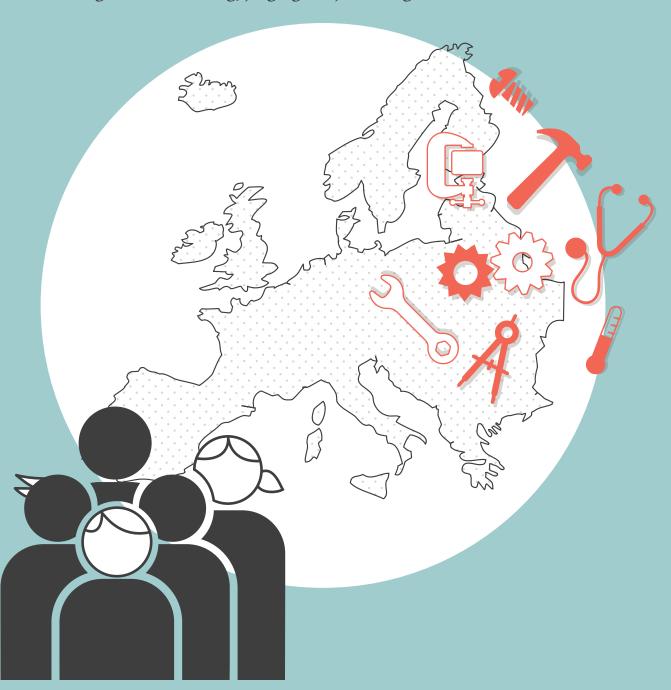
Study

// VOCATIONAL EDUCATION AND TRAINING FOR YOUNG PEOPLE IN EUROPE

Fostering mutual learning, forging the future together











Vodafone Stiftung Deutschland

// PREFACE

VOCATIONAL EDUCATION AND TRAINING (VET) SHOULD BE IN THE BEL ETAGE IN THE EUROPEAN EDUCATIONAL MANSION

Nobody today can predict exactly what the world of work will look like in the future. Digitisation, internationalisation and demographic change are currently altering the requirements of the labour market fundamentally. Amid all this dramatic change, the educational and employment opportunities available to young people in Europe must be actively reconfigured and reshaped. Europe's "educational mansion" must have generous dimensions, but also a clear floor plan. It must have many doors through which people may enter and exit and many corridors through which they may pass.

With a view to advancing this urgent undertaking in an appropriately non-partisan fashion, the Cologne Institute for Economic Research (IW Köln) has analysed the potential of vocational training for young people in Europe with the support of the Hans-Böckler-Foundation, the Konrad Adenauer Foundation, and the Vodafone Foundation Germany.

Systems of vocational education and training foster specific skills and lead to specific professional qualifications. As such, they facilitate entry into the labour market. They empower young people economically and socially, and they support companies in their efforts to fill their requirements for skilled employees. This study shows, however, that initial vocational training in many countries still falls far short of its full potential.

The European Single Market is also a European market for labour. It follows that young people from Stockholm to Palermo and from Lisbon to Warsaw must be afforded equal opportunities to lay down solid foundations for their working lives and should have equal access to high-quality vocational education and training provision. The country-by-country analyses in the present study show that the European vocational education and training landscape is highly heterogeneous and must necessarily remain so. No single ideal vocational education and training model exists. Nevertheless, it is clear that all the countries studied have identified innovative approaches in particular areas that contribute to the strengthening of vocational training. This study, then, sets out to identify successful approaches and to present them in a way that fosters mutual learning between countries and assists them in shaping the future of vocational education together.

The European educational mansion must be made attractive and its future viability must be secured. It must offer the younger generation opportunities to develop their competences and aptitudes so that they can make an effective contribution of their own to economic life and to society as a whole. This is a task for trade unions and employers in equal measure, for it is they who control labour relations in many EU states and work with the state and other organisations influencing social policy to ensure vocational training is afforded recognition and perceived as attractive.

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// CONTENTS

	An overview of key findings from the study	4
1	Aims and approach of this study	8
2	Vocational education and training and youth unemployment in Europe	10
3	Diversity in vocational education and training –	
	seven approaches compared	16
	Germany	18
	Italy	20
	Poland	22
	Portugal	24
	Sweden	26
	Switzerland	28
	United Kingdom	30
4	Central aspects of vocational education and training	
	in a direct comparison between countries	32
	Acceptance and prestige	33
	Company participation	34
	Commitment from the social partners	35
	Permeability	35
	Flexibility	36
	Differentiation	37
	Transparency	37
	Vocational guidance	38
	Mobility	38
	Responsiveness of VET system to labour market needs	39
	Country comparison at a glance	40
5	Résumé and outlook	44
	List of interviewees	46
	Literature	48
	Acknowledgements	

// AN OVERVIEW OF KEY FINDINGS FROM THE STUDY

This study shows how vocational education and training (VET) provision in Europe can continue to be enhanced in order to boost the opportunities of young people in Europe as they enter the labour market. The approaches taken in response to the challenges presented by youth unemployment and the need to equip the younger generation with skills and qualifications currently differ strongly from country to country.

The present study proceeds from seven qualitatively and quantitatively substantiated country-specific analyses for Germany, Italy, Poland, Portugal, Sweden, Switzerland and the United Kingdom and goes on to identify the potential of vocational education in Europe and critical success factors necessary for its unfolding. Insights into vocational education and training derived from the country-based analyses can strengthen transnational mutual learning throughout Europe.

THE STRONGER THE INVOLVEMENT OF COMPANIES IN (DUAL-TRACK) TRAINING, THE BETTER THE CHANCES OF THE YOUNG GENERATION ON THE LABOUR MARKET. PRACTICALLY-ORIENTED TRAINING LOWERS YOUTH UNEMPLOYMENT AND SAFEGUARDS ACCESS TO SKILLED LABOUR FOR EUROPE IN A COMPETITIVE GLOBAL ENVIRONMENT.

The success of vocational education and training stands and falls with its acceptance in the labour market. The earning and career opportunities of graduates of VET programmes are highest when those programmes are closely geared to labour market requirements. This can best be assured when compa-

GERMANY

The high quality of the match achieved between dual VET training and labour market requirements through the strong involvement of the social partners in Germany can act as a stimulus for developments elsewhere.

nies take an active role in training programmes and ensure that knowledge is communicated in the context of realistic tasks and problems.

In countries with established dual-track models of VET training, this type of involvement is deeply rooted and youth unemployment rates are low. In many other countries, companies have yet to be motivated to become more involved in vocational training. Financial incentives for companies, such as those currently available in England, can prove useful in this context. But companies also need to be shown that the value added by company-based training outweighs its costs in the medium to long term, as is already the case in Germany and Switzerland today.

Italy can serve as a good example for how VET programmes can be kept flexible at regional level in spite of general minimum standards applying.

LIVED SOCIAL PARTNERSHIP FORMS THE BED-ROCK OF TRAINING GEARED TO LABOUR MARKET REQUIREMENTS. THE INVOLVEMENT OF THE SOCIAL PARTNERS BOOSTS THE RELEVANCE OF TRAINING CONTENT AND ENSURES THAT A BALANCE OF INTERESTS IS STRUCK.

In all the countries studied, the social partners are actively involved in vocational education, be it through defining training content or in planning VET provision. However, the degree to which they are involved and in a position to exert influence varies strongly from country to country.

As their participation contributes decisively to the development and delivery of VET programmes coinciding with the needs of the labour market; their opportunities to exert influence should be anchored more firmly at an institutional level in national guidelines and regulations. This would ensure more transparent procedures and could bolster the willingness of the social partners to become involved in the process or to deepen their commitment to it. This would also make it easier to strike a balance between the interests of companies and their trainees or young employees.

WHETHER VOCATIONAL EDUCATION AND TRAINING ENJOYS ACCEPTANCE AND IS UTILISED DEPENDS ON ITS IMAGE. THE BENEFITS AND CAREER OPPORTUNITIES ASSOCIATED WITH LABOUR MARKET ORIENTED VOCATIONAL TRAINING MUST BE COMMUNICATED MORE EFFECTIVELY.

Vocational education and training currently has a major image problem in many European countries, for example Italy or Portugal. Large segments of the population view vocational traineeships as only a second-best or even third-line option. This makes it comparatively difficult to leverage the advantages of labour market oriented vocational education as a powerful instrument for integrating young people into the labour market.

It is therefore important that the benefits associated with high-quality VET provision which is closely oriented to the requirements of the labour-market are communicated more robustly. For this to succeed, however, the precondition that vocational education must open up attractive career paths has to be met. Depending on the circumstances prevailing in specific countries, this may entail either a qualitative improvement in the particular training programmes available or moves to improve the connectivity of VET with gener-

POLAND

The Polish VET system is distinguished by a high degree of permeability, which is important for the acceptance of vocational education in the wider population.



al education qualifications. In some countries, like Poland or Portugal, being able to gain a parallel higher education entrance qualification is an important factor to improve the acceptance.

THE EDUCATION AND TRAINING SYSTEM AS A WHOLE MUST FACILITATE PERMEABILITY SO THAT VOCATIONAL AND ACADEMIC EDUCATION CAN BE COMBINED MEANINGFULLY TO OPEN UP INDIVIDUAL CAREER OPTIONS.

The acceptance of VET can also be promoted by creating links between vocational education and higher education pathways or improving the recognition of acquired competences. A permeable education system sends a message to young people and their parents that vocational education and training leaves many options open and will not leave them trapped in an educational dead end. This opens up the prospect of employment and earning opportunities without closing the door on more advanced education options at a later stage. In many countries, a substantial gap exists between the degree of permeability which exists on paper and in real-world scenarios, as is the case in Portugal; efforts to reduce this are necessary.

The great strength of vocational education and training is its relevance to the labour market. This must be facilitated and kept current by defining training content flexibly.

The structuring of vocational training must be oriented towards keeping it in step with the constantly changing world of work and facilitating its adaptation to the requirements of specific regions or sectors of industry. This flexibility can be achieved in various different ways through institutional structures.

When VET trainees learn in real working environments, they are directly confronted with state-of-the-art technologies and processes. In Germany and Switzerland, the necessary flexibility is guaranteed by ensuring that the content of training regulations has an open structure and is phrased in a technology-neutral fashion. This approach also makes certain that training profiles remain valid for longer periods of time and it reduces the overall administrative overhead. Training regulations in both countries are modernised as and when this becomes necessary.



In other countries, such as the United Kingdom, and increasingly also Poland, the requisite flexibility is provided by modular qualifications frameworks. The modular system allows for many different combinations of training programme content and facilitates regional differentiation. Modules can be updated individually when the need arises. The example of Italy is different again. Here, the national minimum standards are formulated in such a way that they leave individual regions sufficient room for manoeuvre.

VOCATIONAL EDUCATION AND TRAINING SHOULD BE OPEN TO INDIVIDUALS WITH A RANGE OF TALENTS AND ABILITIES. THIS CREATES WIDE-SPREAD ACCESS TO VOCATIONAL QUALIFICATIONS AND MAKES DIVERSE SKILLS PROFILES AVAILABLE TO COMPANIES.

Maximising the diversity of the VET options and training places on offer makes it possible to reach out to the greatest possible number of target groups and to cater appropriately to their needs. Adequately differentiated provision boosts quality and the accuracy of the fit between training programmes and the economy. People with diverse talents are thus facilitated in gaining a vocational qualification, and companies benefit from access to a broad range of different skills profiles.

Outreach programmes designed specifically to support low-achieving young people or migrants such as those offered in Sweden, Poland or Portugal can reduce dropout rates in training programmes and promote improved labour market integration. Programmes making specific provision for high-achieving school pupils such as those available in Great Britain and the dual-track courses offered at the universities of cooperative education in Germany uncover specialist and management talent and can contribute to more widespread acceptance of vocational education.

SWITZERLAND

Switzerland shows how the value added to businesses by productively deployed VET trainees receiving high-quality training can motivate a large number of companies to become involved in company training.

YOUNG PEOPLE NEED HIGH-QUALITY AND UNBIASED CAREERS COUNSELLING WHEN CHOOSING BETWEEN VOCATIONAL AND ACADEMIC QUALIFICATION TRACKS.

Vocational education in Europe is often still (and not without reason) described as a "hidden world". Not everybody succeeds in beating a path through the jungle of existing opportunities available, and that fact is reflected in the decisions that are made on training and education. Only when training pathways, their content and the labour market prospects associated with them are publicised can young people reach informed decisions, together with their parents, on the educational paths they wish to follow. Companies also prefer applicants whose competences and potential they can appraise accurately on the basis of their qualifications.

From that point of view, it is important that the VET system should be as transparent as possible. In addition to a clear legal framework and thoroughly documented occupational profiles, careers counselling of a qualitatively high standard can also make an important contribution towards increased transparency. Vocational guidance currently shows room for improvement in all the countries studied. The UK has already embarked on this process and scored initial successes.

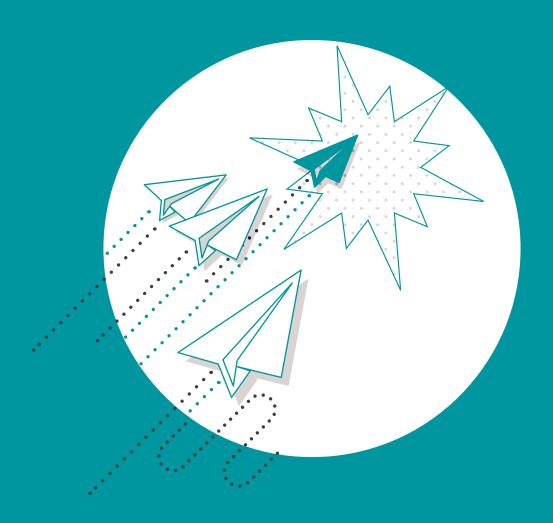
Vocational education and training in the United Kingdom is enjoying increasingly high levels of acceptance as a result of the emergence of new dual apprenticeship programmes tailored to the needs of specific target groups.

MOBILITY PROMOTES EDUCATION AND EMPLOY-MENT OPPORTUNITIES. MOBILITY AT NATIONAL LEVEL ENSURES REGIONAL NEEDS ARE BALAN-CED, AND MOBILITY WITHIN EUROPE STRENGT-HENS THE EUROPEAN LABOUR MARKET AND ITS INTERNATIONAL COMPETITIVENESS.

