have heterogeneous skill and qualification needs. To find appropriate policy responses, we need a clearer understanding of the target groups and their needs.

6.3.1. Those with little formal education and training

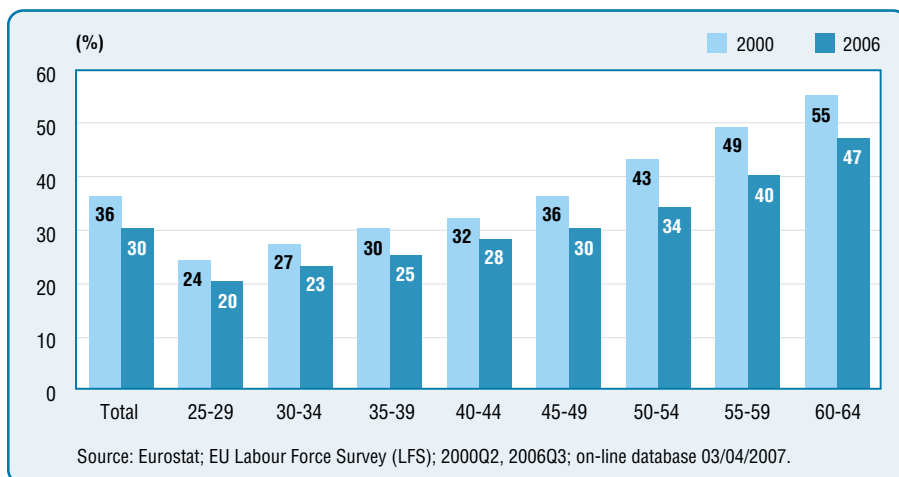
It is on the basis of formal education or training levels that people are classified as low-skilled, i.e. they have not completed at least upper secondary education (ISCED 3) ⁽³¹⁾. Evidence suggests that ISCED 3 and higher as well as a literacy level 3 and higher ⁽³²⁾ are the minimum skills required to perform a stable and skilled job. However, skills and competences acquired at work or elsewhere through non-formal and informal learning are not taken into account in the ISCED definition.

According to the European labour force survey 2006, 30 % of the working age population in the EU-27 are considered low-skilled (Figure 18). As a result of the educational expansion of the past decades, younger people are more highly qualified than older generations. Still almost 23 % of the 20-24 year olds have a qualification below upper secondary education, and 15 % of young people drop out of education and training.

⁽³¹⁾ Following a recent amendment, the category 'low-skilled people' does not only subsume ISCED levels 0-2 but also ISCED 3c programmes that are shorter than two years.

⁽³²⁾ As used in the International adult literacy survey (IALS).

Figure 18. **Low-skilled as a percentage of the population aged 25-64, by age groups (EU-27)**



Low-skilled people also participate less in further learning. This applies not only to formal learning activities, but also to non-formal and informal learning (Eurostat, 2003).

Figure 19. **Participants in non-formal education/training, by educational attainment (%), 2003**

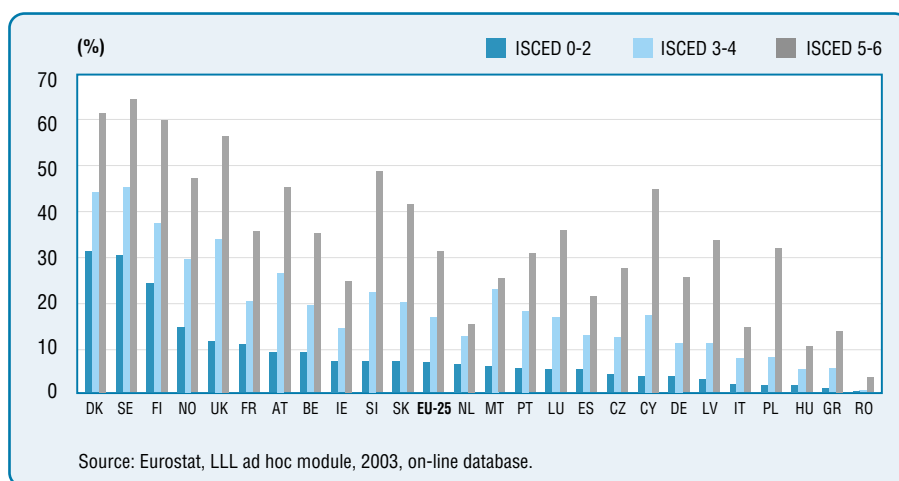
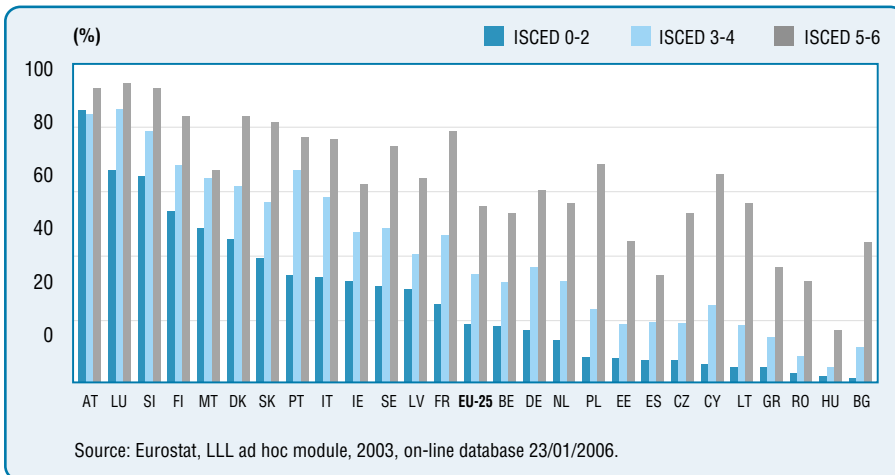


Figure 20. **Participants in informal learning, by educational attainment (%), 2003**

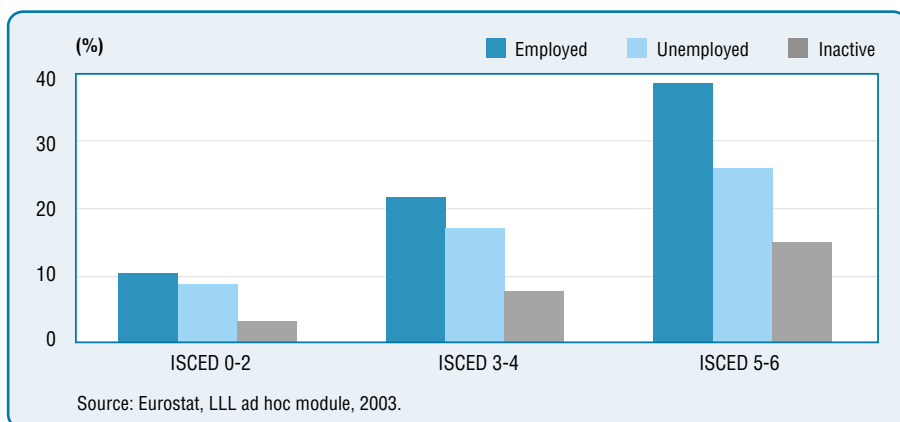


The two figures above clearly confirm that previous levels of educational attainment is linked to inequality in access to continuing education and training. For people with low levels of education, opportunities for informal learning seem to be better. Whether this sufficiently broadens their knowledge and skills to enhance employability and reduce the risk of unemployment, remains questionable.

Low-skilled workers, too, are increasingly required to be ICT literate, have learning skills and decision-making capacities, be able to work in teams, and display entrepreneurship and leadership. In certain sectors, low qualified workers need to meet high security requirements and be able to extract relevant information from large documentation manuals under time constraints. Just-in-time production systems demand the capacity to innovate and solve problems (OECD, 2006a).

When comparing participation in non-formal learning by working status, it is among those in employment where previous education and training levels cause the most marked differences.

Figure 21. **Participation in non-formal learning by educational attainment and working status, %, (EU-25, 2003)**

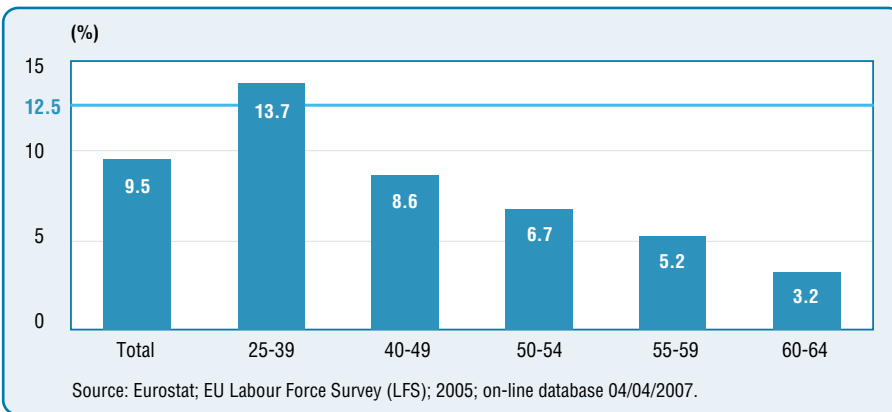


6.3.2. Senior workers

To address the challenge of the ageing population and the subsequent pressure on welfare and pension systems, the EU has decided to raise employment rates for those over 55 to 50 % by 2010 (in 2005, the average for the EU-25 was 42.5 %). Research, however, indicates that discrimination towards older workers on the labour market starts as early as 40 or 45.

