



editorial

This is a tumultuous time for Europe. The much anticipated return to economic and employment growth, following the economic crisis of 2008-10, was put on hold in most EU Member States as a result of economic austerity and a gloomy economic outlook for the global economy. Europe as a whole saw its unemployment rate climbing to historically high levels, with marked consequences for employment prospects of its younger generation. The very high rates of youth and long-term unemployment are serious threats to social cohesion of European societies.

In this negative economic environment, a speedy return to job creation constitutes a holy grail. High employment levels are needed to stem further discouragement of the European workforce. Promise of more and better quality jobs is also key for efficient absorption of Europe's increasingly talented workforce, one in which workers do not succumb too often to the discouraging reality of skill mismatch. In this respect, we need to understand better and learn from the type of policies and institutions that have assisted some EU Member States to rise above the tide during these challenging times. Anticipation of the specific occupations and sectors likely to constitute sources of job growth in forthcoming years is also a key contribution to EU policy-making.

Cedefop has worked tirelessly towards these goals in 2012, as it has further refined its skill supply and demand forecasts. It has contributed to development of the EU skills panorama online tool, investigated causes of skill mismatch further and identified key sectoral policies that can promote growth of key high value-added sectors, such as the green economy. More importantly, we have set the foundations to provide accurate evidence-based policy conclusions in forthcoming years via development and execution of two new pan-European surveys – the employer's skill needs survey and skill mismatch survey of employees.

We hope 2013 will surprise Europe positively, and engines of growth will quickly resume at a faster pace. We also hope that more and better jobs will become available for Europe's citizens and that this will provide a lasting exit strategy from rising rates of poverty and social strife we have been facing in the recent past.

Cedefop skills analysis team

ANTICIPATING EUROPE'S SKILL NEEDS

EUROPE'S SKILLS CHALLENGE: 2013 FORECAST



Cedefop forecasts provide a better understanding of the skills needed for tomorrow's jobs and of sectors and countries running risks of labour market imbalances. The 2013 results confirm that currently weak employment demand increases the risk of skill mismatch.

Cedefop's 2013 forecast (baseline scenario) indicates that between 2010 and 2020 more than 83 million jobs will open up in the EU (plus Norway, Iceland and Switzerland). Of these, about eight million will be new jobs created by a modest economic recovery bringing a return to employment growth. Most new jobs will be created at the higher and lower ends of the job spectrum, signalling some risks of job polarisation. The other 75 million job opportunities will arise owing to the need to replace those leaving the labour market due to retirement, migration, job changes, etc. There will be job opportunities for all types of occupations, but most will be in services. The trend towards more skill-intensive or non-routine jobs will continue at all levels, as

jobs will become less routine. A significant increase in skill supply is projected, as more than 83% of the workforce will have at least medium-level qualifications in 2020. Following the economic crisis, employment demand remains weak and is lagging behind skill supply. This substantially increases a risk of people taking jobs for which they are overqualified, displacing those with lower levels of qualification in the short term.

Alongside its baseline forecast, Cedefop also considers two other scenarios. The main differences in the scenarios are assumptions about the strength and speed of economic recovery. The optimistic scenario assumes a speedier economic recovery and greater confidence that leads to increasing investment and consumer spending. The pessimistic scenario assumes a prolonged economic slump lowering confidence and depressing investment and consumer spending. In the baseline scenario, employment recovers to its 2008 pre-crisis level between 2017 and 2018. The optimistic scenario assumes this happens earlier, between 2015 and 2016. Under the pessimistic scenario employment will remain below its 2008 level beyond 2025. All results of the Cedefop 2013 skills supply and demand forecast are available online from April 2013 on Cedefop's website under 'Skills forecasts: online data and results' (<http://www.cedefop.europa.eu/EN/about-cedefop/projects/forecasting-skill-demand-and-supply/skills-forecasts.aspx>).