International work experience and foreign language skills are becoming more and more important in the globalised economy as a whole and in the specific context of the European Single Market. Periods spent abroad, in particular, boost the personal development, self-reliance and organisational skills of those who avail of these opportunities. To date, European mobility programmes have largely been targeted at students in tertiary education, and the mobility of vocational trainees in Europe has been, and is currently, rather limited. A stronger focus on this area could clearly pay dividends, and the EU plans to extend the Erasmus+ Programme to this end. As trainees in vocational programmes are younger than third-level students, more comprehensive provision for the specific accommodation needs of young people will be required in this context, and services for socially disadvantaged young people will need to be strengthened. It is envisaged that more attention will be paid to making information available to this target group, motivating them to participate in programmes and providing appropriate financial support where this is necessary.

In all the countries studied, mobility at national level also lagged behind ideal levels. A stronger focus should be placed on achieving a balance of supply and demand between regions.

// AIMS AND APPROACH OF THIS STUDY



There is no such thing as a single ideal vocational education and training system. Approaches used in different countries can arrive at the same successful results even though they have taken different paths to get there. In this sense, they can be functionally equivalent. This study sets out to identify potential opportunities and success factors for vocational education and training in Europe through in-depth analysis of seven different countries.

This study differs from other studies. It takes a systemic view of the topic of vocational education and training (VET) in Europe while also considering how VET provision is ingrained in the institutional contexts of the selected countries. In doing so, it is guided by the principle that reforms of systems that have evolved historically and are subject to political influence can only be as valuable as they prove to be fitting in the given setting. When the integration of measures into existing structures is not harmonious, their desired effects may be impeded or even negated. This has been demonstrated time and again through reforms that have been implemented with the best of intentions but with poor results, and through similarly well-intentioned but ill-fated offers of international assistance.

The present study takes a qualitative approach which is underpinned by quantitative and statistical analysis and goes beyond the pure marshalling and interpreting of key statistical indicators. This allows insights that transcend borders and may inject momentum into policy formation to be derived – without succumbing to a "one size fits all" approach.

In Chapter 2, issues that are currently proving challenging in Europe are illuminated and reform endeavours described.

In order to ensure the study would reflect a representative spectrum of different framework conditions, stakeholders, responsibilities and levels of action, seven different countries were selected for analysis: Germany, Italy, Poland, Portugal, Sweden, Switzerland and the United Kingdom. This selection of countries offers a representative cross-section of the regionally highly diverse models of VET training in Europe and the approaches taken in the sector. Dual-track training systems are represented, as are full-time school-based and modular structures.

In Chapter 3, the vocational training systems in the individual countries are described in short profiles. The information presented here summarises the results of in-depth country-by-country analyses that also encompassed a considerable number of interviews with experts and participants.¹

In Chapter 4, the core results of the country studies are presented systematically in the form of direct comparisons between countries across a range of issues. This comparative analysis reveals where potential opportunities exist for countries to learn from one another and work on particular issues together. It becomes evident that functional equivalents can sometimes be identified. In other words, different pathways and approaches in particular areas of vocational education and training, with roots in different contexts, can be shown to lead to similarly successful results. As such, the study goes far beyond a mere comparison of the different systems. With its approach rooted in systemic country-by-country compari sons, it facilitates the identification of insights that can lend impetus both to the strengthening of vocational education across Europe in general and to the particular strengthening of dual-track VET components.

Chapter 5, finally, offers a conclusion and a short outlook. It highlights the areas in which the need for cross-border action in Europe is evident and shows the roles individual countries can play in stimulating discussion and action on specific issues. The conclusion shows where success factors have been identified and how the existing potential of vocational education and training in Europe can be exploited more successfully in the future.

// VOCATIONAL EDUCATION AND TRAINING AND YOUTH UNEMPLOYMENT IN EUROPE



"Europe's future depends on its youth. Yet, life chances of many young people are blighted."

COMMISSION OF THE EUROPEAN COMMUNITIES, 2009: An EU Strategy for Youth: Investing and Empowering

Youth unemployment in many European countries currently stands at worryingly high levels. In 2014, 5.5 million young people between 15 and 24 years of age were registered as unemployed in the European Union (EU) at the beginning of the year (Eurostat, 2015). The youth unemployment rate stood at 22 per cent. The rate shows considerable variation from country to country, ranging from below ten per cent in Switzerland and Germany to almost forty per cent in Portugal and Italy (Figure 1). In addition, more than two million young people across the EU were classed as NEETs ("not in education, employment or training") (Cedefop, 2014). This situation has multiple causes. Many countries are still struggling with the repercussions of the European economic and financial crisis. Structural causes such as high barriers impeding entry to the labour market also contribute to high levels of youth unemployment. Last but not least, many young people encounter difficulty in finding suitable employment because they are unskilled or lack the skills which are in demand on the labour market. Across Europe, unemployment rates are highest among semi-skilled and unskilled young people and adults. Gaps in the monitoring systems that track data on the training and labour markets in many countries mean that the exact numbers of people who lack suitable qualifications cannot be pinpointed. A survey carried out by McKinsey (2013) in

UNEMPLOYMENT RATE (PERSONS AGED BETWEEN 15 AND 24) Figures in per cent 50 40 30 10 2010 2011 2012 2013 2014 2005 2006 2007 2008 2009 EU 28 Italy Portugal UK Poland Sweden Switzerland Germany Source: Eurostat

eight European countries showed, however, that 27 per cent of companies reported difficulty in filling positions due to young people lacking relevant skills.

Paradoxically, the rising needs of business for qualified specialist employees – which already often go unmet today – are particularly acute in countries with high rates of youth unemployment (McKinsey, 2013). Vocational training nevertheless counts as a "hidden world" in many European countries, and the significant role it has to play alongside academic education is often barely visible (OECD, 2014). The question therefore arises as to how VET systems should be reconfigured so that they can meet the skill needs of industry and also become more visible and more attractive to young people interested in pursuing options that are likely to lead to good jobs.

In Germany, youth unemployment stands at a very low level in comparison to other countries. This has kindled much interest from abroad in the German VET system. The dual-track German system of initial vocational education and training in two distinct learning locations, vocational schools and the in-company setting, is undoubtedly a key factor behind the successful integration of young people into the labour market in Germany. But while the label "export hit" has been deployed liberally and often, a growing body of opinion suggests that purely copying elements of this training system or even attempting to replicate the entire system is unlikely to be crowned by success. Attempts to transplant features of a given system cannot work unless the characteristics and background conditions of the recipient country are given due consideration.

SUCCESS FACTORS IN REFORMS

Vocational education and training systems are not only integrated solidly into country-specific institutional structures; they are also rooted in their social and cultural frameworks (Barabasch/Wolf, 2011; Euler, 2013). For that reason, particular approaches can work well in certain countries, while they would not work in others, or would fail to gain the levels of acceptance required in order to achieve desired outcomes.

This is a story also told in more than 450 education reforms implemented in OECD countries between 2008 and 2014 (OECD, 2015). Almost 30 per cent of these reforms were geared to improving the quality or the relevance of VET pro-

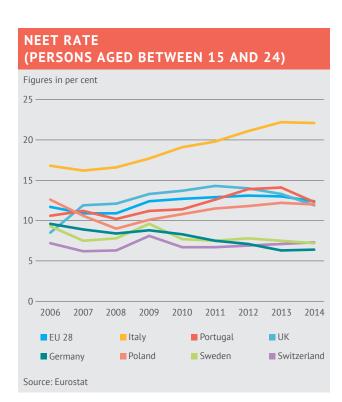
grammes. Whether such reforms lead to the desired outcome depends greatly, however, on the context.

This becomes clear when looking at Germany as an example. The dual VET system in Germany has evolved over time. It is anchored firmly in the economy and society and enjoys a high level of acceptance as a result of this long-standing tradition. This environment is conducive to companies being prepared to commit themselves to strong involvement in training. In other countries without such traditions, mustering this kind of commitment from companies can represent a huge challenge when attempts are being made to strengthen the labour market relevance of VET programmes by involving companies to a stronger degree. But this is a challenge which countries can tackle pro-actively. Historical developments result from processes that can be (politically) influenced.

In the present study analysing selected European vocational education and training systems, contextual factors like this are given consideration in order to accurately identify potential opportunities and success factors for future-proofing vocational training. The individual country reports are substantiated through reference to relevant statistical indicators. A comparison based purely on statistical evidence would, however, only allow very limited conclusions to be drawn. The consideration of contextual factors is essential when interpreting key performance indicators in order to avoid jumping to premature conclusions (Wittmann, 2010). This will be exemplified with reference to two key performance indicators in particular, the "youth unemployment rate" and the "proportion of school students taking vocationally-oriented courses".

YOUTH UNEMPLOYMENT AND ATTACHMENT TO THE LABOUR MARKET

Statistics on youth unemployment have dominated media coverage since the crisis. However, they do not reflect the situation of all young people by any stretch. Since unemployment statistics are based only on the number of young people who are either in work or registered as unemployed, they can tell us nothing about the number of young people who are still in education or who are unavailable to the labour market for other reasons. But unemployed young people who are not registered as unemployed because they are unavailable to the labour market form a particularly vulnerable group. It follows that it makes sense to consider the NEET rate (the proportion



of young people "not in employment, education or training") as an important supplemental indicator alongside the unemployment rate (Figure 2). This indicator not only reveals the extent to which young people are detached from the labour market, but also acts as a measure of the extent to which they are excluded from other forms of participation in society (Eurofound, 2012). In 2014, 7.5 million of close to 57 million young people aged between 15 and 24 in the 28 EU member countries were recorded as NEET (Eurostat, 2015).

The time taken by young people to find a job and job security are also useful indicators that can be considered alongside unemployment rates in order to arrive at a meaningful interpretation of the latter. The briefer the period of time during which young people are unemployed, the lower the risk that they will turn their backs on the labour market altogether. In 2009, young people in the EU took an average of 6.5 months to find work (Eurofound, 2015). In the United Kingdom, job searches lasted 3.4 months, and in Italy, they went on for an average of 10.5 months – a considerable difference. Overall, 68 per cent of young people had a job one year after qualifying; 53 per cent of these had full-time jobs of indefinite duration. Large differences between countries can be seen on this metric as on others, with figures ranging from 29 per

cent in Portugal to 86 per cent in Germany. These drastic disparities between the different countries demonstrate that the explanatory power of performance indicators is limited when they are taken in isolation; all of these statistics must be seen in the context of the country-specific institutions and regulatory frameworks in which they have transpired.

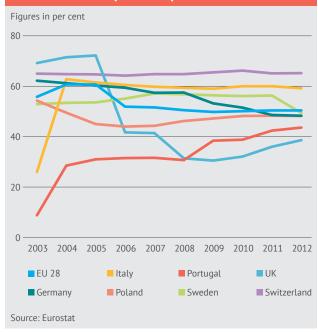
MEASURING PARTICIPANT NUMBERS AND THE PRACTICAL ORIENTATION OF VET PROGRAMMES

Pure juxtaposition of statistical indicators can even lead to completely erroneous interpretations, as is shown by the example of the development of the trend in the proportion of school pupils engaged in vocationally-oriented courses of education as a proportion of all school pupils at upper secondary level (Eurostat, 2015). A rise in the figure does not necessarily demonstrate that vocational education is expanding. Meaningful interpretation of this figure requires, rather, specific knowledge of which educational pathways in the relevant country are classified as "vocational". The rapid increase in the proportion of school pupils in vocational courses in Italy at the beginning of the new millennium resulted purely from an administrative reclassification of the courses in

question; more young people than before were not pursuing vocational qualifications. The strong "decline" in vocational education in the United Kingdom can also be explained with reference to statistical data collection methods and does not reflect substantively altered educational choices. In 2005, for example, the minimum duration of apprenticeships was newly set.

Nor do the raw numbers of young people participating in VET programmes allow any judgement to be made as to the degree to which work-based learning is emphasised, the manner in which the programmes are delivered in different learning settings, or the target groups that they cater for; different models are in use in every country (Cedefop, 2015). Although almost half of all school pupils in the EU are enrolled on vocationally-oriented courses of education, scarcely 27 per cent of these pupils combine school-based learning with learning in the workplace (European Commission, 2014b). And the mere fact that programmes include a measure of work-based learning does not by any means signify that they can be equated with the dual-track vocational training systems that operate in Germany and Switzerland. Such combinations also include the simple integration of work experience placements in full-time school-based education.

PROPORTION OF SCHOOL PUPILS IN VOCATIONALLY-ORIENTED EDUCATION PROGRAMMES (ISCED 3)



EU ACTION ON YOUTH UNEMPLOYMENT

In recent years, the struggle against high rates of youth unemployment has led to vocational education and training becoming more prominent and gaining greater significance on the European political agenda. In 2013, an EU summit resolved central measures against youth unemployment in the form of the European Youth Guarantee and the Youth Employment Initiative (European Commission, 2013a).

The sustained reinforcement of work-based learning in vocational training forms an important component in the majority of pertinent EU initiatives. This has been prompted by international comparative studies that have demonstrated that young people who follow dual-track vocational pathways (or at least programmes with strong alternance training components) have a significantly lower risk of unemployment and cope markedly better with the school-to-work transition than young people with a general education and those who have taken full-time school-based educational paths (Cedefop, 2013; Eichhorst et al., 2012; Eurofound, 2012; European Commission, 2013b).

The most important current EU measures include the European Youth Guarantee, the Youth Employment Initiative and the European Alliance for Apprenticeships.

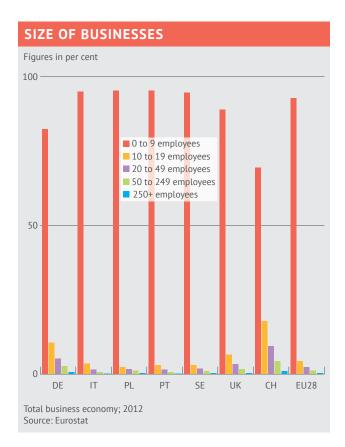
- The **Youth Guarantee** provides that all young people under the age of 25 should receive an offer of a job, a training course or a high-quality apprenticeship or internship place within four months of leaving school or becoming unemployed. The European Social Fund (ESF) has made 10 billion euros available annually for the implementation of the Youth Guarantee and associated reforms and measures for the years 2014 to 2020. The measures funded are geared to giving early school leavers and low-skilled young people a second chance at gaining skills and qualifications (European Commission, 2014a). All countries have incorporated vocational training models featuring work-based learning into their implementation plans.
- In addition, a further six billion euros have been made available through the **Youth Employment Initiative**; this funding is particularly intended to support regions with youth unemployment running at more than 25 per cent.
- In July 2013, the European Alliance for Apprenticeships was launched. Intended to promote the exchange of the member countries in the area of vocational education, it focuses on work-based learning and pursues three aims: promoting high quality in VET programmes, broadening the diversity of programmes available, and improving the image of vocational education and training. In June 2015, a brochure published by the European Commission presented various initiatives forming part of the Alliance for Apprenticeships under the headings of "Earn & Learn" and "Train & Gain" (European Commission, 2015b).