With fewer young people entering the labour market, skill renewal also needs to be ensured through continuing training of older workers. However, the importance of learning to maintain and improve the employability of older workers is often neglected in policy responses. As shown in the figures above and following, many are at a disadvantage in terms of previous educational attainment and continuing training opportunities. Employers tend to invest in younger workers, older people themselves may not see the need to increase their adaptability and productivity. A 'deficit approach', focusing on the skills older workers lack, predominates, rather than one that values their strengths and contribution to workplace know-how.

Figure 22. **Percentage of the population aged 25-64 participating in lifelong learning, by age groups (EU-27, 2005)**



6.3.3. Conclusions

Demographic change and revised welfare policies make it essential to keep older workers in employment longer and ensure they can develop their skills and competences. This requires:

- devising age-sensitive and appropriate human resource management policies;
- making employers and older workers aware of their skills, giving them the opportunity to have them validated and valued;
- tailored career guidance and continuing training for older workers, in particular those who are low-skilled or unemployed;
- including older workers in the dialogue on their skills development, engaging them in workplace learning and encouraging them to share their knowledge and experience with younger people (for example mentoring, inter-generational learning).

6.3.4. Those with migrant backgrounds ⁽³³⁾

In several EU countries, large numbers of immigrants who took low-skilled jobs have stayed longer than intended or even permanently. In south European countries, illegal or legal immigrants in low-skilled jobs make up a substantial share of foreign-born residents. In Ireland, Greece, Spain, Italy

⁽³³⁾ Based on OECD (2006b) and European Commission (2006a).

and Portugal immigration is a rather recent phenomenon. Foreign nationals account for 2 % to 8 % of the total population in most Member States, (more than 8 % in Belgium, Germany, Estonia, Greece, Cyprus, Latvia, Luxembourg and Austria; less than 2 % in the Czech Republic, Lithuania, Hungary, Poland and Slovakia).

Unemployment rates of immigrants tend to be higher than those of native populations, though disparities vary widely. In 2005, employment rates of highly-skilled EU nationals were around 83 % compared to 67 % for non-EU nationals. Disparities in educational background and employment situation vary across countries. In Germany, the Netherlands and Austria, for instance, as in the United States, many immigrants have less than upper secondary level education. Immigrants who arrived many years ago, now belong to the disadvantaged category of older workers.

Although education and training plays a crucial role in integration, there has been comparatively little research on this issue. An OECD study (2006b) on young learners prior to or in the early stages of VET, reached some interesting conclusions.

In the case countries, more than 25 % of young immigrant learners do not have the necessary basic skills for the world of work and lifelong learning. More than 10 % are at serious risk in Austria, Belgium, Denmark, France, Luxembourg and Norway, more than 20 % in Germany. Often, the gap between immigrant and native learners persists across generations. They are more likely to leave school early or drop out and will constitute a considerable share of the low-skilled in the future. Competence in the language of the host country, besides parents' educational background and socioeconomic situation, has a strong influence on their learning outcomes. Where clearly defined language support is offered, performance differences tend to be lower.

A forthcoming Cedefop study shows the challenges for VET become evident (Dibbern Andersen, et al., forthcoming). In Germany, for instance, a lack of training placements and the learning difficulties of young people with migrant backgrounds, make it increasingly difficult to attract immigrants to VET. Denmark has recognised the need to develop VET to reduce the number of school drop-outs among immigrants (around 60 %) and reduce the barriers they face on the labour market.

6.3.5. Conclusions

Measures to support people with migrant background should aim to:

- (a) ensure that young learners with migrant background achieve the skills necessary for lifelong learning and the world of work;
- (b) provide adequate opportunities and devise tailored methods to acquire or improve their skills in the language of the recipient country in VET institutions and at the workplace (e.g. by combining occupational content and language learning); the Europass language passport could help to motivate learners and show the value of being multilingual;
- (c) promote research and longitudinal studies to examine how integration policies and practice help alleviate differences in educational attainment.

6.3.6. Those leaving education and training early

With 77 % of 18-24 year olds completing upper-secondary education, Europe still has a long way to go to reach the 85 % target, despite progress in some countries. Around 15 % of young people still leave school early (see Figure 1); nearly 20 % of 15 year olds have serious reading difficulties. An audit of ESF support used in six countries to help reduce early school leaving found that research, analysis, clear strategies and targets to address the problem adequately and efficiently were all lacking. Also, definitions of early school-leavers used in the six countries audited, varied from the European-level definition (European Court of Auditors, Special report 1/2006).

Though declining, youth unemployment (16.8 % for EU-27 in January 2007), especially among immigrants and ethnic minorities, is still more than twice the overall rate. Young people often find themselves in a vicious circle of 'low pay - no pay'. Many Member States are expanding apprenticeships and provide other support after short spells of unemployment to improve access to mainstream measures (Council of the European Union, 2007).

6.3.7. How countries cater for those who risk losing out

Measures to improve retention rates in education and training and increase access to training opportunities for adults feature prominently among the five areas where countries state they have made considerable progress since 2004. They range from targeted training programmes (basic skills or specific continuing VET), language learning for migrants, to workplace learning, both for unemployed and employed people. Often they are linked to guidance and counselling services and skills validation.

Some of these measures seem in line with employment policies that aim to make labour market (re)training more attractive through small-scale

programmes targeted at particularly disadvantaged groups. Such programmes are often carried out in close partnership with local employers and with as much on-the-job content as possible and the training is certified (Martin and Grubb, 2001).

Several countries have devised more strategic approaches to increase access to tailored or mainstream learning opportunities for disadvantaged people as part of their lifelong learning strategies or (C)VET reforms (Denmark, Ireland, Spain, France, Italy, Latvia and Luxembourg). The newer Member States tend to develop these initiatives and strategies in the framework of the reform programmes for growth and jobs. Few countries included references to their active labour market policies in their reports on progress in VET for the disadvantaged. This is certainly due to different ministry responsibilities and countries' VET structures.

Box 30. VET for those who risk losing out

Keeping young people in education and training:

- guidance and counselling prior to VET and/or preparatory VET programmes: (Spain, Finland, Hungary);
- school completion programmes, extension of mandatory schooling, guidance packages, monitoring and cooperation with welfare staff: (Ireland, Netherlands) (additional funding including ESF);
- increasing flexibility and differentiation in VET: (Luxembourg, Estonia) (also apprenticeship), foundation courses (Malta);
- research of best practice: Denmark (Retention in vocational education in Denmark).

(Re)integrating disadvantaged people into VET and the labour market:

- integrating travellers and adults with disabilities into mainstream learning activities: e.g. Ireland;
- modularised training and cooperation with professional chambers to reintegrate early school-leavers and low skilled: (Luxembourg);
- individual learning accounts for the less educated, (Netherlands);
- focused career and training guidance and personal action plans, (Belgium);
- internships, on the job training, apprenticeships and training contracts for unemployed and low skilled, (Denmark, France, Poland, UK) (mandatory packages, New Deal for young people and New Deal 25+);
- recognising non-formal and informal learning: (Denmark, Spain, France) (specifically for those over 45), (Portugal).

Supporting people with migrant background:

- mediation and language training for migrants and their descendants: (Ireland, France, Luxembourg, the UK) (introductory classes to VET for newcomers combined with prevocational training);
- colleges and guidance centres cooperate to improve completion rates in VET: (Denmark);
- local and regional networks, specific support programmes: (Germany) (policy package accompanied by research, also includes encouraging employers with migrant background to train apprentices), (France);
- skills auditing, more individualised approaches to learning in VET, recognition of prior learning, and support measures: (Denmark, the Netherlands, the UK);
- additional financial support for mentoring and improving achievement in VET: (Germany, Denmark, France, the Netherlands).

Source: Cedefop, DGVT survey 2006 and Dibbern Andersen et al. (forthcoming).

According to the Joint report on social protection and social inclusion (Council of the European Union, 2007), most Member States adopt a balanced approach combining personalised labour market support, which includes skills training and accessible, high-quality social services. Measures for people with mental illness and disability are scarce. Ensuring adequate levels of minimum resources for all and making work pay still needs more attention. The report calls for a balanced policy mix with reinforced labour market policies, appropriate counselling, opportunities to upgrade skills, also in IT, and efforts to address educational disadvantage.

6.3.8. Tailoring VET to tap the potential of those at risk

Europe cannot afford to waste the potential of its people. VET is a major pillar of lifelong learning. It promotes employability, personal and citizenship skills for young and older people and thus is an interface between different policy areas. To ensure the population's skill level and promote social inclusion, comprehensive policy packages are needed to reduce early school leaving and improve older generations' opportunities for skills development.