THE EU SKILLS PANORAMA IS ONLINE

In December 2012, the European Commission launched the EU skills panorama, a website presenting quantitative and qualitative information on short- and medium-term skill needs, skill supply and skill mismatches (<http://euskillspanorama.ec.europa.eu>).

The panorama acts as a central access point providing data, information and intelligence on skills trends in occupations and sectors at national and EU levels, including Cedefop data and forecasts. It provides short topical analyses and offers information on methods used to generate labour market and skills information and intelligence. The EU skills panorama will be regularly updated with the latest data.



EUROPEAN EMPLOYER SURVEY ON SKILL NEEDS

In 2012, Cedefop successfully piloted the employers' survey on skill needs in nine EU countries, the Czech Republic, Germany, Ireland, Spain, France, Italy, Hungary, Poland and Finland. A total of 8 500 employers were surveyed (local establishments). The survey investigates changing skill needs of enterprises in countries, sectors and occupations, and what drives the differences. A task-based approach was tested to enquire about skill needs using six generic domains (cognitive, interaction/social, physical, learning, environmental, self-direction), as well as occupation-specific skills for one occupational group per sector. Items on newly-emerging tasks and preparedness for these tasks address current skill gaps and future skill needs.

As an example, Figure 1 looks at some generic tasks for personal care workers in health services (in human health services) and software and applications developers and analysts (in IT and other information services). Green skills are more important for personal care workers and their importance is increasing at a faster pace compared to software developers. Problem-solving and task discretion are particularly important for software developers with importance of these tasks growing more rapidly compared to personal health workers. In both occupations task discretion and problem-solving are important.

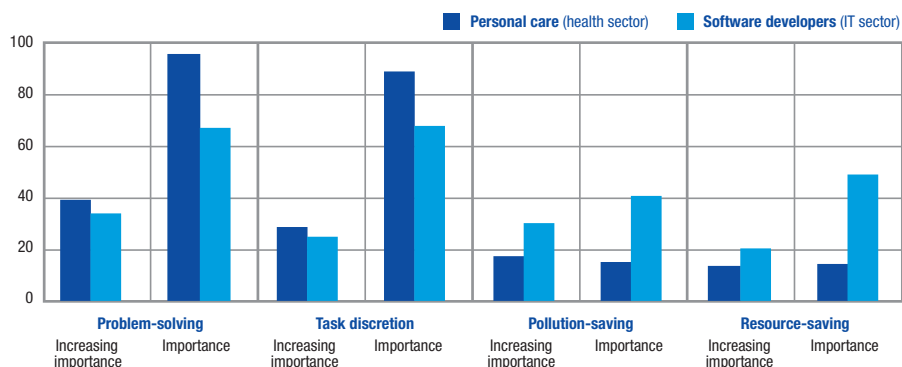
A publication presenting illustrative results and recommendations on implementing a full-scale survey is due in May 2013. This document will be accompanied by a user manual/toolkit for the survey instrument for use by other organisations at national, sectoral or regional levels, along with an anonymised data set.

In agreement with and supported by the European Commission, a full-scale European survey will be derived from the pilot survey. It will focus on transversal/ generic skills. Preparation will start in spring 2013 and fieldwork is planned for the beginning of 2014.

WASTING TALENT: SKILL MISMATCH DURING THE ECONOMIC CRISIS

Research undertaken by Cedefop, and presented in the *Employment and social development in Europe 2012* report (chapter 6), reveals that one out of three European employees is either over- or underqualified, with overqualification increasing by about 5% over the past decade – assuming that educational requirements within jobs have not markedly changed. Countries with higher qualification mismatches, such as the Mediterranean countries, share com-

Figure. Establishments in EU-9 reporting selected tasks as important and increasing in importance for personal care workers (in the health sector) and software developers (in the IT sector)



Source: Pilot employer survey on skill needs, Cedefop, 2012.

mon features. They tend to have lower levels of public investment in education and training, which might reduce the quality and ability of education and training systems to respond to changing labour market needs. Demand for graduates is low and less high-skilled jobs are available. They also have lower expenditure on labour market programmes and more rigid and segmented labour markets.