In 2014 alone, 22 country-specific recommendations for strengthening vocational education and training and workbased learning were issued by the European Commission to member states (European Commission, 2014b). The extent to which it proves possible to implement these recommendations, which have been phrased in very general terms, will, like the degree to which they prove successful, only become clear over the course of time. Evaluation studies are not yet available. However, country-specific recommendations do not adequately exploit the potential for drawing on cross-border success factors to improve VET provision. It seems important

that the funding made available is used to initiate lasting structural reforms. Only when the diverse causes underlying high youth unemployment are tackled in a focused manner are young people likely to be helped in the long-term.

The issue of cooperation in the area of vocational education and training is, however, not fundamentally new terrain for the EU. It was already an integral component of the Lisbon Strategy. Adopted in the year 2000, the Lisbon Strategy was intended to make the EU the most competitive and dynamic economy in the world. In 2002, the Copenhagen Process began, the vocational education counterpart of the more widely known Bologna process in the realm of tertiary education. In 2010, a ten-year cooperation plan relating to initial and continuing vocational education and training was elaborated in Bruges as part of the Europe 2020 strategy. The Bruges Communiqué represented a major step towards focusing more strongly on the significance of vocational training. Concrete aims were defined, including improvements in the training of trainers, the strengthening of connectivity to the labour market, the implementation of ECVET (European Credit System for Vocational Education and Training), the establishment of benchmarks at European level, exchange on best practice and the continued development of Europass. In 2015, when the first monitoring report was presented, it attested that member states had at least embarked on the project of revitalising vocational education in a structured fashion (Cedefop, 2015). In June 2015, the Riga Communiqué was published. The targets for the period from 2015 to 2020 are more flexible than those set out in the Bruges Communiqué, with each country being given leeway to arrive at the optimal solution for its own specific circumstances. The stated aims include the reinforcement of work-based learning, among other means through the stronger involvement of the social partners, improvements to quality assurance mechanisms, access to vocational education and training for all, greater emphasis on key skills in vocational training, and improvements in the training of those who work in the area of vocational training.

These various measures taken by the EU to strengthen vocational education and training have been flanked by a range of activities undertaken by the social partners at European level. Employer organisations and trade unions have formulated recommendations for action for the EU, member states, employer organisations and companies which are geared to improving the quality and reputation of vocational



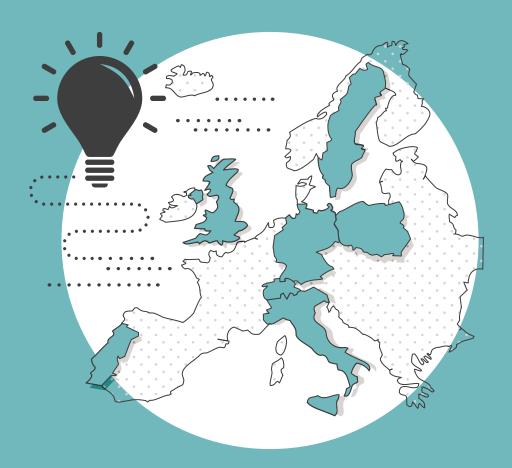
education (BUSINESSEUROPE, 2012; ETUC, 2014). BUSINESS-EUROPE, the umbrella organisation of European employers' organisations, has appealed, for example, to the employers' organisations in all EU states to participate in the design and adaptation of curricula. Only when these reflect current labour market demand will they gain the acceptance of industry. Over and above this, appeals have been voiced that the associations should encourage their member companies to become more involved in vocational training. The Euro-

pean Trade Union Confederation (ETUC) has advocated, for example, for the rights of trainees in companies.

Whether such measures aiming to bolster the commitment of industry to vocational training fall on fruitful ground is likely to depend to a strong degree on the respective economic environments. The size structure of companies plays a role, as small, medium-sized and large companies have very different (human and financial) resources to invest in the realm of training than those available to micro companies. In Germany and Switzerland, for example, the medium-sized companies which form the backbone of the dual training system are common and the proportion of micro companies is relatively lower than in other European countries (Figure 4). Finally, the structure of the economy also influences the shaping of the educational system, as the skill needs of industry, for example, differ from those in the services sector; such differences must be reflected accordingly in the configuration of VET provision.

Finally, the success of vocational education and training stands and falls with its visibility and acceptance among young people. Third-level academic study continues to enjoy higher social prestige than vocational education and training in many countries. It is all the more surprising, then, that the McKinsey survey (2013) reported that the majority of students in just those countries where vocational training is viewed with scepticism reported that their search for work would perhaps be easier if they had taken up vocational training options and that they regretted not having done so. This evidence shows that considerable potential for the strengthening of vocational education and training and its acceptance exists and that this "hidden world" deserves to enter the consciousness of the wider public and receive more public attention.

// DIVERSITY IN VOCATIONAL EDUCATION AND TRAINING - SEVEN APPROACHES COMPARED



"The Copenhagen Process on Enhanced European Cooperation in Vocational Education and Training was launched as a European strategy to improve the overall performance, quality and attractiveness of VET in Europe."

Communiqué of the European Ministers of Vocational Education and Training, the European Social partners and the European Commission, 2006: Helsinki Communiqué on Enhanced European Cooperation in Vocational Education and Training In this chapter, the vocational education and training systems of seven selected countries – Germany, Italy, Poland, Portugal, Sweden, Switzerland and the United Kingdom – are presented in the form of short profiles that give an overview of the core elements in each system.

These countries were selected in order to represent and illustrate the variety of system structures and approaches in vocational training that exist in Europe. To this end, countries with a dual vocational training system – Germany and Switzerland belong in this category – were included alongside vocational training systems dominated by schools – Italy, Poland, Portugal and Sweden – and a modularly structured vocational training system in the United Kingdom. It must be noted at this point that all of these countries have mixed systems to some degree, each of which already contains elements from others.

The country profiles are each structured according to a uniform schema. Each begins with an account of the historic development of the respective system, since the current structure of vocational education and training systems, their reputation and prestige, and possible leverage points for reforms can be better understood against the background of how each system emerged and has continued to evolve. The structure of each VET system is then described. This is followed by a summary of important reforms implemented in the recent past. Each profile then examines the status and significance of vocational education in the respective country and the compatibility of the skills imparted with those required in the respective labour markets.² The parallel structure replicated in each country profile is intended to make functional equivalents that exist in different contexts

visible and to highlight potential opportunities for mutual learning between countries. The aim is to successfully identify operating principles that can be developed further in other countries and so be used to strengthen vocational education in Europe.

The country profiles are based on qualitative analyses underpinned by quantitative-statistical data. In-country interviews with experts and VET participants allowed the results of literature and data analysis to be soundly contextualised and appraised. Some of the remarks made in these interviews on particularly striking features or developments in individual countries have been included in the country profiles as illustrations of issues or trends.

In the fourth chapter, the main results from the individual country analyses are then subjected to cross-border analysis which in turn allows the formulation of insights with the power to foster mutual learning between countries. This means that the central points which emerged in the country analyses are taken up once more, but this time in a cross-sectional and in-depth analysis of specific issues. These aspects include the acceptance and prestige enjoyed by vocational education, the participation of companies, the involvement of the social partners, and permeability, flexibility, differentiation, transparency, career guidance provision, mobility, and the matching of skills and labour-market demand.

This two-step analytical approach allows the key success factors underlying vocational education and training to be identified in cross-border comparisons and for central successful operating principles for vocational education and training in Europe to be derived from this.



Today's vocational training system in Germany roots back to the medieval crafts guilds. Training in the trades today still features the traditional trajectory with the three stages of apprentice, journeyman and master craftsman. These days, however, apprentices are no longer taken into the family home by their masters, but conclude a contract with a training company in which their rights and obligations as employees are set out in binding form. Statutory competence for the training of apprentices was transferred to the trade associations, as successors of the guilds, in 1897. Together with the vocational schools movement initiated by the Munich schools superintendent Kerschensteiner, this established the basic outlines of today's dual-track VET system.

In the wake of industrialisation, company-based training of apprentices in industrial settings developed along the same lines as the model used in the crafts and trades. The "German Committee for Technical Education" (Deutscher Ausschuss für Technisches Schulwesen) founded by the Association of German Engineers VDI in 1908 made a significant contribution to the harmonisation and structuring of industrial vocational training. Vocational education finally entered the modern era with the passing of the Vocational Training Act (Berufsbildungsgesetz - BBiG) in 1969. The Act represents the first uniform statutory basis for vocational training in Germany to apply across all sectors. It was most recently amended comprehensively in 2005.

STRUCTURE OF THE VOCATIONAL EDUCATION AND TRAINING SYSTEM

The German vocational education system is structured in three subsystems, the dual system, the school-based vocational training system and a transition system. The dual system, as the most important area, is largely supported by the commitment of companies in the private sector. Trainees learn their chosen occupations in two parallel settings, in-company and through part-time attendance at vocational schools. In the school-based vocational training system, students earn vocational qualifications through attendance at full-time vocational schools that is supplemented with work experience phases.

Besides these two branches, there exists a transition system which offers preparatory vocational training that does not

lead to a certified professional qualification, but prepares students to begin an occupational training programme.

New entrants to the vocational training sector are roughly divided across the three systems as follows: in 2013, 51 per cent of trainees entered the dual-track system, 22 per cent the school-based VET system, and around 27 per cent the transition system. Almost 480,000 people participated in final examinations in the dual system in 2013; the pass rate stood at 89.9 per cent.

"The positive image of dual vocational training is strongly related to the tripartite system of social partnership. In the dual system of vocational training, we make decisions together, shape the system together and take responsibility for it together."

(Ulrich Nordhaus, DGB)

In the dual-track system, in contrast to purely school-based systems, access to the system is not formally regulated and no school leaving certificate is required. The training is nevertheless regarded highly by companies and the social partners. More than half the companies who are entitled to take on dual-track trainees do so. One of the reasons behind this is that the training regulations specify minimum standards applicable throughout the Germany, but also leave companies considerable scope to deliver these flexibly within their own operational contexts. Cooperation between companies that team up to offer shared training is also facilitated. Training regulations are jointly determined by the social partners and are based on the requirements of the labour market. In 2015, around 330 recognised training occupations currently exist in Germany.

RECENT AND CURRENT REFORMS

In the year 2005, the Vocational Training Act was comprehensively overhauled and key points were revised and extended. Changes were made in the areas of initial VET, continued training, and retraining. In addition, the area of preparation for initial vocational training was recognised as part of the VET system. It was also made possible for young people who had completed school-based training rather than dual-track training to be admitted to the final examinations conducted by the chambers. Further innovations included the statutory

// KEY FACTS: GERMANY Unemployment to population rate 80,767,463 3.9% Population (age group 15-24) Young people with at least upper secondary Young people not in employment, education 77.1% 6.4% education (age group 20-24) or training (age group 15-24) Early leavers from education and training Predominant dual-track 9.5% (age group 18-24) **VET** structures (low proportion of school-based learning) high Youth unemployment Esteem accorded to VET 7.0% (age group 15-24) high Company commitment to VET

anchoring of the recognition of training periods completed abroad, the reorganisation of training stages in certain occupations, and the recognition of prior occupational training.

Access to higher education was also opened up to former apprentices, with those who have completed occupational training now being allowed to take up programmes at tertiary education institutions after they have worked for three years. The redrafting of occupational profiles and the creation of new occupations where necessary is a never-ending task in the VET sector. Over the past 15 years, around two-thirds of occupational profiles have been updated. The training regulations are, however, formulated as openly and technology-neutrally as possible to minimise this redrafting. New programmes that set out to improve vocational orientation and the transition from school to vocational traineeships are also being developed nationwide.

In December 2014, the Federal Government, the industry, trade unions and the federal states concluded the new "Alliance for Training and Further Education". The participants intend to work together to strengthen dual-track vocational training and strive for parity of esteem between in-company and academic training. All who are interested in pursuing vocational training should, it is envisaged, be supported in gaining an professional qualification at the earliest possible opportunity. "Assisted training" programmes are intended to open up access to VET programmes to socially disadvantaged people and people with disabilities.

PRESTIGE OF VOCATIONAL EDUCATION AND TRAINING

Vocational training in Germany is well respected. As the quantitatively dominant form of training and education, it is also firmly anchored in society. It is, however, currently losing ground as dtertiary education becomes ever become ever more popular. In 2014, the number of newly concluded training contracts reached a historically low level. More than

half of all school leavers currently fulfil the entry requirements for third-level study, and young people have become considerably more willing to go to universities. Almost as many students are now enrolling in degree programmes as those starting traineeships.

An intense debate is ongoing as to how VET under the dual system can remain attractive in competition with programmes offered by tertiary institutions. This is important because specialist staff are already in short supply; in combination with the decline in the number of school leavers, more students opting for academic programmes could have serious repercussions for the labour market. The quality of the career and earning opportunities open to specialist staff with vocational qualifications wwneed to be emphasised, and ongoing improvements in connectivity and permeability between vocational and tertiary education should help to strengthen the branding of vocational training.

"We have to further improve advanced VET offerings to boost the career prospects of those starting out as apprentices. We also need more permeability in education, so that young people who have concluded an apprenticeship can take up de-

gree programmes and people who have dropped out of third-level education can easily transition into vocational programmes."

(Dr Barbara Dorn, BDA)

RESPONSIVENESS OF VET SYSTEM TO LABOUR MARKET NEEDS

Dual-track vocational training in Germany correlates with very low levels of youth unemployment. Many trainees transition smoothly from initial vocational training into employment. In 2013, around 67 per cent were taken on by their training company or another company.



In Italy, the 21 regions have been responsible for regulating the skilled crafts and trades sector and vocational training since the Italian constitution came into force in 1948. In the area of initial vocational training, however, the regions have been marginalised and the VET provision managed by the Italian Ministry of Education dominates the scene.

The virtual operating monopoly held by the Ministry of Education first came about as a result of the growing demand for vocational education in the post-war years that saw the nation state come under increasing pressure to act. The political movements in the 1960s then had a strong impact with their demands (which were met) for (general) education for all. This is now organised through a uniform lower secondary school level, vocational education only as part of a package with (no less than 50 per cent) general education and a secondary school leaving certificate that qualifies holders for entry to tertiary education for all after five years of upper secondary schooling.

Developments in the late 1960s led to the complete exclusion of private-sector involvement from schools – before then, local businesses had still been represented in the planning and examination committees of the vocational schools. Regionally-organised vocational training offered through various public and private providers became more and more marginal and soon functioned only as a fallback system for dropouts from other programmes.