- Different people have needs which VET 'targeted' at specific groups might not address. If independent of mainstream measures, targeted VET programmes may reinforce social exclusion. 'Tailoring' VET by skills, i.e. modifying mainstream VET, seems more appropriate than 'targeting' it by social characteristics ⁽³⁴⁾. Potential learners should participate in the tailoring process.

⁽³⁴⁾ Based on contribution from Preston and Green in Cedefop (forthcoming) fourth research report.

- Competence-based approaches combined with individualised guidance, recognition of non-formal and informal learning and tailored training plans are vital to the policy mix; as are work-based learning, support in finding placements and assistance in welfare issues. Relevant ministries or departments (e.g. education, employment and social affairs, health, finance and economy), social partners and other stakeholders need to cooperate to devise policy packages. Collaboration and networking at regional, municipal, sectoral and local level are needed to reach out to the groups at risk.
- Integration strategies, which include education and training and recognition of prior learning (European Commission, 2005, p. 16) are vital to ensure social cohesion. ERDF and ESF support could help to make VET more inclusive, as sustainable integration in employment of disadvantaged people is currently a specific priority. Clear strategies and targets, monitoring and evaluation of outcomes are prerequisites for effective and efficient use of funds.

6.4. Making learners and workers mobile ⁽³⁵⁾

6.4.1. Learning by leaving

Previously an integral part of a journeyman's occupational training, mobility in VET is a tool to foster cognitive learning, develop key competences, intercultural understanding and employability. It adds an international dimension to education and training and can shape attitudes towards future labour market mobility.

Placements tend to be seen as an 'interlude' rather than an integral part of VET, as stipulated by the Maastricht communiqué. Few countries report on progress in the period 2004-06. Luxembourg's VET reform package, for instance, foresees integrated placements abroad. In Sweden, the success of mobility in the Leonardo da Vinci programmes prompted increased government funding for placement schemes. It is the responsibility of the individual schools to implement them.

In most countries, less than 1 % of learners in initial school or work-based VET spent three weeks or more abroad. Status and size of VET, in particular its apprenticeship sector, mobility policies, legislative arrangements, stakeholder support, and funding arrangements influence participation rates (Brandsma et al., forthcoming).

⁽³⁵⁾ Based on Kristensen, 2004 and Brandsma et al. (forthcoming).

Table 7. **Estimated percentage of IVET students participating in transnational mobility**

Country	Participation rate in %	Country	Participation rate in %
CZ	0.4	NL	0.5
DK	1.0	AT	0.3
DE	0.4	PL	0.3
EE	0.2	PT	0.4
ES ^(a)	0.2	SK	0.2
FR ^(b)	0.2	FI	3.3
IE ^(c)	0.9	SE	0.9
CY	4.2	UK	0.4
LV	0.5	NO	0.5
LT	0.6	BG	0.3
LU	0.5	RO	0.01
HU	0.8	TR	0.2

^(a) The annual average of IVET transnational mobility participants over the period 2000-05 has been used for the calculation.

^(b) The estimated number of IVET transnational mobility participants has been the basis for the calculation.

^(c) Though Ireland hardly has any IVET within the educational system, people can and do apply with FETAC (the national qualification authority) to have their qualifications assessed and accredited. The estimation is that on an annual basis this concerns about 185 000 people. This has been used as the basis for the calculation.

Note further: adequate data for the IVET population appear not to be available for Belgium (Flanders), Iceland, Italy, Liechtenstein and Slovenia (at least not found yet).

Source: Brandsma, J. et al forthcoming.

There are several bilateral or specific national mobility programmes (Denmark, Finland, Norway, Sweden), regional initiatives, company schemes or mobility initiatives by individuals. However, outside the scope of the Leonardo da Vinci and Youth programmes, European level statistics on mobility in VET hardly exist. Some data are available on bilateral initiatives, those on initiatives by enterprises and individuals are scarce.

6.4.2. Mobility barriers and benefits

In initial VET, mobility barriers exist at policy, institutional and individual levels. Lacking mobility policies (Estonia, Latvia and Lithuania) and the difficulty in getting one's learning outcomes validated and recognised upon return, appear major reasons for low participation rates.

Box 31. Barriers to mobility in VET**Policy level:**

- national policy for mobility missing,
- lacking recognition of qualifications acquired in other countries,
- little emphasis on language learning in VET,
- lack of quality placements,
- lacking encouragement and support from social partners and sector organisations,
- national and European bureaucracy (e.g. employment-related regulations),

Institutional level:

- clear vision and strategy missing,
- little awareness of the benefits,
- little support, capacity and experience in managing placements (e.g. lack of guidance and supervision of incoming apprentices in SMEs, outgoing staff difficult to replace).

Individual level:

- financial problems,
- limited language skills, need to adapt to new culture,
- lack of courage and family reasons,
- problems with social security rights, work and residence permits required in some Member States.

Source: Bransma et al. forthcoming; European Commission, 2006a adapted by Cedefop.

VET institutions and learners in initial VET seem the main beneficiaries of transnational placements. However, data on the benefits for employers and sectoral organisations are limited. Research is essential to make the benefits of mobility understood better. This applies particularly to small and medium-sized enterprises (SMEs) which play a major role in apprenticeship training.

6.4.3. Quantity or quality?

Without adequate support, mobility can turn into a negative encounter and reinforce prejudice, stereotypes and xenophobia. Hence, more funding for more mobility in VET is not enough. Improving the quality is key, as positive experience will trigger off further mobility.

Member States are increasingly aware of this. An Austrian initiative followed by other Member States (Belgium, the Czech Republic, Spain and Hungary), paved the way for the European Leonardo da Vinci quality awards in 2004 and 2006. By appointing mobility ambassadors, countries create

role-models for others. The Finnish government subsidises a network to develop and improve mobility initiatives ⁽³⁶⁾.

The quality charter for mobility ⁽³⁷⁾ in education and training, developed in the Education and training 2010 work programme, provides guidelines to ensure quality in mobility. It stresses the importance of preparing, monitoring, mentoring and the transfer and recognition of competences.

6.4.4. Accumulating learning and making it portable

Lack of information and recognition of learning outcomes hamper mobility in VET. Hence, it is imperative to make the relevant European tools widely known. Being directly relevant to learners, Europass ⁽³⁸⁾ prepares the ground for labour market mobility. The agreement to use a common standard curriculum vitae (CV) for both Europass and Eures web resources will support learners' and workers' mobility.

Box 32. Europass

By 2004, several of the EU-15 had issued the previous Europass Training for placements abroad within VET. The Czech Republic, Denmark, Lithuania, the Netherlands and Poland had included Europass-related activities in their policies to improve comparability and transferability of skills and qualifications. Few (e.g. Austria) had reported on implementing the CV format or the certificate supplements.

By September 2006, nearly all Member States had established their national Europass centres (NEC) and websites. They focused, in particular, on promoting the Europass CV and the Europass Mobility. To compare figures and evaluate progress in using the latter, it would be necessary to single out the data pertinent to VET and to consider them in relation to the specific country context (e.g. size, status, level of VET). Several countries were promoting the Europass Language Passport which forms part of the European Language Portfolio. Only one country (Austria) referred to its potential as an integral tool in language learning in VET (*).

(*) Language portfolio already previously piloted in the Netherlands.
Source: DGVET questionnaires, NEC.

⁽³⁶⁾ http://www.majakka.kpedu.fi/majakka_englati.htm.

⁽³⁷⁾ Recommendation of the European Parliament and the Council of 18.12.2006.

⁽³⁸⁾ Decision 2241/2004c of the European Parliament and of the Council of 15 December 2004 on a single Community framework for the transparency of qualifications and competences (Europass) launched in February 2005; previously, the term Europass had been used to denote the Europass training issued to document work placements abroad.

Box 33. **Europass as a tool for guidance and counselling**

Country	Activities	How to develop Europass?
Austria	<ul style="list-style-type: none"> • Europass considered a supporting tool for guidance personnel, in particular the Europass CV; • certificate supplements widely known and used; since 2005 mandatory use of diploma supplements at universities and <i>Fachhochschulen</i> (universities of applied sciences). 	<ul style="list-style-type: none"> • include more competence-analysis based elements; • encourage use of portfolio for all target groups and all types of education providers; • raise awareness of and cooperate with employers and guidance personnel.
Belgium	Europass electronically linked to MyVDAB: Mijn Loopbaan (electronic career portfolio) being developed to integrate Europass and the EQF and to form a basis lifelong career guidance.	<ul style="list-style-type: none"> • make user-friendly; • cooperate more with employment services to encourage use of Europass in guidance and counselling; • integrate Europass portfolio into personal portfolio.
Ireland	<p>FÁS promotes awareness among staff within national employment service centre network; advises people to keep Europass CVs up to date.</p> <p>Uses Europass:</p> <ul style="list-style-type: none"> • for own trainees who wish to travel; • to evaluate qualifications of migrants (e.g. many Polish migrants use it); • NEC promotes Europass in post-primary and adult education, among guidance counsellors; online quiz for schools. 	Align the Common European Framework for languages and the NFQ to increase recognition of Europass language passport.
Italy	NEC coordinates activities with the national agencies in charge of Community education and youth programmes, NARIC and the EURES network; links section on acquired competences in the <i>Libretto formativo</i> (training portfolio piloted in 2006) to the Europass CV, also aligned to the <i>scheda anagrafica professionale</i> (professional record card) used at employment services.	
Lithuania	<ul style="list-style-type: none"> • Euroguidance and NEC located at the same agency; jointly train advisors and career counsellors on use of Europass documents; multilingual CD as a tool for guidance personnel; • promoting Europass among private recruitment agencies, personnel/HR managers of private enterprises; • strategy to embed mobility and related learning outcomes in initial and continuing VET programmes. 	<ul style="list-style-type: none"> • raise peoples' awareness of the Europass as a tool for guidance; • ask guidance and counselling staff to inform clients on benefits of Europass; • use Europass CV and Europass Language Passport to train clients on how to present their skills; • integrate Europass CV and Europass Language Passport into existing virtual career portfolio systems.