Even a good match in terms of educational qualifications, however, does not mean that individuals necessarily possess the skills required for their jobs and the labour market more generally. Young people tend to be more often than other age groups overqualified, but also underskilled. For this reason, it is essential that younger people blend learning with work as part of their upper secondary education. This enables them to benefit from a faster transition from school to work and to access more stable employment.

Yet, the reasons for mismatches extend beyond an ineffectiveness of education and training systems to respond to labour mar-

ket needs. They include inadequate company training, geographical barriers to mobility and adverse working conditions, especially in sectors affected by high skill and labour shortages such as manufacturing, construction, hotels and restaurants and the health sector. An effective reduction of skill mismatch requires both supply and demand policy measures. Reforms increasing flexibility and responsiveness of education and training systems, including improved recognition of skills acquired outside formal education or abroad, ultimately need to be combined with pursuing measures and policies that support creation of innovative and high-skilled jobs in sufficient numbers.

In 2013, Cedefop will launch the first pan-European skill mismatch and skill obsolescence survey. The purpose of this survey is to allow empirical analysis of the incidence and determinants of skill mismatch and obsolescence.

The data set will be made available to any interested Skillsnet members and researchers in 2014.

CEDEFOP

Events on skill needs in 2013

- Sectoral anticipatory system – Methodology and technical approaches (April 2013) – Workshop: by invitation only
- Methods for anticipating skill needs (July 2013) – Joint Cedefop/ETF/ILO workshop: by invitation only
- Knowledge-sharing greening TVET and skill development (September 2013) – Workshop: by invitation only
- Skill supply and demand forecast (September 2013) – Workshop: by invitation only
- Validation of employer survey instruments and large-scale testing (autumn 2013) – Workshop: by invitation only

Publications on skill needs in 2013

- Quantifying skill needs in Europe
- Labour market outcomes of vocational education and training in Europe: evidence from the labour force survey
- Skills for a low-carbon Europe
- Piloting a European employer survey on skill needs: methods and findings
- Employer survey on skill needs: tool kit and user manual
- Updated skill demand supply forecasts and potential imbalances
- Skill mismatch in Europe: what do we know and what can policy-makers do

THE INTERAGENCY WORKING GROUP ON GREENING TECHNICAL VOCATIONAL EDUCATION AND TRAINING AND SKILL DEVELOPMENT

With the employment package, the Commission identifies transition to a low-carbon and resource-efficient economy as one of three main structural challenges facing Europe. In particular, green economy and green sectors are considered to offer the highest potential for employment creation in the future. Vocational education and training (VET) and skill development play a key role in boosting this potential by supplying the right skills for (green) jobs.

Against this background, Cedefop and a wide range of other European and international organisations agreed that a collaborative effort in technical vocational education and training (TVET) and skill development is required for meeting the challenges brought about by green transformation of society and the economy. They set up an interagency working group (IWG) on greening TVET and skill development. Many international agencies and EU organisations working on TVET and skill development have already confirmed their willingness to participate in such an open-ended informal IWG, namely the Asian Development Bank, Cedefop, the European Training Foundation, the International Labour Organisation, the Organisation for Economic Cooperation and Development, Unesco-Unevoc, the United Nations Institute for Training and Research, the United Nations Economic Commission for Europe, and the World Bank. Representatives of bilateral agencies working on in-



tersection of TVET and the green economy will also be invited to meetings as observers.