Since then, the vocational training courses available have been largely uncoupled from the economic system, and the state and the regions have each acted largely autonomously in their respective spheres.

STRUCTURE OF THE VOCATIONAL EDUCATION AND TRAINING SYSTEM

By far the largest number of pupils engaged in vocational education and training (around 90 per cent) attend one or other of the two school types offering vocationally relevant subjects and run by the national Ministry of Education, either an istituto tecnico or an istituto professionale. These school types prepare students for their university entrance qualification over five years in 17 subject areas, largely using typical

grammar-school teaching methodology. The ratio of general and vocationally-oriented subjects is approximately fifty-fifty.

While up to 2009 it used to be possible to gain initial occupational qualification after three school years at an istituto professionale, since 2010 this has only been possible in 21 three-year and 22 four-year professional profiles offered within the framework of the education planning of the regions (istruzione e formazione professionale, IeFP). This form of VET provision is, however, distributed very unevenly throughout the different regions and sometimes not present at all. Approximately six per cent of young people were pursuing one of these programmes in 2010. These are delivered either by various educational providers or, increasingly, by the istituti professionali. It must be noted, however, that the graduation rates at the latter are considerably lower (more than 20 per cent).

"Over the last 50 years, our educational pathways have become increasingly longer and the content has become more theoretical."

(Milena Micheletti, UIL)

Post-secondary education has been on offer since 1999. This one-year, flexible cooperative training model can be organised at national level, but is overseen by the regions and is termed istruzione e formazione tecnica superiore (ifts). About ten years later, the higher technical institutes (istituti tecnici superiori – its) were established offering courses of twice this duration open to those with a school-leaving certificate. Uniform national minimum training standards for both of these course types have gradually been drawn up.

The poor relation in the Italian system of VET provision is still the company apprenticeship contract (apprendistato), which is essentially a labour contract – highly subsidised, but – up to now – not linked to any form of training standards. In 2011, the statutory basis on which these contracts rest was reformed at national level, and since 2014 is has been possible for the regions to reshape the apprendistato contract so that it is integrated into a standardised educational pathway featuring in-company practical training combined with instruction delivered by educational providers, schools or even tertiary institutions and leading to a recognised professional qualification and/or to a second or third-level academic qualification.

// KEY FACTS: ITALY

Population 6	60,782,668	Unemployment to population rate (age group 15-24)	11.6%
Young people with at least upper secondary education (age group 20-24)	79.9%	Young people not in employment, education or training (age group 15-24)	22.1%
Early leavers from education and training (age group 18-24)	15.0%	11000111110111	me school ttendance
Youth unemployment	49.70/	Esteem accorded to VET	low
(age group 15-24)	42.7 %	Company commitment to VET	low



"The apprendistato reform in 2011 did not succeed in reforming the system fully. The apprenticeship contract not leading to a recognised qualification has no reason for existence."

(Emmanuele Massagli, ADAPT)

Coordinated offerings in the sense of a structured system of initial and continued vocational education and training are currently non-existent in Italy. All VET programmes - stateled and regional programmes alike – stand in isolation from the others.

RECENT AND CURRENT REFORMS

In 2010, all three to four-year programmes of initial vocational training became the responsibility of the regions. As the school pupils did not likewise switch from the state into the regional system, they now find themselves taking part in education courses that lead – with no intermediate school qualification – to the higher school leaving certificate after 13 school years. Those who fail in this model, but do not drop out entirely, land in the regional system. But not all regions offer these programmes, and even when they do, only a handful of the approximately 20 defined qualifications are normally offered. In other regions, students can only opt for 13 years at school or dropping out of education and training altogether.

Most recently in 2015, the opportunities were extended for school students in the five-year state secondary education courses to become acquainted with the world of work in the last three school years before their final examinations (up to 400 hours per year). Among other developments, the company-based proportion of the apprenticeship was increased, and employers are now only obliged to pay for the proportion of training time spent in-company.

Planning, programmes and models for providing support that will ensure that the current quantitative increase in workbased learning in the state and regional systems provides qualitative benefits to all participants are still lacking (for example the planning of common training and examination standards, measures for the upskilling of trainers and examiners, and much more).

PRESTIGE OF VOCATIONAL EDUCATION AND TRAINING

In recent years, innovative initial vocational training models have been developed in the regional systems. As yet, only a handful of young people are taking part in these programmes. Instead, enrolment numbers at the heavily theory-based state school types continue to rise. Also because the education ministry advertises almost exclusively its own system and this is the only one contained in its guidance brochures, in which all paths to happiness (at work) seem to involve the school leaving certificate qualifying holders for entry to university education.

RESPONSIVENESS OF VET SYSTEM TO LABOUR MARKET NEEDS

The Italian system of VET provision is not well matched to the requirements of the labour market. Even in Italy itself, nobody seriously doubts this. On the contrary: efforts to alleviate the situation are currently being made. The ongoing dualism between the state and the regions seems, however, to present a fundamental structural barrier blocking progress in this area.



"The Italian system suffers from two sicknesses: all educational courses are overly academic, and they have been completely de-professionalised."

(Claudio Gentili, Confindustria)



Today's vocational training system in Poland has its origins in the reconstruction phase after the Second World War. The process of industrialisation was accompanied by rising demand for qualified skilled workers, and this led to VET provision being rapidly expanded. Academic training was accorded less significance in the Communist period. Access to the few academic study places that were available was regimented. Trades and crafts were regarded highly by the population during the Communist period. Dual-track training places in the trades were coveted by young people. With the changeover of the political system in 1989, however, this picture changed dramatically.

As the economic environment shifted and a new educational environment emerged in which free choice was a factor, the interest of young people in vocational training declined starkly, with the formerly popular trades sector also falling victim to this development. Many young people now took advantage of the new opportunities to pursue tertiary education. This was in line with Poland's educational objectives, as a pronounced shortage of graduates had become evident after the political changeover.

"In the Ministry of Education in the 1990s, people were convinced that higher level technical or university education was going to be where the future lay, not vocational education."

(Dorota Obidniak, ZNP)

A new education act was passed in 1991 to align vocational education with the conditions of the new market economy. This legislation still forms the legal framework for the structure and organisation of vocational education and training in Poland today.

STRUCTURE OF THE VOCATIONAL EDUCATION AND TRAINING SYSTEM

Vocational education and training in Poland is organised at national level and is largely dominated by school-based instruction. A dual-track system of vocational training also exists and is overseen primarily by the trades sector.

The training programmes at the basic vocational schools (Zasadnicza Szkola Zawodowa) and the programmes leading to a double qualification in the technikum school type are the dominant forms of full-time school-based vocational education. The technika combine an professional qualification with a school-leaving certificate that qualifies students for entry to higher education.

In the school year 2013/2014, over half the young people transitioning to upper secondary education opted for vocational training (55 per cent). More than 80 per cent of them embarked on full-time school-based programmes, and just under 20 per cent on dual-track programmes.

Two-thirds of the young people who began their occupational training in autumn 2013 attended a technikum with the aim of gaining a qualification granting access to tertiary education in parallel with their occupational training. In particular in times of high youth unemployment (26.5 per cent), it is logical for young people to opt for a programme that opens up opportunities to join the labour market directly or embark on third-level study with a view to improving their career prospects, or simply as a strategy for bridging poor periods on the labour market. In Poland, 194 recognised training occupations exist at present.

Several VET courses have been abolished since the year 2000 in an effort to bring greater clarity and transparency into the Polish VET system.

RECENT AND CURRENT REFORMS

In the year 2007, the strategy underlying the design of teaching and training curricula was altered: the content of curricula was divided into individual modules that can be combined within individual occupational areas and that allow partial qualifications to be recognised. This process concluded in 2012 and was, at the same time, an important prerequisite for further reforms.

"The reform of vocational education and training in the year 2012 should significantly raise the quality of vocational training and improve its ability to respond to labour market needs."

(Monika Wojciechowska, KOWEZiU)

// KEY FACTS: POLAND Unemployment to population rate 38,017,856 8.1% Population (age group 15-24) Young people with at least upper secondary Young people not in employment, education 90.4% 12.0% education (age group 20-24) or training (age group 15-24) Largely full-time Early leavers from education and training Predominant 5.4% school-based **VET** structures (age group 18-24) low Youth unemployment Esteem accorded to VET 23.9% (age group 15-24) Company commitment to VET low

In the course of the 2012 education reforms, numerous decisions were taken in Poland that were intended to make VET provision more flexible and improve its regional differentiation. These measures aimed to improve the accuracy of the match between the content of VET programmes and the demands of the regional labour markets, and to shorten the reaction time taken to respond to changes in the wider economic environment.

The autonomy of vocational training institutions was also strengthened as part of this process. These are now tasked with developing curricula for their own individual specialist modules on the basis of the framework curricula created by the National Centre for Supporting Vocational and Continuing Education (KOWEZIU). Representatives from political life, schools and industry are all intended to be actively and jointly involved in curriculum development processes. So far, only around 10–20 per cent of the vocational education centres have implemented this process.

PRESTIGE OF VOCATIONAL EDUCATION AND TRAINING

While vocational education in Poland is not valued highly by society at present, many young people opt for the double qualification reached by combining vocational education with general secondary education leading to a qualification to enter tertiary education.

Against a background of high youth unemployment, poor earnings prospects and partially obsolete equipment at the basic vocational schools, it is clear why many young people reject classic three-year apprenticeships in a trade or programmes at a basic vocational school in favour of the options available at the technikum or the general education offered at the lyceum.

For a long time, a broad social and political consensus in favour of motivating as many young people as possible to enter tertiary education existed. Only a few years ago a change of thinking has started which manifested itself especially in the reforms of the VET sector undertaken in 2012.

Despite broad-based image campaigns, the attitudes of the population to vocational education have, up to now, barely changed. This can partially be attributed to the careers guidance on offer, which was quite limited in scope until very recently and tended to favour academic training. Most Polish young people and their parents are not familiar with the prospects of those with vocational qualifications.

RESPONSIVENESS OF VET SYSTEM TO LABOUR MARKET NEEDS

Despite the process of reform which has been ongoing, the orientation of vocational education and training towards the needs of the labour market is still underdeveloped. For example, the directors of vocational schools and of regional education authorities are not obliged to tailor the training places offered to match developments on the labour market. In the financially weak areas of Poland, in particular, this means that the vocational schools tend to offer programmes which can be offered cheaply (for example training for office clerks rather than mechatronics technicians) without regard to the occupations that are in demand on the respective regional labour markets.



The Portuguese vocational training system has been characterised by many periods of upheaval. Its roots go back to the 1940s. In the wake of the Carnation Revolution in 1974, however, vocational education was almost completely abolished, since it was strongly stigmatised and reserved only for the "working class". It was envisaged that higher-level education is made available to all segments of the population. Vocational schools were closed or converted into schools providing general education. But these reforms did not raise the overall educational attainment level of the Portuguese population. Instead, many young people ended up leaving the education system without any qualification at all. From the 1980s on, vocational programmes were increasingly introduced once more.

STRUCTURE OF THE VOCATIONAL EDUCATION AND TRAINING SYSTEM

Responsibility for vocational education and training is split between the Ministry of Education and the Ministry of Employment. VET programmes form part of the National Qualifications System introduced in 2007 as a common institutional framework for all general and vocational educational pathways. The National Agency for Qualification and Vocational Education and Training (Agência Nacional para a Qualificação e o Ensino Profissional - ANQEP) administers the National Catalogue of Qualifications which was introduced in 2008. This contains information on training content and training pathways for around 270 non-tertiary qualifications. Many of these can be reached via more than one route. All pathways lead to a double qualification, this means to both a general and a vocational qualification.

Qualifications are organised in modules that students can receive individual credit for. These modules are intended to foster permeability between different educational pathways, and they can also be used in adult education.

Just under 45 per cent of all second-level pupils are enrolled in vocationally-oriented courses. Almost three quarters of pupils enrolled in vocational programmes participate mainly in school-based vocational courses (Cursos Profissionais) taught at vocational and secondary schools under the control

of the Ministry of Education. The second most common vocational track is the apprenticeship training (Aprendizagem) offered in the vocational education and training centres of the Employment and Vocational Training Institute (Instituto do Emprego e Formação Profissional – IEFP) which falls within the labour ministry's area of responsibility. One vocational school pupil in five is enrolled in such an apprenticeship programme, in which just under 40 per cent of the training is completed in-company. Companies are not, however, obliged to cover specific learning content.



"Vocational education and training in Portugal is not yet where it should be. But its acceptance – both in society and in companies – is growing."

(Sandra Sousa Bernardo, IEFP)

The role of the social partners in vocational education is generally a more advisory one. They are, however, becoming increasingly involved in the drawing up of training regulations and the planning of VET provision through participation in what are generally termed Sectoral Councils for Qualifications. In addition, some vocational education and training centres are managed directly by business associations or trade unions.

RECENT AND CURRENT REFORMS

In the last ten years, the Portuguese vocational training system has already undergone wide-ranging reforms (such as the introduction of the qualifications catalogue). The difficult economic situation has ratcheted up the pressure to implement reforms even further. In addition to causes related to the crisis, the high rate of youth unemployment can also be traced back to structural problems such as the high barriers to young people entering the labour market and the relatively high minimum wage. It is envisaged that structural reforms in the area of VET should be advanced further, partly also with the help of EU assistance. The strengthening of workbased learning is a primary aim here. Over and above this, the upskilling and qualification of personnel involved in training in companies is also a hot topic in German-Portuguese collaboration in the VET area.

Population	10,427,301	Unemployment to population rate (age group 15-24)	11.9 %
Young people with at least upper secondar	N/	Young people not in employment, ed	ucation
education (age group 20-24)	72.1 %	or training (age group 15-24)	12.3 %
Early leavers from education and training		Predominant	
(age group 18-24)	17.4%	VET structures	School-based
Youth unemployment		Esteem accorded to VET	low
(age group 15-24)	34.8 %	Company commitment to VET	low

In recent years, the range of VET provision has expanded significantly, the number of training places has increased, measures to reduce dropout rates have been embraced, and mechanisms for the recognition of prior competences have been put in place. The government has set a target that at least 50 per cent of secondary pupils should participate in vocationally-oriented training courses. While the proportion of pupils engaged in vocational training has risen by a good 15 per cent between 2000 and 2013 and then stood at 44 per cent, the target has not yet been reached. Appraisals of the reforms have come to very different conclusions. Their advocates have discerned a clear trend in the right direction, but critics feel that continuity has been lacking in vocational education and training policy and that the creation of more and more new educational offerings may lead to even less transparency and make it more rather than less difficult for young people to identify offerings that suit their needs.