Source: Cedefop, DGVT survey, 2006.

Countries seem to ignore the potential added value of the certificate supplements for the EQF mapping exercise which inform on learning outcomes. In early 2007, certificate supplements were easy to access and downloadable only in Austria, Denmark, France, Spain, Iceland, Norway and Sweden on their Europass websites or reference points. In the Netherlands, they are downloadable free of charge for many programmes. For others requests need to be filed and service charges apply. Other countries provide examples and/or information on the authorities which issue the documents (Germany, Ireland, Italy, Hungary, Portugal, Slovenia, Finland and the UK). In Finland a link on the Europass website leads to the inventory on the site of the National Board of Education.

Countries state that their National Europass Centres (NEC) cooperate with schools, employment services, guidance and counselling personnel and others (see table below). Some underline the need to reach out to employers (Austria, Hungary, Norway), though this might prove challenging. While Estonia and Romania, for instance, prioritise implementing and consolidating the tools as such, Belgium and Italy have started to link Europass to their own career guidance and training portfolios. Most of the other countries run information campaigns among the guidance personnel to develop Europass further ⁽³⁹⁾.

Challenges countries have identified range from linguistic inconsistencies between other national documents and the certificate supplements, differences in describing programmes and qualifications, through to compatibility with national frameworks and the European qualifications framework (EQF) and the European credit system for vocational education and training (ECVET). The trend to develop and use more e-tools, argues for helping those with limited access or less developed ICT skills.

6.4.5. Credits

For learners to transfer or build on their learning outcomes when moving across borders, mutual trust and cooperation between VET providers as well as a 'common currency' are essential. More than 15 sector-related projects, ranging from mechanical engineering and ICT to nursing, hotel and catering, were launched through the Leonardo da Vinci programme, with 24 countries involved in one or more of these projects. Complementary to its national qualifications framework, Ireland has embarked on a national credit transfer policy with a twin track approach for higher education and for further education and training. An explicit goal is to foster national and international

⁽³⁹⁾ See Table 5 in annex.

mobility. Germany and Austria have included recognition of placements abroad during training in their VET regulations.

Transferring and accumulating learning outcomes should be possible in the lifelong learning perspective (see Chapter 5) within a country's education and training system and in view of job mobility. In several countries, transfer of prior learning is possible in specific cases by way of granting exemptions from exams or subject areas, or by shortening study times (Austria, Belgium, Finland, Hungary, Norway). Italy is piloting a training portfolio approach that records formal training, to facilitate the recognition of credits.

In parallel to the consultation process on the European qualifications framework and prior to the consultation on the European Commission staff working document on ECVET (European Commission, 2006b), several countries reported discussions on development of modularised approaches and/or credit systems (Germany, Latvia, Luxembourg and Austria, although the apprenticeship model is based on a different philosophy, the *Berufskonzept*). In higher technical education and training (IFTs), Italy has developed sets of certifiable skills that can be recognised as training credits when entering other pathways in line with the agreement.

6.4.6. Leaving to match jobs and skills or to make a living ⁽⁴⁰⁾

Most Europeans, in particular older people, prefer a stable job in their home country. The Integrated guidelines for growth and jobs (2005-08) (European Commission, 2005c), however, calls on Member States to promote cross-border mobility. The reinforced recognition of professional qualifications will make labour market mobility easier for the regulated professions (Directive 2005/36/EC). In 2006, Greece, Spain Italy, Portugal and Finland reconsidered the restrictive free movement policy that followed the 2004 enlargement.

Although rates differ across countries and sectors, intra-EU mobility is generally very low. Only 4 % of Europeans have moved to another EU country and 18 % to another region since they left their parental home (European Commission, DGPC, 2005). Regional mobility is lower than average in the southern countries and new Member States, for migration between regions and commuting. It is above the average in Germany, the Netherlands and the UK. Disregarding seasonal factors, intra EU-15 mobility

⁽⁴⁰⁾ The following data refer to the main findings of the Eurobarometer survey (EB 64.1) on geographical and labour-market mobility, conducted in September 2005 and analysed by the European Foundation for the Improvement of Living and Working Conditions.

rates are low in construction and high in the hotel and restaurant sectors, real estate, renting and business activities. They are decreasing in agriculture and industry but increasing in the service sector. In 2005, according to the Labour Force Survey, 55 % of the EU-15 mobile population worked in high-skilled non-manual occupations. Low-skilled non-manual workers made up 24 % of the mobile population (European Commission, 2006a).

In Estonia, Latvia, Lithuania and Poland, employment and income related incentives, a major reason for mobility, was to motivate 7 % of the working population to move to another EU country in the next five years (Eurofound, 2006b). Nevertheless, overall intra-EU mobility is likely to remain relatively low at around 3 % (Krieger and Fernandez, 2006). Policy-makers have emphasised removing artificial obstacles to mobility, promoting mutual recognition of qualifications, and the transferability of social security and pension rights. The more fundamental and less tangible barriers seem more difficult to tackle.

Box 34. Europeans' personal mobility barriers

People's main concerns are:

- losing their social network (44 %) and support from family and friends (27 %),
- difficulties with housing and health care,
- employment-related problems (more than 40 %).

Like other mobility obstacles, language difficulties are considered less severe by those who are ready to move than by those who are not.

Source: Eurofound, 2006a and 2006b.

In the EU, young and well educated people are more likely to be mobile than those who are older and have low or average attainment levels. Thus, countries, particularly some of the newer Member States, might face brain and youth drains, worsening imbalances and affecting national economies. With 1.8 million registered immigrants throughout the EU in 2004, several countries have faced substantial inflow from non-EU countries (Eurofound, 2006). Given the projected demographic change (see Section 3.2), Europe will increasingly need to integrate people from outside into its labour market (European Commission, 2006a). However, immigrants with high education levels seem less likely to be able to take up adequate jobs than country residents or those from other Member States. A significant number of

migrants with tertiary level qualifications, therefore, are employed in low skill jobs across the EU ⁽⁴¹⁾ (see also Section 6.3.3).

Geographical and labour-market mobility seem strongly interrelated and linked to labour market regulation, industrial regimes, job and housing security and countries' welfare state models ⁽⁴²⁾. Commuting seems a substitute, primarily for the less educated.

6.4.7. Supporting mobility wisely

Mobility among learners and trainees in VET can foster labour market mobility.

To support mobility for learning and working, geographically, job-to-job and lifelong learning, a shift in mind-sets is required. Policy measures need to take the links between different policy areas into account:

- (a) include foreign language learning and a European dimension into VET; provide guidance and support on employment-related, social and personal issues;
- (b) ensure validation and recognition of prior learning; Europass, ECVET and EQF can help to make learning portable and accumulable; the certificate supplements could help relate qualifications to the EQF levels; for these tools to become effective, partnerships between training providers and stakeholders in the different countries are crucial.

There is a need to examine more thoroughly:

- (a) mobility barriers and incentives for study and employment, temporarily or long-term;
- (b) longitudinal data or detailed case studies to monitor education and career paths;

Promoting mobility as a simple remedy to address labour market imbalances, is risky. To avoid wider demographic and economic imbalance, it is important to better understand:

- (a) the role of mobility and migration in meeting the demand for labour in different areas;
- (b) the economic and social benefits and drawbacks for the places people leave or go to;

⁽⁴¹⁾ Based on contribution from Ward in Cedefop (forthcoming) fourth research report.

⁽⁴²⁾ Welfare state typology as devised by Esping-Andersen (1990): predominantly liberal, conservative or social democratic.

- (c) how to support economies and education and training facilities in weaker countries/regions to attract learners and create employment (e.g. tapping the Structural Funds and the Globalisation Fund).

Despite substantial progress, more needs to be done to realise the vision of a Europe with highly-skilled people, flexible and adaptable workforce, with a high degree of social inclusion.

