



dualvet

Transfer of successful structures and guidance for implementing
the dual VET system. Training company trainers

Strategy Plan

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Source:

- “Germany’s dual vocational training system: a model for other countries” Prof. Euler;
- Germany’s Vocational Training Act;

01 Cooperation of government and industry

- Roles of each party involved in the system (government, vocational school, awarding body, training company);
- Joint funding of vocational training;
- Social acceptance of VET.

INTRODUCTION

“German vocational education and training is a successful model in Germany and is highly regarded abroad. It ensures that future members of the skilled workforce receive initial and continuing vocational education and training to equip them with high-level specialist, methodological and social competence, and thus it lays the essential foundation for an innovative and competitive economy.

Ongoing further development and the adaptation of vocational training to economic, technological and social changes are promoted by five basic features which also traverse all forms of education and training and represent added value for the VET systems of our partner countries.

- 1. Cooperation of government and industry*
- 2. Learning within the work process*
- 3. Acceptance of national standards*
- 4. Qualified VET staff*
- 5. Institutionalised research and consultancy”*

Source: [BIBB](#) and [edvance](#)

We will analyse with the help of these 5 basic features the best practice from Germany and Austria and parallel the state of the art in Spain and Portugal. Afterwards we will create a report containing recommendations for implementing the dual system from German and Austria to Spain and Portugal as well as a summary of all the research carried out containing best practices and SWOT analysis.

1. Cooperation of government and industry

Best practice: Portugal	Best practice: Spain	Best practice: Austria	Best practice: Germany
Role of the government / state / region?	Role of the government / state / region?	Role of the government / state / region?	Role of the government / state / region?
<p>Introduction Over the past thirty years, a considerable effort was made to close the gap in average development standards between Portugal and the European Union, particularly regarding educational attainment. But more remains to be done: educational attainment of some 3.5 million people of working age is below secondary education, while some 485 000 young people (i.e. 45 % of the total) aged between 18 and 24 are working without having completed secondary education (Year 12 of school).</p> <p>The <i>New Opportunities Initiative</i> launched by the Government in 2005 aims to achieve a rapid improvement in the qualification levels of the Portuguese people, with Year 12 being set as the minimum reference qualification.</p>	<p>Introduction The vocational education and training system in Spain is regulated by the <i>Qualifications and Vocational Training Law (Ley Orgánica 5/2002, de las Cualificaciones y de la Formación Profesional, de 19 de junio)</i>. This Law creates the National System of Qualifications and Vocational Training and establishes the legal framework for the development of all its instruments. After this Law, regulatory standards of qualifications, vocational training offers, systems for evaluation, accreditation and recognition of qualifications and professional competence have been developed.</p> <p>Besides, the Law of Education (Ley Orgánica 2/2006, de 3 de mayo, de Educación) and the Law of Sustainable Economy (Ley 2/2011, de 4 de marzo, de Economía Sostenible) establish new measures in the field of the vocational training, in order to complement the system laws. Furthermore, the Royal Decree of Professional Certificates (RD 34/2008 de los Certificados de</p>	<p>Introduction In the Austrian dual VET system (apprenticeship training) there are shared competencies of national & provincial bodies, as follows:</p> <p>A. National/federal level: There are three main bodies which are responsible for legislation on the federal level:</p> <ul style="list-style-type: none"> • Federal Ministry of Economy, Family and Youth (BMWFJ) • Federal Ministry for Education, the Arts and Culture (BMUKK) • Federal Advisory Board on Apprenticeship (BBAB) 	<p>Introduction The German VET system is noted for its combination of three goals determined by consensus among policy makers in the field of education at the state and federal level, as documented in the National Report on Education. This “consensus principle” refers to mutual agreement of government and business regarding vocational training policy.</p> <p>Collectively, the three goals reflect the interests of society, business and the individual and their purpose are: (1) promoting economic productivity,(2) social integration,(3) individual development (economic dimension; social dimension; individual dimension).</p>