PRESTIGE OF VOCATIONAL EDUCATION AND TRAINING

While vocational education has quantitatively gained much ground in recent years, it still struggles to shake off its poor image and is rarely the first choice of young people (or their parents, for that matter). Vocational education and training is perceived as a reserve option for school pupils who cannot cope with the challenges presented by general school education. The prestige VET options attract varies considerably between different 15 per cent between 2000 and 2013 and then stood at 44 per cent, the target and sectors, however, and it strongly correlates with the availability of employment opportunities. It has repeatedly been the case that particular occupations have been "in" and that demand for training in

these fashionable areas has resulted in more people being trained than were needed to meet demand in the respective fields. While the education system is de jure highly permeable and this is intended to promote its acceptance, surveys of pupils suggest that very few people who have completed initial vocational training go on to study at tertiary level.

"Portuguese companies in the metal-electro area urgently need new specialist staff with technical capabilities. Apprenticeship training in Portugal is the best model in terms of its ability to meet these requirements."

(Manuel Pinheiro Grilo, CENFIM)

Although companies in Portugal often complain that young people lack qualifications or have the wrong qualifications, their own willingness to become involved in the area of vocational education and training is very low. Large companies, in particular, rarely offer traineeships. This hinders the implementation of the political aim of continuing to strengthen work-based learning.

RESPONSIVENESS OF VET SYSTEM TO LABOUR MARKET NEEDS

No Portuguese statistics exist on the entry of young people into the labour market. It is envisaged that the match between VET provision and the requirements of the labour market will be improved by strengthening the involvement of the social partners in the planning and design of training content and programmes.



The origins of vocational education and training in Sweden lie in the skilled crafts. In the history of the Swedish vocational training system, company-based training of apprentices has historically been less widespread than full-time school-based training. Since the 1970s, the vocational training system has been embedded in the integrative upper secondary school level. The organisation and delivery of vocational education by the state is perceived in Sweden as a guarantee of quality in VET provision.

"Swedish companies pay taxes and levies that are high by international standards. In return, they expect well-trained workers are available to them."

(Johan Olsson, Confederation of Swedish Enterprise).

Sweden's school-based vocational training system aims to offer a high standard of general education. Integration, participation and lifelong learning have traditionally a high value. The ideal ratio of general education to specifically vocational learning content is an issue that has triggered much discussion in debates on educational policy and has featured in many reforms over the past few decades.

STRUCTURE OF VOCATIONAL EDUCATION AND TRAINING SYSTEM

Sweden has a classical school-based vocational education system. Initial vocational training for young people mainly takes place in institutions belonging to the full-time school-based VET sector. After the compulsory nine years of primary school, over 98 per cent of pupils transition directly to secondary school programmes lasting three years. Around half these pupils enrol in one of the twelve vocational programmes. All the vocational programmes last three years and must include an in-company training period with a minimum duration of 15 weeks. The vocational training programmes are free of charge for participants and are funded almost entirely from public resources.

A particular feature of the Swedish decision-making and administrative structures that has decisively influenced and shaped the education system is the high degree of decentralisation which has taken place since the beginning of the 1990s. Ministries in Sweden are generally very small and transfer their areas of responsibility to central state administrative agencies. While the Swedish National Agency for Education with responsibility for public schools, school-age childcare and adult education (Skolverket) is mainly tasked with the elaboration of policy, the Swedish Schools Inspectorate (Skolinspektion) is tasked with quality assurance. The 290 Swedish municipalities are responsible for overseeing the administration and organisation of schools within the framework provided by the national guidelines.

While school pupils have only limited influence on the character of vocational education, due to the full-time school-based nature of most VET programmes, trade unions occupy a relatively influential position, since they are frequently among the initiators of political reforms. This influence is also evident in the Swedish labour market, which is strongly regulated through collective labour agreements. While the numbers have gone down somewhat in recent years, over 70 per cent of employees in Sweden are still organised in trade unions.

RECENT AND CURRENT REFORMS

The main challenges currently presenting themselves are the rising dropout rate in secondary schools and the high level of youth unemployment. Complaints are also regularly heard from companies to the effect that the vocational training programmes, with their high general education content, do not adequately prepare students for the specific requirements of the labour market.

That was reflected in the 2011 school reform (Gy11), which aimed to reduce dropout rates by bringing in higher entry requirements. Reinforcing vocationally oriented training contens within VET courses was also designated as a priority. With this aim in mind, upper secondary education has been more strongly differentiated by splitting it into two pathways, one leading to higher education and one directly preparing students to enter the world of work in their desired occupation.

// KEY FACTS: SWEDEN

Population	9,644,864	Unemployment to population rate (age group 15-24)	12.7 %
Young people with at least upper secondary education (age group 20-24)	86.9%	Young people not in employment, education or training (age group 15-24)	7.2 %
Early leavers from education and training (age group 18-24)	6.7 %	Predominant VET structures Sc	hool-based
Youth unemployment	22.00/	Esteem accorded to VET	average
(age group 15-24)	22.9%	Company commitment to VET	low

It is also envisaged that cooperation between the social partners and the central state administrative authorities will be intensified to ensure that more consideration is given to the requirements of the labour market. Local and national programme councils (nationella programmad) with representatives from companies, the social partners and administrative authorities have been set up for each of the twelve vocational programmes.

In addition, an apprenticeship programme (Ya-Jobb) has also been created to strengthen and develop in-company apprenticeship training further. Up to now, however, the success achieved by this programme has lagged far behind expectations, largely due to low numbers of participants.

PRESTIGE OF VOCATIONAL EDUCATION AND TRAINING

Almost half of all secondary school students follow a vocational track. A large majority of the population appraises the vocational education system as being of high quality (European Commission, 2011). Nevertheless, vocational qualifications attract less prestige than academic ones in Swedish society. Educational success is generally defined in terms of the level of a person's general education. The stronger differentiation of vocational and general educational pathways has, in the eyes of many experts, impacted negatively on the esteem in which vocational education is held. The loosening of ties between vocational and general education has increasingly made vocational education seem like a second-best option for weaker pupils.



"Our objective must be that VET is seen as an attractive and independent career path, not a second best option"

(Fritjof Karlsson, Ministry of Education)

The Swedish government places considerable emphasis on students being adequately prepared to make choices about their future careers. During the entire period of compulsory schooling, all pupils regularly take part in events aimed at preparing them to make decisions regarding their future occupational training or third-level education. Most careers guidance officers are employed in schools. Experts have criticised, however, that a clear bias in favour of academic education persists and that this impacts the perceived attractiveness of vocational education and training negatively.

For programmes of initial vocational education to be seen as attractive, permeability to tertiary education is important, but attractive options for continuing education and training (CVET) are also decisive. A commission of enquiry put in place by the government is currently deliberating on how both of these aspects could be improved.

RESPONSIVENESS OF VET SYSTEM TO LABOUR MARKET NEEDS

Youth unemployment in Sweden is currently high, running at 22.9 per cent at present. In general, however, unemployment in Sweden in the 20–24 age bracket tends to be short in duration in comparison to the situation elsewhere in Europe. Only 20 per cent of the unemployed remain without work for more than six months. The strong focus on general education content in the VET system, with the concomitant lack of focus on practical skills, makes it difficult for those completing VET programmes to transition seamlessly into the labour market.



Vocational education and training has a long tradition in Switzerland that can be traced all the way back to the master craftsmen of the Middle Ages. The principal focus has always been squarely on training the next generation of workers in small- and medium-sized industrial businesses and commercial operations. In 1930, the Swiss Federal Assembly passed the first Vocational Training Act putting vocational education and training in Switzerland on a statutory footing.

"In the mid-1990s there was a shortage of trai-

ning places. Discussions with companies about the value of apprenticeships, along with measures to reduce the burden of bureaucracy they faced and to build up training alliances then led to many new training places for apprentices."

(Bruno Weber-Gobet, Travail Suisse)

Developments in the country's economic situation have an impact on vocational education and training, since the number of companies able to offer training places depends on the state of the economy. This underscores the responsibility carried by companies for vocational education in economically weaker phases, in particular.

STRUCTURE OF THE VOCATIONAL EDUCATION AND TRAINING SYSTEM

Switzerland distinguishes between two levels of vocational education and training, the level corresponding to upper secondary education (the VET system) and higher-level Professional Education and Training (PET). The latter encompasses numerous third-level educational courses. Vocational education and training is primarily organised in a dual-track VET system. Around 250 occupations can be learned in VET programmes lasting two to four years and taught in three learning locations - companies, vocational schools and supra-company training centres. Since 1994, young people have also been able to take the Federal Vocational Baccalaureate (FVB). This certifies that students have received extended education in general subjects and allows direct access to universities of applied sciences without sitting an exam, and access to universities if an additional exam is passed. The organisation of vocational training is jointly managed by the

federal government, the cantons, and organisations from the world of work (OdA) that include professional associations, sector-specific organisations, the social partners and companies.

The Federal Government is responsible for enacting training regulations, and the setting of uniform standards at this level ensures that offerings are transparent and can be compared to one another. The cantons are responsible for delivering and overseeing the programmes, and the organisations representing the world of work are responsible for the definition of course content and the national qualification procedures.

Around two-thirds of young people complete initial vocational training. The proportion taking the Federal Vocational Baccalaureate stands at around 15 per cent (2014). Dual-track training, embarked upon by more than 85 per cent of pupils, is the most important form of vocational education and training. This highlights the significance of dual training for securing the development of the next generation of employees in business. In 2008, almost 59,000 businesses were engaged in training dual trainees. The proportion of business involved in training as a fraction of all businesses rose from barely 15 per cent in 1995 to about 17 per cent in 1998 and has remained roughly constant since then (2008: 18.4 per cent). This is all the more impressive given that a good 92 per cent of companies (2013) are, when full-time equivalents are considered, micro companies that cannot easily train apprentices given their size and their high degree of specialisation.

"We have been able to convince many companies with the positive results from our cost-benefit analysis of apprenticeships that continued involvement in training is worth persisting with, even in economically difficult periods."

(Prof Stefan Wolter, University of Berne)

The rights of trainees to participate in decision making in schools and companies is anchored in the Federal Act on Vocational and Professional Education and Training. Apprentices select class representatives in school and representatives in larger companies to advocate for their interests.

// KEY FACTS: SWITZERLAND Unemployment to population rate 8,139,631 5.8% Population (age group 15-24) Young people with at least upper secondary Young people not in employment, education 7.3% 85.8% education (age group 20-24) or training (age group 15-24) Early leavers from education and training Predominant dual-track 5.4% (age group 18-24) **VET** structures (low proportion of school-based learning) high Youth unemployment Esteem accorded to VET 8.6% (age group 15-24) high Company commitment to VET

RECENT AND CURRENT REFORMS

The enactment of the new Vocational Training Act (BBG) which came into force in 2004 gave necessary reforms in the vocational sector fresh impetus and defined and balanced the division of responsibilities between the Federation, the cantons and the organisations from the world of work even more precisely. The main aim was, as before, the updating of educational ordinances. These reforms are now largely complete. Vocational education is currently in a consolidation period. The reform process has been perpetuated by putting a five-year review system in place: every five years, educational regulations are audited to determine whether they are in line with current requirements in the areas of business, technology and teaching methodology.

The 2004 VET legislation modernised and strengthened the dual system of vocational training. A central element in this is the newly balanced tripartite Swiss partnership arrangements that have made the vocational training system even more efficient.

(Katrin Frei, SERI)

PRESTIGE OF VOCATIONAL EDUCATION AND TRAINING

Vocational education and training is well-respected and attracts large numbers of students. It offers a solid foundation for entering the world of work, opens up a wide array of career prospects, and lays the foundations for lifelong learning. According to the 2014 apprenticeship "barometer" (Lehrstellenbarometer), trainees are highly satisfied with the initial vocational training programmes, even though they must decide on their first occupational role at a young age (average age on entry to programmes in 2013: 16.6 years). Three out of four trainees say that they have found their desired occupa-

tion. Almost all trainees (99 per cent) are satisfied with their training places.

"Despite the solid anchoring of the dual vocational training pathway in the Swiss economy

and the high degree of satisfaction of the young people enrolled in the programmes, the image of vocational education could be better. The prejudices of parents with academic backgrounds who consider the university entrance qualification to be

the royal road are still a factor."

(Mark Gasche, EDK)

The satisfaction and good labour market prospects of VET graduates, do not, it seems, translate into vocational education and training attracting the same levels of social prestige as more academically-oriented forms of education.

RESPONSIVENESS OF VET SYSTEM TO LABOUR MARKET NEEDS

The strong influence exerted by the organisations from the world of work in the form of considerable and standardised input to in-company training ensures a good fit between the competences imparted and the changing requirements of the labour market. The low unemployment rate bears testament to the success of this approach. In addition, extensive programmes exist to monitor current developments in both education and the labour market.

In 2011, for example, 66 per cent of those who completed initial vocational training were employed and more than 20 per cent were enrolled in further training. The high degree of permeability in the education system and the differentiated and numerous offerings in the VET and PET sectors yield good prospects of entering the labour market successfully and going on to enjoy a successful career.



The English vocational training system has its roots in the medieval crafts guilds. Craftsmen engaged apprentices and trained them on-the-job. This system remained largely unchanged until well into the nineteenth century: existing structures were adopted and adapted to meet the requirements of industrial-scale manufacturing and emerging new occupations. At the same time, more and more institutions providing vocational education and training in school-based contexts sprung up.

The 1964 Industrial Training Act imposed a certain formal order on highly heterogeneous structures in vocational education and training provision. Employers and workers were given more influence over the development of curricula and training standards. In addition to the state-sector further education (FE) colleges responsible for vocational education and training, more and more privately-run educational institutions such as the City and Guilds of London Institute were given a say.

Only in the mid-1980s was vocational education and training standardised within a single framework. The National Council for Vocational Qualification came into being and was tasked with developing a uniform national qualifications framework.

STRUCTURE OF THE VOCATIONAL EDUCATION AND TRAINING SYSTEM

In the United Kingdom, England, Wales and Northern Ireland share an education system with a uniform Qualification and Credit Framework (QCF). Scotland possesses its own framework, but this bears strong similarities to the model used in the rest of the UK. The English VET system has a modular structure. As credit is given for individual modules and different combinations of modules are possible, these are also highly suitable for use in adult education. As such, the dividing line between initial vocational training and continuing education is somewhat blurred in the UK.

The regulation and monitoring of the English VET system is supervised by the Department for Education and the Department for Business, Innovation & Skills. As such, the system is state-organised, but builds – and this is one of the major

differences from the Continental European models – very strongly on building blocks sourced from the private sector. In addition to the state-run vocational education providers, many private training providers are also state-accredited.