List of abbreviations

AES	Adult education survey
AQF	Australian qualifications framework
CEEP	European Centre of Enterprises with Public Participation and of Enterprises of General Economic Interest
CQAF	Common quality assurance framework
CRELL	Centre for Research on Lifelong Learning
CVET/CVT	Continuing vocational (education and) training
CVTS	Continuing vocational training survey
DG EAC	Directorate General for Education and Culture
DGVT	Directors-General for vocational training
ECTS	European credit transfer and accumulation system
ECVET	European credit system for vocational education and training
EEA	European Economic Area
EFQM	European foundation for quality management
ENQA	European association for quality assurance in higher education
EQF	European qualifications framework
ERDF	European Regional Development Fund
ESF	European Social Fund
ETF	European Training Foundation
ETUC	European Trade Union Confederation
EUROSTAT	Statistical Office of the European Communities
EU-SILC	European Union survey on income and living conditions
EVC	<i>Erkennen verworven competenties</i> (accreditation of prior learning)
GDP	Gross domestic product
HBS	Household budget survey
IALS	International adult literacy survey
ICT	Information and communication technology

ILA	Individual learning accounts
ILL	Integrated lifelong learning
ILO	International Labour Organisation
ISCED	International standard classification of education
ISCO	International standard classification of occupations
IVET	Initial vocational education and training
JRC	Joint Research Centre
LdV	Leonardo da Vinci programme
LFS	Labour force survey
LLL	Lifelong learning
NACE	<i>Nomenclature generale des activites économiques dans les Communautés europeennes</i> / Statistical classification of economic activities in the European Community
NAP	National action plan
NEC	National Europass centres
NQF	National qualification frameworks
OECD	Organisation for Economic Cooperation and Development
PIAAC	Programme for the international assessment of adult competences
RPL	Recognition of prior learning
SGIB	Standing Group on Indicators and Benchmarks
SMEs	Small and medium-sized enterprises
TAFE	Technical and further education institutions
TT	Teacher training
TTnet	Training of trainers network
UEAPME	European Association of Craft, Small and Medium-sized Enterprises
UN	United Nations educational, scientific and cultural organisation
Unesco	United Nations Educational, Scientific and Cultural Organisation
UNICE	Union of Industrial and Employers' Confederations of Europe/BusinessEurope (since 1.1.2007)
UOE	Unesco, OECD and Eurostat
VET	Vocational education and training

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Annex

Table 1. **Implementation at EU level**

2002	2003	2004	2005	2006
BARCELONA EU COUNCIL <ul style="list-style-type: none"> • Working programme for improving ET systems in Europe. • Strategic framework of a European lifelong learning system. • Calls for an 'insight into demand for learning' approach as the basis of lifelong learning strategy. ET should become a world quality reference	BRUSSELS EU COUNCIL <ul style="list-style-type: none"> • Implementation of a 10-year programme on the objectives for ET systems, ensuring efficient and effective investments in human resources. • Foster transparency, recognition and quality assurance of qualifications across the EU. • Put emphasis on basic skills, languages, digital literacy and lifelong learning in ET systems. 	BRUSSELS EDUCATION COUNCIL <p>Resolution on guidance</p> <p>Conclusions on:</p> <ul style="list-style-type: none"> • Quality assurance in VET • Identification and validation of non-formal and informal learning • Decision on Europass. <p>Workshop on sectoral skills, Oct. 2004. Follow up taken on board by Cedefop</p>	EUROPASS <p>European launching conference on 31 Jan. -1 Feb. 2005 marked the start of its implementation. Since then the interactive Europass portal is available on Internet. In April 05 it served about 6 000 users daily), and from March to April 05, the number of Europass CV and language passports almost doubled (from 37 000 to 62 000).</p>	JOINT INTERIM REPORT 2006 includes reporting on VET. <p>ECVET experimentation studies started 1 Jan.</p> <p>EQF conference in Budapest 27-28 Feb.</p> <p>Quality in VET & HE Graz conference 11-12 May</p> <p>Establishment of focus group on VET teachers and Trainers.</p>
November 2002: The Copenhagen Declaration calls for enhanced cooperation in	May 2003: The Education Council agrees on European benchmarks for	The Maastricht Communiqué takes stock of progress made on the Lisbon/	National Europass Centres (NEC) established	Proposal for a Recommendation of the European Parliament and of the Council on

2002	2003	2004	2005	2006
<p>vocational education and training.</p> <p>Priorities:</p> <ul style="list-style-type: none"> • European dimension in VET • Transparency, information, guidance • Recognition of competences and qualifications • Quality assurance, teachers and trainers. 	<p>the improvement of ET systems until 2010, concerning:</p> <ul style="list-style-type: none"> • Copenhagen coordination group initiated to steer process, as well as technical working groups to develop tools required by Declaration (quality, non-formal learning, guidance, credit transfer, plus existing transparency group). • Ploteus portal launched 	<p>Copenhagen strategy and sets new priorities and strategies under the Copenhagen process on Enhanced European Cooperation in VET.</p> <p>Decision 2241/2005/EC of the European Parliament and the Council of 15 December 2004 on a single framework for the transparency of qualification and competences (Europass).</p>	<p>in all EUR-28 countries. The first meeting was held on 23 Feb 2005.</p> <p>EQF consultation including reference levels requested in Copenhagen Declaration.</p> <p>European Network on Quality Assurance in VET established</p> <p>ECVET technical specification completed and presented to ACVT.</p>	<p>the European Qualifications Framework for lifelong learning (EQF).</p> <p>ECVET consultation runs 15 Oct 2006 to 31 Mar 2007</p> <p>Presidency conference on lifelong guidance, Nov. 2006.</p> <p>Council conclusions, Nov 2006, as basis for Ministerial meeting to review process and agree Helsinki Communiqué, 5 Dec 2006.</p>

Source: European Commission, DG EAC, 2007.

Table 2. **Achievement of benchmarks by countries in EU-27, 2000-2006 (in % of target 2010).**

Country	Early school leavers		Youth attainment		Lifelong learning	
	2000	2006	2000	2005	2000	2005
EU-27	17.6	15.4	76.6	77.4	7.1	9.7
Belgium	12.5	12.6	81.7	81.8	6.2	8.3
Bulgaria	:	18.0	75.2	76.5	:	1.3
Czech Republic	:	5.5	91.2	91.2	:	5.6
Denmark	11.6	10.9	72.0	77.1	19.4	27.4
Germany (including ex-GDR from 1991)	14.9	13.8	74.7	71.5	5.2	7.7
Estonia	14.2	13.2	79.0	82.6	6.5	5.9
Ireland	:	12.3	82.6	85.8	:	7.4
Greece	18.2	15.9	79.2	84.1	1.0	1.9
Spain	29.1	29.9	66.0	61.8	4.1	10.5
France	13.3	13.1	81.6	82.6	2.8	7.0
Italy	25.3	20.8	69.4	73.6	4.8	5.8
Cyprus	18.5	16.0	79.0	80.4	3.1	5.9
Latvia	:	19.0	76.5	79.9	:	7.9
Lithuania	16.7	10.3	78.9	87.8	2.8	6.0
Luxembourg (Grand-Duché)	16.8	13.3	77.5	71.1	4.8	8.5
Hungary	13.8	12.4	83.5	83.4	2.9	3.9
Malta	54.2	41.6	40.9	53.7	4.5	5.3
Netherlands	15.5	12.9	71.9	75.6	15.5	15.9
Austria	10.2	9.6	85.1	85.9	8.3	12.9
Poland	:	5.6	88.8	91.1	:	4.9
Portugal	42.6	39.2	43.2	49.0	3.4	4.1
Romania	22.3	19.0	76.1	76.0	0.9	1.6
Slovenia	:	5.2	88.0	90.5	:	15.3
Slovakia	:	6.4	94.8	91.8	:	4.6
Finland	8.9	10.8	87.7	83.4	17.5	22.5
Sweden	7.7	12.0	85.2	87.5	21.6	32.1
United Kingdom	18.4	13.0	76.6	78.2	20.5	27.5