SKILLS FOR A LOW-CARBON EUROPE: ROLE OF VET IN A SUSTAINABLE ENERGY SCENARIO

Cedefop is currently finalising a study investigating the impact of sustainable energy policies on future skill demand in four strategic domains for a low-carbon transition. Combining quantitative approaches (scenario analysis) and qualitative approaches (policy case studies), the study seeks to provide insights for effective policies for initial and continuous VET activities. Some of the main findings indicate that:

- employment projections show positive contributions of strategic domains for a low-carbon transition to employment. Employment associated with development of wind energy capacity is the most significant; while solar thermal and energy efficient buildings are each expected to grow

by over 20% per year from 2012 to 2020; a great degree of uncertainty however, still remains regarding the overall impact of a policy-driven transition to green growth on labour market outcomes. Transition towards a low-carbon economy is best understood as a driver of structural labour market change;

- the key challenges for VET associated with transition to a low-carbon Europe are broadly aligned with the challenges for VET more generally;
- lack of wholesale response of VET systems associated with transition to a low-carbon Europe are likely to be aggravated by an absence of channels to take account of market insights, derived labour demand and corresponding low awareness of labour supply constraints.

Having initially identified instances of ongoing replication and transfer of practices within Member States, this research has developed a framework in which to assess the potential transferability of practices across countries – dependent upon the configuration of their existing systems for developing skills.

NEWS FROM SKILLSNET MEMBERS

GERMAN BIBB-IAB QUALIFICATIONS AND OCCUPATIONAL-FIELD PROJECTIONS

Latest results of the German BIBB-IAB qualifications and occupational-field projections are now available in English on: <http://www.bibb.de/en/61097.htm>.

Results of the forecast show that changes in education and employment behaviour will mitigate shortages of skilled workers in Germany. At macroeconomic level, no serious shortages are to be expected in the coming years. However, until 2030 shortages are expected in 'manufacturing, processing and repair/maintenance occupations', 'occupations involving the sale and marketing of goods', 'hotel/restaurant and cleaning occupations', 'occupations in the media sciences, humanities, social sciences or arts' and 'health, social and personal care occupations'.

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LEARNING, WORK AND PRACTICE: NEW UNDERSTANDINGS

This book's original contribution to crowded literature on work and learning will attract strong international interest. Its focus on philosophy of learning at work brings a fresh perspective to a topic normally viewed through psychological, anthropological and sociological eyes. It assembles a host of internationally-recognised scholars who reflect on various philosophies of work-based learning.

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SUSTAINABLE INDUSTRIAL GROWTH – WHAT IS REQUIRED OF THE SKILLED WORKFORCE

The project looks into the skills and competences that vocationally-trained employees in the manufacturing industry need to have to continue to contribute to growth and innovation in products and processes. The project

examines how sustainable innovative growth companies across industries innovate within energy and the environment, and whether focus on energy and the environment as competition parameters makes it necessary to change the weighting of competences and skills in industry. The project is carried out by the Danish Technological Institute for the Danish Ministry of Children and Education.

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ADAPTING VET OFFERS TO SKILLS ANTICIPATION STUDIES AND LABOUR MARKET NEEDS

An issue arousing high interest and commitment in the Catalan Public Employment Service (SOC) is to achieve better matching between vocational education and training and sector skill needs, and thus design of adapted educational programmes.

The SOC focuses on analysis of current VET versus labour market development to

improve adult learning systems to supply the skills needed. This analysis is done by identifying training needs. The tool consists of a VET map (analysis of VET supply and how it fits labour market needs), matching the VET offer with sectors offering highest levels of recruitment and employment, and a survey of employers to ascertain the workers' skills needed.

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LLIGHT'IN'EUROPE: LIFELONG LEARNING, INNOVATION, GROWTH AND HUMAN CAPITAL TRACKS IN EUROPE

In association with seven education institutions, Zeppelin University has recently launched a new FP7 project LLLIGHT'in'Europe: lifelong learning, innovation, growth and human capital tracks in Europe. Its major scope is to introduce a supplementary measure of human capital explaining innovation competence: complex problem-solving (CPS) skills, defined as an individual's cognitive ability to solve problems. A survey planned for 2012-14 will collect data needed for analysing sources and outcomes of the CPS skill.