Vocational education programmes can be taken on a full-time or part-time basis and both with and without practical work placements. Dual-track apprenticeship programmes also exist. Here, employees acquire practical skills at work in a company and complete the theoretical portion of their training with a training provider. The organisation of these apprenticeships is handled by Sector Skills Councils and bodies. These organisations are led by employers and develop occupational standards together with their member companies as well as shaping the organisational framework for dual apprenticeship programmes.

As well as the standard apprenticeships, the system also encompasses advanced and higher apprenticeships that lead to the award of correspondingly more advanced qualifications. These are, in some cases, equivalent with third-level entry qualifications or even with third-level qualifications. As a rule, professional qualifications are offered at different levels. Around 1,000 professional qualifications exist in England, with about 50 per cent of demand referring to 253 qualifications.

In the 2013/2014 school year, a good quarter of young people aged 16 to 18 were enrolled in training programmes leading to vocational qualifications.

RECENT AND CURRENT REFORMS

The English vocational training system is being reformed on an ongoing basis. Nevertheless, a trend towards creating new dual training places has been perceptible since 2006.

The 2012 funding reform can be counted among the most far-reaching reforms and seeks to give employers control over state subsidies in order to supply education and training providers with incentives to give more thorough consideration to the requirements of employers. In addition, the aim that the companies belonging to particular sectors should elaborate apprenticeship standards directly and not through sectoral councils is being pursued. Initial successes have already become apparent. Around 1,000 companies are involved and have already developed 70 standards. It is envisaged that

// KEY FACTS: UNITED KINGDOM Unemployment to population rate 64,308,261 9.8% Population (age group 15-24) Young people with at least upper secondary Young people not in employment, education 11.9% 84.1% education (age group 20-24) or training (age group 15-24) Early leavers from education and training Predominant School-based 11.8% (age group 18-24) **VET** structures (low levels of dual-track training) Youth unemployment Esteem accorded to VET Low to average 16.9% (age group 15-24) Low to averagew Company commitment to VET

all apprenticeship standards will have been renewed in this way by 2017. The concept is in demand from high-achieving young people and has already lastingly strengthened the image of vocational education and training.

PRESTIGE OF VOCATIONAL EDUCATION AND TRAINING

Academic education enjoys higher prestige than vocational education in the United Kingdom as it often does elsewhere. Vocational education is still often perceived as a second-class educational option, despite the fact that many attractive vocational training schemes now exist and a high degree of flexibility and permeability has been achieved that might be expected to encourage people to choose vocational education and training pathways.



"One of the things we are trying to get away from is the idea that apprenticeships are for people who can't get into university."

(Guy Parker, CBI)

This explains why careers guidance for school pupils is currently seen as a major focus area for improvement. Many young people are not managing to find out about the options open to them and make suitable choices from the large selection available. The National Careers Service introduced in 2012 has been designed to alleviate this issue by providing comprehensive career guidance counselling. Companies are also expected to become more involved in this area in the future. Current reform efforts that aim to extend the range of

dual training places on offer further and make these offerings more visible are already improving the image of VET: by 2013/2014, the number of apprenticeship starts had climbed to 440,000. The number of young people in the 19–24 age bracket enrolled in apprenticeships has climbed particularly strongly (up 40 per cent since 2009/2010). In contrast, a significant upward trend has yet to become manifest among students aged 16 to 18 (currently up 3 per cent). An easier transition to the labour market and improved career opportunities through a qualification in particular career fields (such as MINT occupations) are also proving to be conclusive arguments. 64.5 per cent of all 16- to 18-year-olds are now enrolled in vocationally-oriented modules; this represents an increase of 10 per cent over the past five years.

RESPONSIVENESS OF VET SYSTEM TO LABOUR MARKET NEEDS

Youth unemployment in Great Britain stands at around 20 per cent. It appears that this relatively high rate can be attributed mainly to structural problems and not just to the recession after 2008. One such structural problem is that most vocational education programmes are pitched at too low a level to meet the requirements of many employers. The relatively high number of young people who are neither employed nor in training (13.3 per cent) demonstrates that the transition from school into a vocational training programme can also prove difficult. As such, improving the match between skills development and the labour market by extending the reach of dual-track apprenticeship programmes will be an important goal, since practical experience in companies is more targeted and many dual traineeships qualify trainees to a high level. Studies have shown that those who have completed apprenticeships transition more easily into the labour market and earn more than graduates from full-time school programmes.

// CENTRAL ASPECTS OF VOCATIONAL EDUCATION AND TRAINING IN A DIRECT COMPARISON BETWEEN COUNTRIES



The quality of a vocational education and training system can be judged by the results it produces for young people and companies through its performance across key success criteria. If the implementation of successful operating principles across all countries is achieved, vocational education and training can make an even greater contribution to securing skilled employment and prosperity in Europe in the future.

The seven profiles have shown the extent to which the vocational education and training systems in the various countries examined differ from one another. It is clear that vocational training is influenced by contextual factors which can, in the long term, be (politically) influenced. The secondary and tertiary education systems in which vocational training is embedded, existing continued training opportunities, and the structure of a country's economy all exert strong influences on the institutional organisation of vocational education and training provision.

There is, then, no single ideal VET system which could potentially be suitable for every country. It was, nevertheless, confirmed for the selection of countries examined that the transition into the labour market is easier for young people who have benefited from dual-track training structures where companies are actively involved in vocational training. The introduction and expansion of components of dual-track training can, however, only succeed when locally relevant contextual factors are taken into consideration. This can, for example, involve finding ways to motivate established vocational schools to cooperate closely with businesses or devising incentives for companies to become involved in vocational training. In many countries, structural reforms in the area of vocational training would be required to achieve this. But objectives can often be reached via more than one path. In many states, functional equivalents exist, alternative approaches that nevertheless generate virtually identical results. The necessary accumulation of relevant work experience can, for example, be achieved through on-the-job training in companies after as well as during school-based VET programmes.

As such, the main aim must be to identify successful operating principles that can then be developed further in other countries in an appropriate manner. No universal magic formula exists that could be used to determine the ideal focus, scope and design of reforms. But the country comparisons clearly show that each country has found innovative ways to strengthen certain aspects of vocational training. These diverse approaches can stimulate developments in other countries in important ways. This also applies to the countries that already have robust dual-track training structures in place, since these countries also need to future-proof their systems as they ready themselves to face challenges posed by demographic change, the increasing popularity of tertiary education options, and ever-changing and evolving skills requirements.

Chapters 4.1 to 4.10 draw on the main results of the individual country studies to present an issue-by-issue comparison of key facets of vocational education. In Chapter 4.11, the results of this comparative analysis are then presented in compact tabular format. When interpreting the results, it is important to bear the respective country-specific contexts in mind. The various issues dealt with are strongly intertwined; only when these reciprocal relationships are borne in mind can success factors and potential opportunities for the further advancement of vocational education be identified and reforms be shaped appropriately. An example for this is the issue of flexibility. Flexibility in VET provision is an essential prerequisite for matching the training on offer with the skills that are in demand, for example with regard to state-of-theart technology. But flexibility can also come at the cost of transparency in the education system – a loss of clarity can result when too many offerings exist or what is available changes too rapidly. The systematic treatment of central issues in cross-border comparative analysis provides a sound basis for gaining a good overview and deriving conclusions of transnational relevance.

The degree to which the issue in question is a pronounced feature of the respective vocational education and training system is shown for each country and each issue using a scale ranging from zero stars to three. The arrows represent trends and show whether positive or negative developments can be observed in the respective fields.

ACCEPTANCE AND PRESTIGE

It is clear, in general, that the acceptance of vocational education and the prestige it attracts is relatively low in many countries, especially in comparison to the regard in which higher education is held. The population often discerns in vocational education only a reserve option for lower-achieving young people. The acceptance and prestige of vocational training is highest in countries such as Germany and Switzerland in which dual-track training has a long tradition. In both of these countries, dual training is perceived by young people (and their parents) as an attractive educational track, and VET programmes enjoy considerable acceptance from business. But in Germany, in particular, status problems are currently rising. Increasing numbers of young people find themselves drawn to third-level education. Companies are finding it steadily more difficult to fill traineeships. In the United Kingdom, precisely the opposite trend can be discerned. While vocational training in the UK has typically not been held in high regard, the trend is currently positive, not least because new dual-track training programmes have been created.

One possible approach to raising the acceptance and prestige of vocational courses could lie in the creation of offerings targeted at high-achieving students. The Swiss Federal Vocational Baccalaureate, a supplemental general education certificate qualifying holders for entry to universities of applied sciences, is a good example of how such an approach can be realised. New, progressive training schemes which have proved popular have also been developed for high-achieving young people in the United Kingdom and have lastingly boosted the prestige attached to vocational education. In Germany, young people are afforded opportunities to gain extra qualifications that can include, for example, foreign language skills or extra business studies skills.

The acceptance of vocational training can also be boosted by supporting low achieving students effectively and reducing the dropout rate, since training is then less likely to be perceived as a "useless" dead end. This objective can be reached through the provision of offerings specifically designed for this target group or through the provision of extra support.

In many countries, governments have launched image campaigns aimed at increasing the prestige accorded to vocational training by the wider public. While it is difficult to measure the results of such campaigns, it seems clear that they have raised the visibility and profile of vocational training. Given that vocational education and training systems have often struggled with poor visibility in the past, such "brand reinforcement" is important.

COMPANY PARTICIPATION

About a quarter of the companies in the EU with more than 10 employees employ at least one VET trainee, but large differences in the degree of company involvement exist from one country to another. In some countries, the participation of companies in vocational training is a long-standing tradition, while in others, the willingness of companies to contribute substantively or financially to the training of young people is limited. The participation of companies is, however, an essential prerequisite for introducing and bolstering dual-track components.

Diverse reasons for low rates of company participation exist. In Sweden, Portugal and Poland, the structure of the economy is based on small businesses and micro companies to a greater degree than is the case in other countries (see Figure 4). Very small companies must organise their in-company training differently from larger companies, as the financial and human resources they can draw on are more meagre. One possibility to address this could take the form of small companies joining forces to offer traineeships in collaborative training networks, as is practised in Germany. Together, companies can provide comprehensive training encompassing all the elements included in a given training occupation profile. The creation of suitable infrastructure can make it easier for companies to forge such training networks. The state can, for example, provide support for the upskilling of personnel responsible for training. In Italy, such collaborative training networks have been in place in the post-secondary sector since 1999. In addition to the companies themselves, members include representatives from the regions, educational providers and even research institutes. This form of vocational education is, however, still very much a niche offering.

In Sweden, the reluctance of companies to become more involved in training young people stems from a different source: companies simply do not see themselves as under any obligation to make a contribution to the training of young people, since they are already making a substantial contribution to the common good in the form of high taxes and levies. They expect the state to finance a system of education and training – in exchange for their financial contribution, as it were – that produces a ready supply of suitably qualified specialists.

Companies who are active in the area of vocational education tend to view their involvement, in line with this logic, more as a favour or as a contribution to the welfare of society as a whole than as an important investment in their own supply of up-and-coming skilled workers. While the tendency to perceive training as an investment is now growing, mainly due to demographic developments and skills shortages which are already making themselves felt, it could be nourished further through incentives and awareness-raising measures aimed at companies.

Some countries are deploying financial incentives as an instrument to boost the involvement of companies. These can

take the form of tax concessions or subsidies. Such measures can provide the initial spark needed to fire the involvement of companies that have no track record of being active in training programmes (and consequently no store of positive experiences to draw on). In the United Kingdom, for example, small businesses that have not previously been involved in training receive financial support in the form of a one-off payment when they start.

Cost-benefit calculations show that the investment in training usually pays off for companies not long after – or even during – apprenticeships. In addition, VET graduates are ready for immediate deployment and need neither long induction periods nor supplemental training to adapt to the demands made of them in the workplace. Savings can also be made in the area of staff recruitment costs. The point at which vocational training pays off depends on how quickly trainees can be deployed productively and on the difference between the remuneration trainees receive and the wages of qualified workers. In Switzerland, for example, companies make a net gain on their investment in apprenticeships at an early stage through extensive practical placement phases in which trainees contribute to production.

No matter how it is envisaged that companies should be motivated to become involved in vocational training – be it through direct financial support, tax concessions or non-financial support – thorough documentation of training activity and of the associated costs and benefits is helpful, as it creates a sound basis for the decision-making of companies.

COMMITMENT FROM THE SOCIAL PARTNERS

The participation of the social partners can be a strong driver for matching VET programmes with labour market requirements. In some countries, stronger involvement on the part of trade unions, in particular, could prove helpful. In the German and Swiss dual-track VET systems, the social partners unite to make a decisive contribution towards defining training content. Joint determination of curricula and working conditions at an institutional level ensures that the skills currently in demand on the labour market are imparted and that lasting career prospects open up for programme graduates. A good fit between training programme content and the requirements of companies improves the graduates' chances of finding good and satisfying employment opportunities.

As the role played by the social partners differs considerably from one country to the next, attempts to draw social partners into greater involvement must be matched to the applicable background conditions in the country in question. It is not possible to definitively establish any systematic relationship between the strength of the social partnership in a given country and the characteristics of its VET system (Wolter/Ryan, 2011). Much depends, here as in many other areas, on the details.

Social partnership is generally strong in Germany and Switzerland, and the social partners are also strongly represented in the sphere of vocational training. As such, opportunities for them to actively exert influence are firmly anchored at institutional level. But even in countries with traditionally weaker forms of social partnership, approaches towards stronger participation in vocational training on the part of the social partners are increasingly starting to feature. In Portugal, Sweden and the United Kingdom, for example, sector and programme councils exist and the social partners can exercise influence at least at sectoral level. Through these councils, the social partners can participate in the shaping of vocational education in particular sectors of industry.

Significant differences are also readily apparent in the area of participative decision-making. In Germany and Switzerland, vocational trainees have a training contract with companies and therefore have the status of employees and statutory rights to participate in decision-making. In many other countries – especially those with largely school-based VET systems – participants are classed only as school pupils. Their rights to participate in decision-making processes as stakeholders consequently have a different character.

PERMEABILITY

The issue of permeability is of central importance for ensuring the acceptance of vocational education and training. Training pathways that open up further options are more likely to be perceived as attractive. Young people are significantly more inclined to choose vocational options when they (and their parents) feel that these leave many doors open to them in the future. In many countries, the social recognition accorded to VET programmes rests firmly on them leading to double qualifications in the spheres of occupational training and general education. While this is the standard model in countries such as Poland and Portugal, it is also facilitated

in, for example, Switzerland – through extra courses that can be taken alongside or after vocational training to enable entry to higher education. Sweden also offers an optional general education qualification gained through participation in supplementary courses. The automatic inclusion of a programme leading toward access to tertiary education was, however, quite deliberately discontinued in order to give more prominence to vocational programme content. Double qualifications are also relatively rare in Germany. Graduates of vocational education programmes are, however, permitted to embark on tertiary education at the latest after they have accumulated three years' experience in the workplace.