**Table 3a. Indicators of European competitiveness:
Economic and employment performance**

Country	Human Developm. Index 2004 (combines economic, social and educational indicators; 177 countries)		Real GDP growth per capita 2005/04 based on national currency in constant prices		Labour productivity per hour 2005 GDP (PPP) per person employed per hour		Employment growth 2005/04		Employment rate 2005 Employed persons aged 15-64 years in % of working age population		Unemployment rate Unemployed aged 15-64 years in % of labour force of same age	
	Index	Rank	% change	Rank	US\$	Rank	% change	Rank	%	Rank	%	Rank
Austria	0.944	14	1.3	29	43.4	7	0.3	29	68.6	10	5.2	13
Belgium	0.945	13	1.7	25	45.5	5	0.9	21	61.0	20	8.1	23
Bulgaria	0.816	54	6.0	6	10.6	33	2.2	7			11.5	33
Czech Rep.	0.885	30	5.7	7	22.4	24	1.4	13	64.8	15	8.0	22
Denmark	0.943	15	3.1	15	39.3	9	0.6	25	75.5	3	4.9	11
Estonia	0.858	40	9.9	1	19.5	28	2.0	9			7.9	21
Finland	0.947	11	1.8	24	38.9	10	1.5	12	68.0	11	8.5	26
France	0.942	16	0.8	32	46.1	3	0.4	27	62.3	19	9.9	30
Germany	0.932	21	0.7	33	36.4	14	-0.2	35	65.5	14	11.3	32
Greece	0.921	24	3.5	13	33.4	19	1.3	15	60.3	21	9.8	29
Hungary	0.869	35	4.0	10	22.5	23	0.0	33	56.9	24	7.3	19
Ireland	0.956	4	2.0	21	47.2	2	4.7	2	67.1	13	4.3	4
Italy	0.940	17	-1.0	36	40.7	8	0.7	23	57.5	23	7.8	20
Luxembourg	0.945	12	2.5	19	58.3	1	1.8	10	63.6	18	4.5	5
Netherlands	0.947	10	0.6	34	37.3	12	-0.6	36			4.7	9
Poland	0.862	37	3.1	15	18.7	30	2.3	6	53.0	25	18.0	36
Portugal	0.904	28	+0.0	35	22.4	24	0.1	31	67.5	12	8.1	23
Romania	0.805	60	4.3	8	10.4	34	0.7	23			6.1	16
Slovakia	0.856	42	6.3	4	20.0	26	2.1	8	57.7	22	16.2	35
Slovenia	0.910	27	3.7	11	24.9	22	-0.1	34			6.1	16
Spain	0.938	19	1.3	29	33.5	18	4.8	1	64.3	16	9.2	27
Sweden	0.951	5	2.0	21	37.5	11	1.0	19			5.8	15
Un. Kingdom	0.940	18	1.5	27	36.3	15	1.0	19	72.6	5	4.6	7
Iceland	0.960	2	3.1	15	37.0	13	3.3	4	84.4	1	2.7	1
Norway	0.965	1	1.7	25	45.7	4	0.6	25	75.2	4	4.7	9
Croatia	0.846	44	4.3	8	19.5	28	0.2	30			13.1	34
Switzerland	0.947	9	1.2	31	31.5	21	0.1	31	77.2	2	4.5	5
Turkey	0.757	92	3.7	11	12.3	32	1.1	18	45.9	26	10.5	31
Australia	0.957	3	1.4	28	35.6	16	3.5	3	71.6	7	5.2	13
Canada	0.950	6	2.0	21	34.0	17	1.4	13	72.5	6	6.8	18
China	0.768	81	9.3	2	5.4	35	0.8	22			4.2	3
India	0.611	126	6.1	5	3.5	36	2.5	5			9.5	28
Japan	0.949	7	2.7	18	32.4	20	0.4	27	69.3	9	4.6	7
Korea	0.912	26	3.5	13	19.8	27	1.3	15	63.7	17	3.9	2
Russia	0.797	65	6.7	3	12.6	31	1.2	17			8.1	23
USA	0.948	8	2.5	19	44.9	6	1.8	10	71.5	8	5.1	12

Source: Cedefop (forthcoming), based on UN, OECD and IMD; for legend and footnotes see this publication.

**Table 3b. Indicators of European competitiveness:
Education, training and student performance**

Country	Educational attainment, 2004 ⁽³⁾ ISCED 3-6		Public expenditure on active labour market programmes ⁽¹⁾ in % of GDP, 2004-05		Expenditure on educational institutions in upper secondary education ⁽⁵⁾		Ratio of students to teaching staff, 2004 (full-time equivalents)						Student performance, %, 2003 *			
	%	Ranking	% of GDP	Ranking	% of GDP	Ranking	Lower secondary education ⁽¹⁾		Upper secondary education ⁽²⁾		Tertiary education ⁽³⁾		Proficiency level 3 and higher on OECD PISA mathematics scale		Proficiency level 2 and higher on OECD PISA problem-solving scale	
							Ratio	Ranking	Ratio	Ranking	Ratio	Ranking	Scores	Ranking	Scores	Ranking
Austria	80	14	0.43	14	1.3	16	10.4	6	11.0	7	14.8	13	59.6	14	54	15
Belgium	64	23	0.92	4	2.6	6	10.6	8	9.2	4	19.4	19	67.6	7	62	6
Czech Rep.	88	2	0.13	22	1.2	20	13.5	15	12.6	13	17.9	18	63.3	11	59	9
Denmark	83	10	1.52	1	1.2	20	11.3	10					64.0	10	59	9
Finland	77	15	0.78	6	1.4	12	10.0	2	16.2	21	12.4	8	77.2	1	73	1
France	65	21	0.73	7	1.6	8	14.1	17	10.3	6	17.8	17	63.1	12	60	8
Germany	83	10	0.85	5	1.3	16	15.6	20	13.9	16	12.7	9	59.5	15	58	12
Greece	57	25	0.17	20	1.5	10	8.2	1	8.4	3	28.1	23	34.8	26	31	26
Hungary	75	17	0.21	16	1.6	8	10.2	4	12.3	11	15.6	14	53.2	20	52	16
Ireland	61	24	0.49	13	0.7	29					13.7	12	59.5	15	50	17
Italy	48	26	0.55	11	1.4	12	10.3	5	11.5	10	21.6	20	43.3	24	41	24
Luxembourg	76	16	0.29	15	1.0	25							55.5	18	49	18
Netherlands	70	19	1.12	2	0.7	29					13.6	11	71.1	4	59	9
Poland	85	5	0.19	18	1.3	16	12.6	13	13.5	15	-	18	53.1	21	46	21
Portugal	26	28	0.55	11	1.2	20	10.0	2	7.3	1	13.5	10	42.8	25	40	25
Slovakia	85	5	0.07	25	1.2	20	13.9	16	14.2	18	10.9	2	56.5	17	48	19
Spain	46	27	0.64	9	3.0	4	12.9	14	8.0	2	11.7	5	52.3	22	45	22
Sweden	82	13	1.00	3	1.3	16	11.9	12	14.0	17	9.0	1	61.0	13	55	13
Un. Kingdom	85	5	0.16	21	3.1	3	17.1	21	12.3	11	11.8	6				
Iceland	68	20			5.2	1	11.4	11	11.1	8	10.9	2	64.7	9	55	13
Norway	88	2	0.66	8	1.5	10	10.5	7	9.6	5	12.0	7	55.5	18	48	19
Switzerland	84	9	0.64	9	1.7	7	11.2	9	11.1	8			68.0	6	62	6
Turkey	26	28			0.8	28			16.9	23	16.8	16	25.8	27	16	27
Australia	65	21	0.20	17	0.9	26							67.1	8	65	4
Canada	83	10	0.18	19	3.6	2							71.6	3	65	4
China							20.0	22	16.3	22						
India					1.4	12	37.2	24	27.5	24	22.2	21				
Japan	85	5	0.06	26	0.9	26	15.3	19	13.2	14	11.0	4	70.3	5	70	3
Korea	74	18	0.10	24	2.1	6	20.4	23	15.9	19	25.2	22	73.9	2	73	1
Russian Fed.	89	1			1.4	12										
USA	87	4	0.12	23	1.1	24	15.2	18	16.0	20	15.8	15	50.4	23	42	23

Source: OECD 2005.