<p>This target is to be reached via a strategy focusing on two levels:</p> <ul style="list-style-type: none"> • Raising secondary education completion rates among young people, with strong measures to combat early school leaving and an investment in increasing the number of vocational training routes leading to dual certification of academic and vocational abilities; • Improving the adult population's qualification levels via a combination of education and training for adults and a generalisation of the processes for recognising, validating and certifying skills. <p>Education and training policies are being accompanied in the field of employment by an extensive range of public technical and financial aids whose aim is to encourage entrepreneurship and job creation, focusing particularly on supporting young people's transition to working life and on combating long-term unemployment.</p> <p><u>Role of the Government</u></p> <p>The education and training system in Portugal is centrally administered vis-à-vis the definition of major policy lines and curricular, teaching and financial guidelines. The following figure presents the main actors in the administration of the education and training system.</p>	<p>Profesionalidad) allows certificating training for workers and validating this training as a regulated education.</p> <p>The Law 5/2002 defines vocational training as <i>"the set of training activities that qualify the person for a skilled performance in various professions, access to employment and active participation in social, cultural and economic life, and that includes instruction in their training initial vocational, shares of integration and reintegration of workers as well as those aimed at continuing training in enterprises that facilitate acquisition and updating of skills. "</i></p> <p>In summary, the Spanish system is based on a systemic view that includes all types of training and is closely linked to the labour market.</p> <p>The Law is developed in two Royal Decrees, which establish two subsystems:</p> <ul style="list-style-type: none"> • The Royal Decree 2006 (RD 2006) regulates the initial training within the education system. It depends on the Ministry of Education, Culture and Sports. It includes Cycles and Higher and the Initial Professional Qualification Programmes (PCPI). • The Royal Decree (RD 2007) regulates employment training. It depends on the Ministry of Employment and Social Security. It includes demand training (training actions businesses and individual training leave.). Offer training (aimed at 	<p>The competencies of the Federal Ministry of Economy, Family and Youth (BMWVJ) are legally defined in the Vocational Training Act. According to this law the role of the BMWVJ focuses on the company-based part of the apprenticeship training. An important part of it's role is the definition of training regulations for individual apprenticeship occupations. These training regulations are issued on the basis of expert opinions from the Federal Advisory Board on Apprenticeship (BBAB).</p> <p>As mentioned above the Federal Advisory Board on Apprenticeship (BBAB) has an important role in the definition of training regulations for individual occupations. When the Federal Ministry of Economy, Family and Youth (BMWVJ) issues new or changes existing regulations it has to take into account statements and concepts provided by the BBAB.</p> <p>The members of the BBAB are appointed by the BMWVJ on the basis of nominations by social partners (Chamber of commerce, Chamber of labour). In addition teachers of part-time vocational schools are also members in an advisory role.</p>	<p>Three-fold purpose in the context of the interests of the stakeholder (the state, the business community, young people and parents): government is responsible for ensuring a balance of different goals.</p> <p>Close cooperation between the business and government is characteristic of the dual vocational training system, and this is evident in the way the principles of corporatism and federalism are combined.</p> <p>The federal and state governments perform regulatory and support task, while certain important responsibilities are handled by companies or partnership-based bodies such as the responsible agencies.(e.g. developing occupational profiles & curricula> to developing a skilled labour force which can help promote innovation and business)</p> <p>The states are responsible for the school-based portion of dual training as well as for most training courses that take place entirely in the school setting. The social</p>
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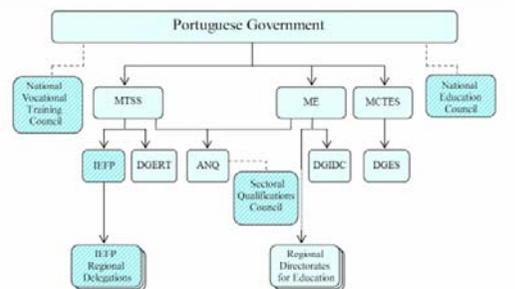


Figure 1 - Main actors in the administration of the education and training system

In detail, the main actors in the administration of the education and training system are as follows:

- MTSS: Ministério do Trabalho e da Solidariedade Social [Ministry of Labour and Social Solidarity]
- ME: Ministério da Educação [Ministry of Education]
- MCTES: Ministério da Ciência, Tecnologia e Ensino Superior [Ministry of Science, Technology and Higher Education]
- IEPF: Instituto do Emprego e Formação Profissional [Institute for Employment and Vocational Training]
- DGERT: Direcção-Geral do Emprego e das Relações de Trabalho [Directorate-General for Employment and Relations of Work]

employed and / or unemployed workers). Offer training (aimed at employed and / or unemployed workers). Traineeship (Employment workshops and other). Accompanying actions (studies, tools, etc.).

In short, the Law aims to integrate vocational and education training focused to the labor market although in practice, there is a division between initial training and employment training with an incomplete articulation of both subsystems.

Role of the Government

Five institutions play a key role in the regulation and coordination system:

- The sectoral conferences of education and work;
- The national and regional councils of vocational and education training;
- The National Employment Institute (INEM);
- The Tripartite Foundation for Employment training;
- The national and regional institutes of professional qualifications.