It is important to note that opening legal avenues towards taking up tertiary education should only be seen as a positive step forward when this opportunity is also taken up in reality and graduates of VET programmes have realistic chances of gaining additional higher-level qualifications. As vocationally-oriented programmes include less general education content, special support measures for third-level students coming in from VET programmes should be planned and delivered. These could include, for example, bridge courses in mathematics or seminars on research methodology.

As a matter of principle, horizontal permeability must be prioritised as well as vertical permeability. This can be facilitated through, for example, the accreditation of prior learning achievements in such a way that students can switch between different educational pathways. Vocational and academic education should ideally be equivalent alternatives, and permeability between them should be given in both directions. In Portugal, qualifications are organised in modules, and credit is given for individual modules. Over and above this, it should be possible to have learning outcomes from vocational education recognised at tertiary level and learning outcomes from tertiary education recognised in vocational learning contexts. Those dropping out of tertiary education, in particular, should be able to profit from vocational programmes of reduced duration or credits recognising their prior learning achievements.

While a vocational education system that keeps third-level options open for graduates of vocational programmes is desirable, it must be borne in mind that the primary purpose of vocational education and training is not to prepare candidates for entering university. Highlighting the employment and earning prospects associated with vocational training more prominently is also a key strategy that can be deployed to make the benefits of VET programmes more visible. This is particularly applicable in light of the fact that tertiary education does not necessarily ensure a more successful transition into the labour market than vocational training in many countries where the majority of young people complete tertiary programmes.

FLEXIBILITY

A certain degree of flexibility must be built into VET programmes so that they can react to current developments in the labour market in a timely fashion. Such flexibility ensures a good fit between the qualifications offered and the skills that are in demand. Flexibility can be built into the VET system in different ways.

In Italy, for example, minimum standards are phrased in quite general terms so that the training programmes offered in the regions can be tailored to fit in with local requirements.

The modular system deployed in the United Kingdom also offers a very high level of flexibility. Other countries, such as Portugal and Poland, have now also organised their qualifications in modules for which students receive individual credits. The structuring of these models varies strongly from country to country. While modules can be combined individually in the United Kingdom, professional qualifications in Poland are systematically built from particular modules and only a limited number of modules can be swapped. The acquisition of a particular professional qualification is strongly foregrounded, not the passing of individual modules.

The advantage of the various modular models is that training content can be updated quickly, since it is possible to revise particular modules as needed without modifying the content of entire programmes.

In Germany and Switzerland, formulating training with open structures and technology-neutral phrasing works in much the same way to create flexibility in vocational programmes and can be seen as a functionally equivalent strategy. As the training regulations are technology-neutral, companies have leeway to react to current developments and to conduct training that draws on their own state-of-the-art technology and is integrated in their own business processes. Regional differences can also be reflected in this way.

DIFFERENTIATION

The issue of differentiation is becoming more prominent in many countries as a result of demographic change. As the total number of young people in education drops, kindling the enthusiasm of traditional and new target groups for vocational education and training is becoming more important. It follows that VET systems must create offerings to attract both low-achieving and high-achieving pupils. A strong degree of differentiation within the system can improve the user satisfaction of various target groups significantly.

Such differentiation can be achieved through the creation of specific programmes for various target groups, but also through the provision of additional, personalised learning support for low-achieving pupils. In Switzerland, two-year programmes targeted specifically at low-achieving young people exist. Germany also makes specific provision for low-achieving pupils. This includes offerings designed to promote inclusion of young people with disabilities and a host of offerings in the sphere of vocational preparation that set out to equip young people with the skills to start dual-track vocational training.

In Sweden, much emphasis has long been placed on participation, and weaker pupils as well as pupils from a migrant background are provided with personalised learning support to enable them to keep up with other students in vocational training.

Differentiated VET provision targeted at high-achieving pupils is often perceived as an indicator of quality in vocational education and training. Such offerings can take the form of dual-track programmes that integrate cooperation with tertiary education institutions. Alternatively, young people can be provided with opportunities to gain additional skills and qualifications. In Germany, demand for places on work-integrated degree programmes at universities of cooperative education is continuing to rise. Almost half of these dual-track tertiary education programmes feature an integrated professional qualification: young people complete a degree and an apprenticeship at the same time. In the United Kingdom, programmes directed at high-achieving pupils have also positively influenced the image of the vocational training system.

TRANSPARENCY

Vocational education and training will need to become more transparent if VET provision is to shake off its reputation as a "hidden world". This means, for a start, that what is on offer must be visible and easy for young people to understand. It also means that companies must be able to understand and judge the skills of graduates with particular professional qualifications.

A uniform national legal framework can assist in making vocational education more transparent. Such national frameworks need not reduce the significance of regional stakeholders. The Swiss legislation on vocational and professional education and training, for example, regulates vocational education and training in a standardised manner and nevertheless leaves the authority and responsibility for structuring and delivering the programmes with the cantons and the professional organisations (OdA).

In Germany, transparency in the dual system is secured through federally binding training regulations for businesses and framework curricula for schools. These documents are publicly available and contain all the important information governing the training occupation in question.

In Poland, vocational training offerings have recently been restructured and streamlined and the number of training occupations has been reduced. This has made it easier to gain a clear overview of the system. Creating groups of occupations can also make it easier to gain such an overview.

In Portugal, a National Catalogue of Qualifications has been introduced where all qualifications are listed. This has made training pathways and training content more transparent.

In Italy, it is striking that the training programmes offered by the regions are mentioned only fleetingly and in passing in the widely disseminated brochures produced by the Italian Ministry of Education. Transparent and comprehensive information is not made available.

In principle, every vocational education and training system becomes more transparent when it is flanked by a comprehensive and neutral information system and through careers counselling tailored appropriately to target groups.

VOCATIONAL GUIDANCE

The need to improve the provision of occupational guidance is a current issue throughout Europe. Careers guidance structures are in place in all of the countries examined. However, these are often largely unknown, or their capacity and the quality of their services is inadequate. Good occupational counselling is especially important in countries where a large number of different offerings exist, like Portugal or the United Kingdom.

In Portugal, central careers guidance centres are currently being set up to fill this gap; it is envisaged that these will provide guidance spanning different educational pathways and that their existence will be widely advertised.

Another widespread problem is that the counselling available is often skewed in favour of academically-oriented education options. In Sweden, in particular, most career guidance counsellors have an academic background and tend to advise the majority of young people to proceed to tertiary education. In Poland, efforts to combat this internationally prevalent issue are currently being made in the form of new training materials being developed for careers guidance counsellors with the aim of broadening the unilaterally academic perspective many counsellors have adopted up to now.

What matters here is that every young person should, without prejudice, be given the advice which best matches their own skills and capabilities.

MOBILITY

National and international mobility in vocational education and training is also an issue which calls to be developed further.

Gaining international work experience is becoming ever more important. Teenagers can already be given opportunities to accumulate such experience as part of their initial vocational training. It appears that countries with strong international economic ties (such as Sweden, with its high dependency on exports) have traditionally placed the greatest value on their education systems being internationally oriented. This is reflected, among other aspects, in a strong focus on the teaching and learning of foreign languages. In spite of this,

however, the international mobility of young people during and after their initial vocational training is still very low.

Regional mismatches can also be observed, for example in the filling of traineeships in Germany – applicants and open training places are located in different regions and a lack of mobility means that young people lose out on places even as traineeships elsewhere remain unfilled. Poland, on the other hand, is characterised by the large numbers of trainees who leave the country after completing initial training. This can be traced back to poor job prospects on the domestic market. At the same time, however, it is also an indicator for the acceptance of Polish vocational training abroad.

Mobility programmes in vocational education and training should be strengthened and made more widely known in order to increase the mobility of trainees. In the current central EU programme for the promotion of mobility, Erasmus+, 43 per cent of the total budget of 14.8 billion euros for the years 2014 to 2020 is earmarked for tertiary education, and only 22 per cent of the funding has been allotted to vocational education and training (European Commission, 2015a). Three times as many third-level students (2 million) as trainees (650,000) are funded in this way.

Assigning more funding to vocational education could also motivate companies involved in dual-track vocational programmes or other in-company VET structures to send more trainees abroad, which in turn could raise the general attractiveness of vocational education and training.

A major stumbling block which goes some way towards explaining the lower mobility of vocational trainees in comparison to third-level students can be identified in the fact that VET trainees are, of course, younger than third-level students. Young people who are still minors would face difficulties abroad in areas such as, for example, searching independently for accommodation. This means that improving the mobility of trainees will need to be supported by national improvements to infrastructure. Areas like the provision of suitable accommodation for young people call for investment.

The educational attainment level of parents also influences the mobility of their children (BiB, 2014). The more highly qualified parents are, the more likely it is that their children will spend some time abroad during their training. This means that it is particularly important to provide socially disadvantaged young people with more support, both financially and in terms of the provision of information. It is likely that this would increase their potential mobility within Europe.

RESPONSIVENESS OF VET SYSTEM TO LABOUR MARKET NEEDS

The quality of the match between skills and labour market needs is one of the most central indicators for appraising the quality of a vocational education and training system. The value of occupational training depends, above all, on how it eases the transition from training to the labour market and on how well the skills and competences acquired can be deployed in the world of work.

In this respect, dual-track VET systems have two major advantages in comparison to largely school-based systems: both the range of programmes offered and the actual training content of those programmes tend to be closer to the requirements of the market in dual systems. As companies mostly offer training places for specialists that reflect their own future needs, trainees can be confident that their skills will be sought after. This is reflected in the high number of trainees in Germany and Switzerland who are taken on by the companies where they have completed their training as soon as they finish their traineeships.

In school-based systems, offering up-to-date training that reflects current trends on the labour market can be a costly endeavour – especially in technical occupations requiring

machinery and equipment which can quickly become obsolete. In the worst-case scenario, pressure on costs can lead to courses being offered on the basis of what training providers can afford rather than on the basis of what is needed on the jobs market. In largely school-based systems, such as those in Poland and Sweden, this is a particular risk; often neither the content of programmes nor the number of training places offered accurately match the needs of the labour market.

A good fit between vocational education and training and the demands of the labour market can be achieved, among other approaches, by securing the strong involvement of companies and the social partners. They must be consulted when VET provision is being planned so that the skills which are in demand on the labour market can be imparted. They should also have an active role to play in the drawing up of the content of training programmes. Only in this way can it be ensured, for example, that training content keeps pace with technological progress.

In Switzerland, for instance, training ordinances are updated every five years. Keeping the training regulations as technology-neutral and open-ended as possible also enables companies to incorporate state-of-the-art technology into training.

It has also been evident in almost all countries that the precise professional qualification gained is not necessarily decisive for job prospects. The general area studied can be a more important factor. In the MINT area, in particular, graduates of VET programmes in Germany can command higher salaries than graduates of tertiary education in other fields.

// COUNTRY COMPARISON AT A GLANCE

		GERMANY		ITALY	POLAND			PORTUGAL
	Ranking	Description	Ranking	Description	Ranking	Description	Ranking	Description
Acceptance/ Prestige	***↓	Vocational training highly valued in society; a majority in each annual cohort enters VET; currently strong trend towards university education threatening status of VET	ote	Vocational training generally seen as low value; take-up of re- gional VET programmes limited; state schools leading to university entry qualification in five years enjoy strong intakes	*1	Acceptance low for historical reasons; initial trends towards improved image now perceptible	*1	Low acceptance; VET perceived mainly as second-line choice for young people
Company involvement	और और	High levels of partici- pation in dual training, but trend declining slightly in recent years, training places remain unfilled more often	*↑	Low participation levels outside pilot projects; new initiative in form of apprenticeships legislation with initial success at achieving stronger participation from companies	*** ***	VET participation generally not high; only firmly anchored in dual training in the trades	*	Companies (especially larger companies) very reluctant to become involved in training; increasing willingness in some sectors promp- ted by skills shortages
Involvement of social partners	· 李· 李· 李	Social partners organise and govern VET provision in partnership with politics and develop occupational profiles; trainees can elect representatives to advocate their interests, have employee rights and are represented by works councils	**	Social partners partly represented in regional VET councils, involved in development of national minimum standards, solely responsible for "apprendistato" qualification standards; only tangentially involved in national VET programmes; trainees with "apprendistato" contracts entitled to role in participative decision-making	* ↑	Social partners involved only in advisory capaci- ty, but permitted to collaborate on curricu- lum development since 2012; trainees have little scope to exert influence	**	Social partners involved in VET through sectoral councils, but largely in advisory role; some training centres are managed by social partners; no employee status for trainees, consequently no role in participative decision-making
Permeability	***	VET training formally open to all school leavers; career prospects through advanced VET options following from almost all occupational profiles; trainees can gain higher education entrance qualification in parallel with vocational education or start tertiary education three years after traineeship; room for improved recognition of vocational competences	**	No barriers to entering vocational school types beyond finishing middle school; lateral moves between occupational profiles possible; recognition of prior achievements being pursued, access to tertiary institutions and higher technical colleges still only through higher education entrance qualification	और और	Widespread double qualifications (general/ vocational) promote permeability; these enable direct access to tertiary education; possible to switch to general education pathway after initial vocational education and training	*	System highly permeable in theory through double qualifications (general/vocational education); in practice, however, this permeability is barely taken advantage of
Flexibility	3k 3k	Rapid adaptation of training processes facilitated by open structure and technolo- gy-neutral phrasing in training regulations; occupational profiles also updated regularly	**↑	Regional system relatively flexible due to very general minimum standards and demand-oriented planning; national school system offers flexibility through autonomy quotas governing about 30 per cent of course content	जेंद्र जेंद्र जेंद	Flexibility assured through increasing modularisation and regionalisation of VET offerings	और और और	Modular system for professional qualifications facilitates switching between educational pathways and the adaptation of training content to suit the time and region; the modules are also used in adult education

Prominence of issues shown on a scale from zero to 3 stars (*), arrows indicate trends 11