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SHORTAGE OCCUPATIONS AND THEIR REGULATION IN HUNGARY

Regional committees in Hungary create lists of shortage occupations based on estimates provided by employers. A recent study reveals that these jobs are mainly in less popular areas and people trained for these jobs remain unemployed or work under rather unfavourable conditions, including low wages.

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ROMANIA: MAPPING THE NEED FOR TVET GRADUATES

In 2011, an employer survey revealed the difficulties companies face due to reducing numbers of employees in Romania. Sectors worst affected by the crisis are now among those where vacancies are on the rise, and recruitment difficulties are found in occupations requiring TVET-type qualifications. Personal profiles of candidates are considered more important than their technical skills in the selection process and subsequent hiring decision.

Most vacancies still open are due to lack of adequate levels of qualifications of skilled workers and unattractive working conditions in companies. In the short term, companies anticipate a rise in demand for skilled personnel for all Romania's regions.

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MEASURING WORK ACTIVITIES AND SKILL REQUIREMENTS OF OCCUPATIONS: EXPERIENCES OF A EUROPEAN PILOT STUDY WITH A WEB SURVEY

The article evaluates a method for measuring work activities and skill requirements of 160 occupations in eight countries, used in EurOccupations, an EU-FP6 project. Additionally, it explores how the Internet can be used for measuring work activities and skill requirements.

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MODERN VOCATIONAL SPECIALTIES IN POST-SECONDARY EDUCATION AND TRAINING

In summer 2012, the National Organisation for the Certification of Qualifications and Vocational Guidance in Greece (Eoppep – www.eoppep.gr) approved the curriculum for a new branch of specialties under the name 'energy technician' (for wind energy, solar energy and renewable energy technicians) as a post-secondary vocational training (level 4) to be implemented by public and private institutes of vocational training from autumn 2012.

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DISCO II FINAL CONFERENCE 'DESCRIBING LEARNING OUTCOMES AND SKILLS PROFILES. EUROPEAN TERMINOLOGIES OF SKILLS AND COMPETENCES'

The final conference of the Leonardo da Vinci TOI project, European dictionary of skills and competences (DISCO II), took place on 18 October 2012 in Rome, at ISFOL. Final results of the project were presented, in particular an online multilingual thesaurus (DISCO) as terminological support for describing and translating skills and competences, occupations, personal CVs, job vacancies and job requirements. DISCO consists of about 97 000 terms and about 9 000 phrases available in Czech, English, French, German, Hungarian, Italian, Lithuanian, Slovak, Spanish and Swedish.

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HUNGARIAN NATIONAL FORECASTING SYSTEM

The Institute of Economics, CERS HAS, in Hungary will complete its national forecasting system in February 2013. The system delivers labour demand and supply forecasts for 10 industries and 200 occupational groups over a five to 10-year horizon. The forecasting model is modular, making use of micro-level survey and administrative data

in behavioural models and estimates. Besides working papers for the modules and an overall final report, the project creates a web-based information system to support decisions of experts and actors on the labour market. Details can be found at <http://elorejelzes.mtaki.hu/english/>

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NEUJOBS – SKETCHING EUROPEAN LABOUR MARKET(S) IN 2025

The aim of NEUJOBS – a large-scale research project in the seventh framework programme of the European Commission – is to decipher possible dynamics of labour markets in Europe facing four main transitions: skill, socioecological, societal and geographical. First main findings in terms of skills transition confirm that a concept of dividing skills into low, medium and high levels should be developed as different types of abilities become important. Routine work, for instance, can no longer be seen as purely low-skilled work and non-cognitive skills such as sociability are more important in a set of current job ads than generic cognitive skills.

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SKILLS MONITORING IN EUROPEAN REGIONS AND LOCALITIES

Skills monitoring in European regions and localities was the topic at the seventh annual meeting of the European network on regional labour market monitoring in Krakow, Poland. About 90 participants from 17 EU Member States discussed various aspects of the new challenges, opportunities, future aims and targets, different methods and approaches to skills monitoring. The programme, presentations and documentation are available on www.regionallabourmarketmonitoring.net/

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