Table 4. Population prospects 2005-2050

Country	Median age (years)			Population aged 65 and more (%)					Population aged 15-24 (%)					Old-age dependency ratio		
	2005	2050	Rank 2050	2005	2050	Rank 2050	Dif (*)	Rank Diff.	2005	2050	Rank 2050	Dif (*)	Rank Diff.	2005	2050	Rank 2050
Austria	40.6	50.0	29	16.7	30.7	34	14.0	29	11.9	9.4	28	-2.5	17	25	55	33
Belgium	40.6	46.3	20	17.6	27.2	20	9.6	10	11.9	10.6	18	-1.3	8	27	47	19
Bulgaria	40.6	51.2	33	16.8	30.2	30	13.4	26	13.7	8.8	34	-4.9	28	24	53	30
Cyprus	35.3	44.1	11	12.1	23.0	6	10.9	14	15.5	10.7	17	-4.8	27	18	38	5
Czech Rep.	39.0	51.6	34	14.2	32.0	35	17.8	38	13.1	8.8	34	-4.3	24	20	58	35
Denmark	39.5	42.8	4	15.0	22.8	5	7.8	3	11.0	12.1	3	1.1	1	23	38	5
Estonia	38.9	45.6	17	16.5	25.3	14	8.8	6	15.7	10.1	22	-5.6	30	24	43	14
Finland	40.9	45.6	17	15.9	26.6	18	10.7	13	12.5	10.9	12	-1.6	11	24	46	18
France	39.3	45.5	16	16.6	27.1	19	10.5	12	12.7	10.9	12	-1.8	12	25	47	19
Germany	42.1	47.4	22	18.8	28.4	23	9.6	10	11.8	10.4	20	-1.4	10	28	50	23
Greece	39.7	49.3	26	18.2	30.2	30	12.0	20	12.4	9.2	29	-3.2	20	27	54	31
Hungary	38.8	49.6	27	15.2	29.0	27	13.8	27	12.8	9.5	27	-3.3	21	22	51	27
Ireland	34.2	45.8	19	10.9	25.9	17	15.0	31	14.9	9.7	26	-5.2	29	16	44	16
Italy	42.3	52.5	39	20.0	35.5	39	15.5	32	10.2	9.0	32	-1.2	6	30	69	39
Latvia	39.5	50.5	31	16.9	29.1	28	12.2	21	15.6	8.8	34	-6.8	37	25	51	27
Lithuania	37.8	51.7	35	15.5	28.8	26	13.3	25	15.7	8.8	34	-6.9	38	23	50	23
Luxembourg	38.1	42.9	5	13.8	21.6	4	7.8	3	11.0	10.8	15	-0.2	2	21	35	4
Malta	38.1	48.0	23	13.5	28.2	22	14.7	30	14.6	10.3	21	-4.3	24	20	49	21
Netherlands	39.3	45.3	15	14.1	25.4	15	11.3	16	11.7	11.2	8	-0.5	3	21	43	14
Poland	36.5	50.8	32	12.9	29.8	29	16.9	35	16.3	8.9	33	-7.4	40	18	52	29
Portugal	39.5	48.7	24	17.1	30.2	30	13.1	24	12.3	10.1	22	-2.2	15	25	55	33
Romania	36.7	50.1	30	14.8	28.7	25	13.9	28	15.3	9.1	30	-6.2	34	21	50	23
Slovakia	35.6	51.8	36	11.8	30.5	33	18.7	39	15.8	8.7	38	-7.1	39	17	54	31
Slovenia	40.2	51.9	37	15.6	32.8	36	17.2	36	13.2	8.6	39	-4.6	26	22	60	36
Spain	38.6	49.9	28	16.5	34.1	37	17.6	37	12.0	9.8	24	-2.2	15	24	66	38
Sweden	40.1	43.9	10	17.2	24.7	12	7.5	2	12.3	11.1	9	-1.2	6	26	42	12
Un.Kingdom	39.0	42.9	5	16.0	23.2	8	7.2	1	13.1	11.8	5	-1.3	8	24	38	5
Croatia	40.6	48.8	25	17.2	28.5	24	11.3	16	13.1	9.8	24	-3.3	21	26	50	23
Iceland	34.1	44.1	11	11.8	24.7	12	12.9	23	14.8	11.4	7	-3.4	23	18	42	12
Norway	38.2	43.8	9	15.0	24.3	11	9.3	8	12.2	11.6	6	-0.6	4	23	41	11
Switzerland	40.8	46.5	21	16.0	27.7	21	11.7	19	11.9	10.9	12	-1.0	5	24	49	21
Turkey	26.3	39.5	2	5.4	17.0	2	11.6	18	18.4	12.7	1	-5.7	31	8	26	2
Australia	36.6	43.6	8	12.7	23.8	10	11.1	15	14.0	11.1	9	-2.9	19	19	40	10
Canada	38.6	45.2	14	13.1	25.6	16	12.5	22	13.5	11.0	11	-2.5	17	19	44	16
China	32.6	44.8	13	7.6	23.6	9	16.0	33	16.5	10.6	18	-5.9	32	11	39	9
India	24.3	38.7	1	5.3	14.8	1	9.5	9	19.1	12.6	2	-6.5	36	8	22	1
Japan	42.9	52.3	38	19.7	35.9	40	16.2	34	11.0	9.1	30	-1.9	13	30	71	40
Korea	35.1	53.9	40	9.4	34.5	38	25.1	40	14.5	8.5	40	-6.0	33	13	65	37
Russian Fed.	37.3	43.5	7	13.8	23.0	6	9.2	7	17.0	10.8	15	-6.2	34	19	38	5
USA	36.1	41.1	3	12.3	20.6	3	8.3	5	14.2	12.1	3	-2.1	14	18	33	3

Dif (*) Difference between percentage 2050 and 2005 (in percentage points). Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. World population prospects: the 2004 revision and world urbanization prospects: the 2003 revision. <http://eso.un.org> [13.12.06]

Table 5. **Europass today and tomorrow**

Country	State-of-play as reported by the NEC, September 2006	Countries' activities and impact of Europass since Maastricht (DGVt survey)	Taking Europass further for guidance and counselling (DGVt survey)
AT	<ul style="list-style-type: none"> • NEC located at the LvD National Agency, website operational (approximatively 300-500 visitors per day); • online version of Europass-CV very attractive, • NEC is particularly active in implementing the Europass Mobility, document available online (507 issued July-December 2005; 900 January-June 2006); • certificate supplements online. 	<p>Remarkable impact of information events targeting educational institutions and guidance personnel.</p> <p>Documents: Certificate supplements widely known and used; since 2005 mandatory use of diploma supplements at universities and <i>Fachhochschulen</i> (universities of applied sciences).</p> <p>Challenges: further develop the Europass-mobility to make it more suitable for university exchange programmes (Erasmus) and compatible with ECVET and EQF/NQF.</p> <p>Europass language portfolio (reference to pilot for integration in upper secondary general and VET programmes).</p>	<p>Considered a supporting tool for guidance personnel, in particular the European CV.</p> <p>How to develop Europass?:</p> <ul style="list-style-type: none"> • include more competence-analysis based elements; • encourage the use of portfolio for all target groups and all types of education providers; • raise awareness of and cooperation with employers and guidance personnel.
BE (FI)	<p>NEC and website operational and active in using the Europass Mobility (188 documents issued as of March 2006).</p>	<p>Europass electronically linked to MyVDAB where users can fill in updatable personal and protected file; ESF3-project <i>Mijn Loopbaan</i> (electronic career portfolio) being developed which can integrate Europass and the EQF, follow-up system for lifelong career guidance; vulnerable target groups will need more assistance to use e-tool.</p>	<p>How to develop Europass?</p> <ul style="list-style-type: none"> • develop into user-friendly tool; • cooperate more with employment services so that they include Europass in guidance and counselling; • integrate Europass portfolio into personal portfolio.

Country	State-of-play as reported by the NEC, September 2006	Countries' activities and impact of Europass since Maastricht (DGV survey)	Taking Europass further for guidance and counselling (DGV survey)
BE (Wa)	NEC and website operational and active in promoting Europass and using the Europass Mobility (320 documents issued).	July 2006 Europass meeting on Certificate supplement to focus on competences/ learning outcomes.	How to develop Europass at EU-level? <ul style="list-style-type: none"> • define main job profiles in sectors with high mobility; • link Europass to employment services' electronic system.
BG	No NEC appointed, Europass portal available. Europass mobility, Certificate supplements will be implemented later.	Forthcoming ensure the legal preconditions necessary to implement Europass.	
CY	NEC and website operational (85 Europass Mobility documents initiated).		How to develop Europass? <ul style="list-style-type: none"> • make it compulsory for job applications in the public and semi-public sector; • make it mandatory for universities, colleges and upper secondary technical and vocational education to issue diploma and certificate supplements; • include additional documents like the European computer driving licence (ECDL).
CZ			
DE	NEC and website operational, very active in implementing the Europass Mobility; steep increase in interest since the 2005 Europass launching event, users appreciate simple procedure.	The Vocational training act 2005 allows periods abroad to be recognised as equivalent to training within Germany; promoting mobility for apprentices, spreading use of Europass.	How to develop Europass? <ul style="list-style-type: none"> • ensure users are well informed on the different tools; • create a module for better exploitation of statistical data.
DK	NEC and website operational; NEC located at Cirius; Certificate supplements online in four languages.		

Country	State-of-play as reported by the NEC, September 2006	Countries' activities and impact of Europass since Maastricht (DGVt survey)	Taking Europass further for guidance and counselling (DGVt survey)
EE	NEC and website operational, set up May 2005 (200 Europass Mobility documents expected to be issued in 2006).	NEC cooperates with different guidance centres (eg. Eures); Nordic-Baltic Europass meeting organised in May 2006. Challenges: technical problems with Europass Mobility; difficult to reach employers; terminology problem (people mix up Europass with EU passport).	<ul style="list-style-type: none"> • NEC informs people and employers about benefits but no plans yet to use Europass as a guiding tool; • intend to use it mainly within portfolios to assess qualification levels of personnel (Europass language portfolio).
EL	NEC and website operational (405 Europass Mobility documents issued, 200 initiated since January, most of them within the LdV programme, some for Youth and Grundtvig but none for Erasmus; database allows follow-up of procedure).	NEC has high policy profile; intention to make Europass a requirement for those applying as trainers in VET institutes.	
ES	NEC and website operational (2177 Europass mobility documents initiated, 903 issued since July 2005).		How to develop Europass? As a tool: <ul style="list-style-type: none"> • to facilitate the horizontal and vertical mobility of people within the labour market inside and outside the country; • to collect the training experience in other countries and where possible establish which training can be recognised and capitalised on.
FI	NEC and website operational, NEC located at the National Board of Education.		
FR	NEC and website operational. NEC located at the Socrates/ LdV national agency (3 770 Europass Mobility documents issued since August 2005); register of certificate supplements being set.		