SWEDEN		SWITZERLAND		U		
Ranking	Description	Ranking	Description	Ranking	Description	
*	VET seen as second-best option in society; falling demand	ર્ગંદ મંદ મંદ	High prestige of vocational education and training; VET trainees highly satisfied; nevertheless existing status problems	* ↑	Acceptance of VET typically lower than the respect accorded to academic education; prestige rising through new (dual-track) programmes and new information policy	Acceptance/ Prestige
oje	Participation in mainly school-based VET system low; companies expect state to organise and deliver occupatio- nal training	ate ate	Intensive involvement on part of companies; cost-benefit ratio shows clear net benefit for companies	*↑	Participation levels on the low side, but strong increase in dual-track VET programmes over past 15 years	Company involvement
ale ale	Trade unions have relatively strong position; stronger involvement of social partners since schools reform in 2011 through establishment of programme councils and "Teknik-Colleges"	and the side	VET provision organised jointly by Federation, cantons and organisations from the world of work (OdA); the latter define training content; rights of employees to participate in deci- sion-making anchored in legislation	**	Social partners are involved, employers' organisations wield the strongest influence through sectoral councils; VET trainees have employee rights and can organise in trade unions	Involvement of social partners
** 1	Permeability reduced by vocational programmes no longer including automatic access to tertiary education since 2011; large range of second-chance qualifications and continuing education programmes in adult education offered	神神神	High degree of perme- ability through Federal Vocational Baccalau- reate facilitating access to tertiary education for those who have pursued an professional qualification	****	Permeability of education system traditionally high through modular configuration; a large range of second-chance qualifications and continuing vocational education and training courses are also offered	Permeability
** 1	Training provision can be adapted to regional requirements; scope for these adjustments has, however, been reduced since 2011 school reform	**	Flexibility through consideration of regional specificities in cantons and technology-neutral phrasing in training regulations	· 첫 · 첫 · 첫	Modular structure and opportunities for companies to exert influence lead to considerable flexibility in both VET and preparatory training	Flexibility

// COUNTRY COMPARISON AT A GLANCE

		GERMANY		ITALY	POLAND		PORTUGAL	
	Ranking	Description	Ranking	Description	Ranking	Description	Ranking	Description
Differentia- tion	***	Special offers for low-achieving students in the form of vocational training preparation, learning support during training, occupational profiles with reduced theoretical content; high-achieving pupils catered for through additional qualifications during training and cooperative education programmes.	*	Just under 6 per cent of students engaged in regional VET pro- grammes that emerged from programmes for early school leavers; learning support teachers for pupils with special educational needs	水水	Vocational special needs schools for low-achieving and dis- abled pupils; increasing modularisation makes it possible for young people with learning deficits to take indivi- dual training modules	N: N:	Various occupational training pathways specially designed for weaker pupils; particular curricula and vocational education centres for disabled young people
Transparency	ale ale	High level of trans- parency through training regulations for companies and curriculum framework for schools in dual VET system; diverse range of continuing education and training program- mes available can lead to confusion	% % ↑	High transparency in national, five-year edu- cation programmes, low transparency in shorter regional programmes; national Ministry of Education provides detailed information only on five-year pro- grammes	ale ale	Transparency through recent streamlining number of VET courses and reduction in number of occupational profiles	*1	Many alternative programmes leading to the same professional qualification lead to a lack of clarity; qualifications catalogue improves transparency, but not yet fully implemented
Vocational guidance	*** ***	Careers counselling mainly through job centres, but also a core task of schools; advice partially biased in favour of academic tertiary education options; some confusion results from involvement of numerous additional stakeholders and counselling agencies	*	Not effective, as transition into labour market still very poor; skill shortages in certain areas evident at the same time; high dropout rates in all educational programmes	*↑	No systematic careers counselling available, but system in planning	*↑	Counselling structures exist in both schools and education centres, but are largely unknown; network of advice centres currently under construction
Mobility	水	Mobility weakly developed: only around three per cent of VET trainees complete period abroad; mobility within Germany weak, with strong regional differences in supply and demand	*1	Low mobility at national level; surveys suggest increased interest from pupils at upper level and slight increase in mobility projects, individual transnational mobility very low	शृंद शृंद	Mobility during training low; after completion of training, outward mobility is high as a result of poor earning and job prospects in Poland	水	National mobility weakly developed; international mobility slightly higher, but still at low levels
Labour market match	शंद शंद शंद	As companies train mainly specialists for their own future needs, a close connection to labour-market demand is ensured; broadly-defined occupational profiles ensure multiple possible areas of deployment after initial vocational training	*1	Very poor match bet- ween VET and labour market; slight trend towards stronger involvement of companies in training through regional training programmes and changes in apprenticeships legislation	*1	Inadequate labour mar- ket match in particular in school-based VET courses	*	Labour market orientation up to now only weak; plans exist to match range of training programmes and labour market needs more effectively through involvement of job centres and sectoral councils

Prominence of issues shown on a scale from zero to 3 stars (*), arrows indicate trends 11

SWEDEN		SWITZERLAND		10		
Ranking	Description	Ranking	Description	Ranking	Description	
水水水	Considerable emphasis on empowerment and participation reflected in personalised learning support available to weaker students and migrants	***	Special two-year training courses with individual support for weaker pupils; numerous transitional options geared to in- tegration into training programmes	** 1	Differentiated dual-track training programmes for high-performing and weaker students	Differentia- tion
**	Transparency achieved through framework requirements; regional adaptation results in a lack of clarity at times; restriction of regional flexibility through 2011 school reform	शंद शंद शंद	Highly transparent VET system; comprehensive range of instruments and programmes for monitoring training and labour markets	**	A high degree of trans- parency is formally given; the diverse range of programmes available reduces this, however	Transparency
ate ate	Quantitatively large numbers of counsel- lors available, directly employed at schools, but quality inadequate, as strong bias towards academic options evi- dent in advice given	sic sic	Every canton offers careers counselling; need for improvement in counselling available to school pupils	zie	Counselling has been criticised, as diversity of programmes available not communicated adequately; not enough emphasis in schools, especially, of opportunities in VET system	Vocational guidance
**	Strong international orientation of educa- tion system as economy highly export-depen- dent; high demand for international mobility and exchange pro- grammes	*	Mobility still very low, as a loss of quality in training is feared; the various language regions form a barrier to mobility at national level	*	Very low mobility overall; national mobility still more significant than international mobility	Mobility
*	Strong focus on general education content and low company involvement leads to difficult transition from training to labour market; decentralised VET provision improves adaptation to regional labour market	推准体	Large and standardised influence of organisations from the world of work (OdA) ensures strong connection between VET training and labour market as well as it assures that training is not too company-specific; training ordinances updated every five years	* ↑	Level reached by some programmes not adequate for labour market, but state and companies increasingly committed to enhan- cing VET programmes	Labour market match

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// RÉSUMÉ AND OUTLOOK



The results of the study are intended to foster mutual learning.

It must be borne in mind, however, that reforms can only prove successful when they are integrated harmoniously into existing structures and local realities.

Vocational education and training systems in every country play an important role for individuals, for the economy, and for society. They carry out an educational mandate to offer instruction leading to professional qualifications, they smooth the path of young people entering the labour market, they facilitate the participation of young people in society, and they support companies in filling their needs for staff with specialist skills. In spite of these benefits, vocational education and training in many countries falls far short of realising its full potential.

The country analyses have shown that vocational training in Europe is extremely heterogeneous. It has also become evident that no single successful model exists, but rather many functional equivalents which address various goals of vocational education in different ways. No guarantees exist that structures which have proved successful in one country and within one particular institutional framework would lead to similarly successful results in a different country.

A clear trend exists, however, for the integration of young people into the labour market to proceed more rapidly and more successfully in countries where dual elements play a more dominant role in VET provision. And while entire VET systems cannot simply be transplanted en bloc to other countries, countries can certainly learn from one another when designing their individual components.

The example of Germany and Switzerland can inject momentum into the discussion on the value of dual-track vocational training systems and strong involvement by the social partners for achieving a good match between VET systems and the labour market. Italy can serve as a good example for how VET offerings can be kept flexible at regional level in spite of general minimum standards applying. The Polish system is distinguished by a high degree of permeability, which is important for the acceptance of vocational education. Portugal has developed new institutions in recent years which contribute significantly to increasing transparency in the sphere of vocational education and training. The Swedish system is highly inclusive and features, among other attributes, personalised learning support for weaker pupils and young

people with migrant backgrounds. And, last but not least, the vocational education system in the United Kingdom is a good example of how the modular structuring of qualifications can create close links between initial and continuing vocational education and training. Solutions for integrating these various priorities must be found within the existing VET systems. These issues can also be managed successfully in the context of dual-track vocational training structures.

In addition, a number of action areas in which improvements are necessary throughout Europe exist. These include the national and international mobility of both trainees in vocational education and qualified specialists, and the need to put careers guidance systems in place that competently provide balanced counselling on the relative merits of vocational and academic education options.

Vocational education and training, and especially work-based learning, have attracted increasing levels of attention in recent years as a result of high youth unemployment and the EU activities aiming to stem its causes. It has become clear, however, that no single magic formula for implementing ideal systems exists, and that many countries are still far from the point where they would ideally currently like to be. The reasons for this are diverse: institutions that have evolved over time, attitudes towards vocational education that prevail in the wider population, but also overall economic developments that have detracted from a strong focus on vocational education and training. Nevertheless, change is now under way and the critical situation is being used as an opportunity to take a wider view that incorporates lessons from further afield. The current degree of willingness to embrace opportunities for mutual learning and to enhance vocational education and training together is greater than ever before.

Regardless of how well established VET systems already are and how much acceptance they enjoy, they must constantly readjust themselves and test whether they are future-proof. Demographic change and digitisation are only two examples for the overall economic developments which vocational education and training must keep pace with and prepare young people for, so that they in turn are prepared for the future.

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// LITERATURE

Barabasch, Antje/Wolf, Stefan, 2011, Internationaler Policy Transfer in der Berufsbildung – Konzeptionelle Überlegungen und theoretische Grundlagen am Beispiel deutscher Transferaktivitäten, Zeitschrift für Erziehungswissenschaft, Vol. 14, No. 2, pp. 283–307

BiB – Bundesinstitut für Bevölkerungsforschung, 2014, Auslandserfahrung junger Menschen nimmt zu, Press release No. 11/2014 (3/12/2014)

BUSINESSEUROPE, 2012, Creating Opportunities for Youth: How to improve the quality and image of apprenticeships, March 2012

Cedefop – European Centre for the Development of Vocational Training, 2015, Stronger VET for better lives: Cedefop's monitoring report on vocational education and training policies 2010-2014

Cedefop, 2014, Education and Training Monitor 2014

Cedefop, 2013, Labour market outcomes of vocational education in Europe. Evidence from the European Union labour force survey, Research Paper No. 32

Eichhorst, Werner/Rodríguez-Planas, Núria / Schmidl, Ricarda / Zimmermann, Klaus F., 2012, A Roadmap to Vocational Education and Training Systems around the World, IZA Discussion Paper No. 7110, December 2012

ETUC – Confederation Syndicat European Trade Union, 2014, ETUC Resolution Improving quality of Apprenticeship and Work-based learning, Adopted at the ETUC Executive Committee on 11-12 March 2014

Euler, Dieter, 2013, Das duale System in Deutschland – Vorbild für einen Transfer ins Ausland?, Eine Studie im Auftrag der Bertelsmann Stiftung, Gütersloh

Eurofound – Europäische Stiftung zur Verbesserung der Lebens- und Arbeitsbedingungen, 2015, Eurofound yearbook 2014: Living and working in Europe, Publications Office of the European Union, Luxembourg

Eurofound, 2012, NEETs. Young people not in employment, education or training: Characteristics, costs and policy responses in Europe, Publications Office of the European Union, Luxembourg

European Commission, 2015a, Erasmus+, The EU programme for Education, Training, Youth, and Sports 2014-2020, http://ec.europa.eu/programmes/erasmus-plus/documents/erasmus-plus-in-detail_en.pdf [14/9/2015]

European Commission, 2015b, Good for Youth – Good for Business, European Alliance for Apprenticeship

European Commission, 2014a, EU measures to tackle youth unemployment, Memo/14/466, 8 July 2014, Brussels, http://europa.eu/rapid/press-release_MEMO-14-466_en.htm [28/08/2015]

European Commission, 2014b, Education and Training Monitor 2014

European Commission, 2013a, Work-based Learning in Europe: Practices and Policy Pointers

European Commission, 2013b, The effectiveness and costs-benefits of apprenticeships: Results of the quantitative analysis

Eurostat, 2015, Eurostat – Ihr Schlüssel zur europäischen Statistik, http://ec.europa.eu/eurostat/web/main/home [28/08/2015]

McKinsey Center for Government, 2013, Education to Employment: Getting Europe's Youth into Work

OECD – Organization for Economic Co-operation and Development, 2015, Education Policy Outlook 2015 – Making Reforms Happen

OECD, 2014, Skills beyond School

Wittmann, Eveline, 2010, Von Unternehmensrankings zu internationalen Systemvergleichen. Die Bedeutung von Indikatoren und Benchmarks in der Berufsbildung, Berufsbildung, in: Wissenschaft und Praxis (BWP), Year 39, No. 3, Bundesinstitut für Berufsbildung, Bonn

Wolter, Stefan C./Ryan, Paul, 2011, Apprenticeship, in: Hanushek, Eric A./ Machin, Stephen/Woessmann, Ludger, Handbook of the Economics of Education, volume 2, pp. 521–576

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The present study is the joint product of four partners. It was produced by the Cologne Institute for Economic Research (IW Köln) and developed and discussed intensively with the three foundations involved.

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Konrad Adenauer Stiftung is a political foundation which works in political education at national and international level for peace, liberty and justice. Its work focuses particularly on consolidating democracy, promoting European unification, advancing transatlantic relations, and development cooperation policy. The Foundation operates as a think tank and advisory agency, producing academic studies and topical analyses which can serve as a basis for future political action.

Vodafone Stiftung Deutschland of a family of foundations that span the globe. As an independent, non-profit institution, it supports and initiates programmes as a socio-political think tank with the goal of providing impetus for social progress, fostering the development of an active civil society and assuming socio-political responsibility. Focusing on the fields of education, integration, and social mobility, the foundation's mission is to recognise challenges and chances, to give support and eventually to make a difference.

Institut der deutschen Wirtschaft Köln Cologne Institute for Economic Research (IW Köln) is a private, non-profit research institute and a registered non-profit organisation. It is supported by employers' and industrial associations as well as individual companies. It compiles and develops rigorous academic analyses and advisory opinions on all areas of social and economic policy, the education system (including vocational education and training) and the labour market. The work of IW Köln is characterised by close links between focused public relations work targeting key groups and academic analysis drawing on solid theoretical expertise and sound empirical research. In these specialist fields, IW Köln enjoys a special standing among Germany's research institutes.

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