Country	State-of-play as reported by the NEC, September 2006	Countries' activities and impact of Europass since Maastricht (DGV survey)	Taking Europass further for guidance and counselling (DGV survey)
HU	NEC and website operational (670 Europass Mobility documents issued in 2005, 796 by September 2006).	Introducing benefits of the Europass to employers.	
HR	Europass portal being translated.		
IE	NEC and website operational, NEC located at the National Qualifications Authority.	<ul style="list-style-type: none"> • Europass launched at FÁS' annual 'Opportunities' exhibition 2006 (Ireland's largest careers exhibition); • FÁS promotes awareness among staff within national employment service centre network; uses the Europass for its own trainees who wish to travel; uses it to evaluate qualifications of migrants (in particular, Polish migrants seem to use Europass); inform people on the need to keep Europass CVs up-to-date; • NEC is promoting Europass in post-primary and adult education: briefing guidance counsellors; online quiz for schools (start of 2006/2007 academic year; promotional leaflets and a CD to schools in autumn 2006). 	How to develop Europass? NQA intends to align the CEF and the NFQ to increase recognition of Europass language passport.
IS	NEC and website operational.		How to develop Europass? As integral part of education in life skills (as of lower sec – piloted).
IT	NEC and website operational, located at ISFOL (since May 2005), very active in implementing the Europass Mobility (2 348 documents issued in 2005 and 2 571 by September 2006).	NEC cooperates with all key actors and coordinates promotion and dissemination activities with LdV, Socrates and Youth national agencies, NARIC national centre and EURES network (national event in December 2005);	

Country	State-of-play as reported by the NEC, September 2006	Countries' activities and impact of Europass since Maastricht (DGVt survey)	Taking Europass further for guidance and counselling (DGVt survey)
		<p>Link from section on acquired competences in the <i>Libretto formativo</i> (training portfolio officially agreed in 2005 and piloted in 2006) to the Europass CV (also aligned to the <i>Scheda anagrafica professionale</i> (professional record card) used at employment services.</p> <p>Challenges:</p> <ul style="list-style-type: none"> • to coordinate application of Europass (issuing the documents); • to ensure information and access for users; • correspondence/coherence between national documents and European supplements, as systems/approaches to plan and describe VET programmes vary considerably in the Member States; also linguistic problems; • Europass Curriculum Vitae – Europass Language Passport: proper monitoring on personal tools not feasible as available on different web sites; only sample surveys possible; • Europass-Mobility: real-time monitoring on users and type of intervention; making application form easier; more training and technical assistance for users; • Europass Certificate Supplement – Europass Diploma Supplement: ensure access and gather information on users and impact; reflection with all actors started in March 2006. 	

Country	State-of-play as reported by the NEC, September 2006	Countries' activities and impact of Europass since Maastricht (DGV survey)	Taking Europass further for guidance and counselling (DGV survey)
LI			
LV	NEC and website operational (62 Europass Mobility documents issued in 2005, 171 by September 2006).		
LT	NEC and national website operational; data base of Europass Mobility documents created (650 Europass mobility issued); Europass certificate supplement available on internet; 17 400 Europass CV, 6 400 Europass language passport templates downloaded.	<ul style="list-style-type: none"> • Euroguidance and NEC located at the same agency; advisors and career counsellors trained jointly by NEC and Euroguidance how to use Europass documents; • CD with programme on Europass CV and Europass Language Passport in four languages (Lithuanian, English, French and German) as a tool for guidance personnel; • NEC also promotes Europass among private recruitment agencies, personnel/HR managers of private enterprises (targeted seminar in June 2006); • strategy to embed mobility and the related learning outcomes in initial and continuing VET programmes. 	<p>How to develop Europass? As a tool for guidance personnel by:</p> <ul style="list-style-type: none"> • asking them to inform their clients on Europass and the opportunities it provides; • using Europass CV and Europass Language Passport forms to train clients on how to present their qualifications and skills; • integrating Europass CV and Europass Language Passport into existing virtual career portfolio systems. <p>Therefore, very important to raise peoples' awareness of the Europass as a tool for guidance.</p>
LU	NEC and website operational (94 Europass mobility documents issued); same numbers as for previous Europass-Training expected.		<p>How to develop Europass? As a tool for guidance personnel in VET institutions as well as for students and workers themselves which offers comprehensive info for mobility, recognition and employment.</p>
MT	NEC appointed.		

Country	State-of-play as reported by the NEC, September 2006	Countries' activities and impact of Europass since Maastricht (DGV survey)	Taking Europass further for guidance and counselling (DGV survey)
NL	NEC and website operational, Europass mobility promoted (709 documents issued in 2005).	Specific website on mobility set up in line with user demand for more comprehensive information (additional funding from Dutch authorities).	How to develop Europass? <ul style="list-style-type: none"> • create Europass consortium in which all guidance centres are directly and indirectly linked; • cooperation with Euroguidance, ENIC/NARIC and NRP (using same consultative structures, communication channels etc).
NO	NEC and website operational, Europass introduced in 2005; Europass Mobility promoted (481 requests since 2005).	All candidates who pass a craft exam receive the Europass Certificate Supplement together with the craft certificate.	How to develop Europass? <p>Use Europass CV to inform individuals and employers about their skills and competences.</p>
PL	NEC and website operational.	Emigrants seem to make use of Europass.	
PT	NEC and website operational; Europass mobility promoted (306 documents issued in 2005 and 573 in 2006).		How to develop Europass? <ul style="list-style-type: none"> • improve transparency and mobility within education, from education to work, within the world of work, within the country and across borders; • ensure effective promotion among education and training and employment providers and other bodies receiving the documents. • train guidance personnel specifically to: <ul style="list-style-type: none"> – use Europass as career guidance tool; – support those who want to move for occupational and learning purposes.
RO	No NEC appointed, Europass portal not available; Europass mobility, Certificate supplements will be implemented later.	Europass certificate supplements for CVT programmes provided by the accredited training providers.	How to develop Europass? <p>Make first all its components operational in order to incorporate the learning outcomes.</p>

Country	State-of-play as reported by the NEC, September 2006	Countries' activities and impact of Europass since Maastricht (DGVt survey)	Taking Europass further for guidance and counselling (DGVt survey)
SI	NEC and website operational (181 Europass mobility documents initiated, 78 already issued; 27 within the LdV and Erasmus programmes).		Reply not related to Europass: Establish a national forum for career counselling to better coordinate the services' work and to establish an integrated information network in order to obtain all information, e.g. on training and education opportunities, employment, assessment of informally gained knowledge at one place.
SK	NEC and website operational.		How to develop Europass? <ul style="list-style-type: none"> • for career guidance and promoting mobility in the education and labour market; • for developing a credit system.
SE	NEC and website operational (460 Europass Mobility documents issued).		
TR	No NEC but contact person appointed. Europass mobility, Certificate supplements will be implemented later.		
UK	NEC and website operational (785 Europass Mobility documents issued April to June 2006).	Challenge: low recognition to date => build into other institutional frameworks.	

Countries: names, codes and protocol order

The order of protocol for the Member States is alphabetical, based on the original written form of the short name of each country.

Code	Short name (original language)	Short name (English)	Code	Short name (original language)	Short name (English)
BE	Belgique/België	Belgium	MT	Malta	Malta
BG	България (Bǎlgarija)	Bulgaria	NL	Nederland	Netherlands
CZ	Česká republika	Czech Republic	AT	Österreich	Austria
DK	Danmark	Denmark	PL	Polska	Poland
DE	Deutschland	Germany	PT	Portugal	Portugal
EE	Eesti	Estonia	RO	România	Romania
IE	Éire / Ireland	Ireland	SI	Slovenija	Slovenia
EL	Ελλάδα (Elláda)	Greece	SK	Slovensko	Slovakia
ES	España	Spain	FI	Suomi/Finland	Finland
FR	France	France	SE	Sverige	Sweden
IT	Italia	Italy	UK	United Kingdom	United Kingdom
CY	Κύπρος (Kypros) / Kibris	Cyprus	EEA countries		
LV	Latvija	Latvia	IS	Ísland	Iceland
LT	Lietuva	Lithuania	LI	Fürstentum Liechtenstein	Liechtenstein
LU	Luxembourg	Luxembourg	NO	Kongeriket Norge	Norway
HU	Magyarország	Hungary			

Cedefop (European Centre for the Development of Vocational Training)

Zooming in on 2010

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vocational education
and training

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Manfred Tessaring

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Reassessing vocational education and training

Joint efforts of European countries, social partners and the European Commission to modernise vocational education and training (VET) for a more socially cohesive and competitive Europe, have shown results. But more remains to be done. VET has to be seen as an investment in the future for young people to acquire the right skills and to boost learning opportunities for Europe's 80 million low-qualified people and those older than 40.

The report presents progress in and challenges for devising equitable, effective and efficient VET systems, based on information from individual countries, the EU and international sources. The report highlights the implications of demographic and labour market trends. It discusses progress in devising national qualification frameworks, ensuring quality, validating non-formal learning and providing lifelong guidance and questions whether teachers' and trainers' roles and professional development are sufficiently addressed. Conclusions are supported by statistical data and research findings as well as examples from non-EU countries, thus providing sound evidence for policy-makers.



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