The education and employment conferences are bodies to meet and discuss the coordination of educational and employment policies respectively across the state. The Ministers concerned, technical secretaries of each ministry and counsellors compose the conferences with expertise in each field in every region. They

On the basis of the School Organisation Act the **Federal Ministry for Education, the Arts and Culture (BMUKK)** is responsible for issuing framework curricula for part-time vocational schools for each apprenticeship occupation.

B. Provincial Level:

There are 5 main bodies who have important responsibilities at the provincial level:

- Apprenticeship offices of provincial branches of the Austrian Chamber of Commerce;
- Federal Provinces;
- Provincial governors;
- Regional Advisory Boards on Apprenticeship;
- Regional school inspectors.

Apprenticeship Offices of provincial branches of the Chamber of Commerce act as vocational training authority of the first instance. These offices are responsible for assessment training companies suitability, assessment & recording of apprenticeship contracts, wide-ranging counselling for apprentices (for the protection of apprentices there is also specific support by the provincial branches of the Chamber of Labour)

partners are involved in developing and updating training guidelines.

The federal government coordinates complex negotiating processes, with responsibility for vocational training distributed among various ministries. The federal Institute for Vocational Education and Training (BiBB) plays an essential role in coordinating guidelines and in research relating to vocational training. (e.g. to update professions, vocational training act,...)

The importance of workplace training is reflected in the fact that the standards and rules for this kind of training were set up by the self governing economic bodies, i.e. mainly by the Chambers.

In 1969 the Vocational Training Act was passed by the German parliament, bringing together the few relevant regulations contained in other legislation and having the force of law to much that had until then been regulated by the statutes of the Chambers.

<p>Industrial Relations]</p> <ul style="list-style-type: none"> • ANQEP: Agência Nacional para a Qualificação e Ensino Profissional [National Qualifications Agency] • DGIDC: Direcção-Geral de Inovação e do Desenvolvimento Curricular [Directorate-General for Innovation and Curricular Development] • DGES: Direcção-Geral do Ensino Superior [Directorate-General for Higher Education] <p>The Ministry of Labour and Social Solidarity (MTSS) is responsible for defining, managing and implementing policies on employment, vocational training, industrial relations, working conditions and social security. It performs its tasks via central, regional and local services and advisory bodies.</p> <p>The Institute for Employment and Vocational Training (IEFP) is the national public employment service responsible for implementing active employment policies, particularly those pertaining to vocational training.</p> <p>The Ministry of Education (ME) is responsible for defining, coordinating, implementing and assessing national policy related to the education system, specifically pre-primary education, basic education, secondary education and adult education; and,</p>	<p>coordinate the regions and the public administration. And also, take key decisions about the allocation of resources or the development of processes.</p> <p>The General Council coordinates the entire system with the participation of representatives of the two subsystems. It is a consultative body of the state government in which the major state and regional institutional actors involved in the education and training are represented (central and regional government, employers and trade unions). Its main objectives are: first of all, report all matters relating to vocational training referred by the government; secondly, propose any suitable action to improve the system; and finally, develop and propose to the Government the approval of the National Vocational Training Programme to assess and control its subsequent implementation.</p> <p>At the regional level, have been also created vocational training tripartite councils with the presence of representatives of the ministries responsible for the areas of education and occupation. In the Council of Aragon is represented the Aragonese Council Chambers which is currently developing the III Vocational training Plan of Aragon.</p> <p>The regional councils are more or less active depending on the dynamics of each autonomous region. Most of them have developed Regional</p>	<p>and training companies as well as the administration of apprenticeship-leave exams and subsidisation schemes for training companies.</p> <p>In addition the head of the apprenticeship office appoints - on the basis of a nomination by the Regional Advisory Boards on Apprenticeship – the chair-persons of the apprenticeship-leave examination boards.</p> <p>The federal provinces are in charge of constructing and equipping part-time vocational schools and also for 50% of the funding of salaries of teachers of part-time vocational schools.</p> <p>Provincial governors (and related provincial government offices) act as apprenticeship authority of the second instance. In this role they decide about appeals in apprenticeship training matters e.g. withdrawal of authorization as training company, cancellation of illegally registered apprenticeship training contracts. In addition provincial governors are also responsible for the members of respective regional advisory boards on apprenticeship.</p>	<p>The Act made no alteration in the training system itself. The Vocational Training Act regulates more than just the training of young persons after their period of compulsory school attendance.</p> <p>As determined in the Act, the concept of vocational training in Germany comprises initial training, further training and vocational retraining.</p> <p>In conformity with the powers of jurisdiction laid down in the German constitution, the Vocational Training Act does not apply to vocational training schools, for which the member states of the Federal Republic (the "Laender") are responsible. The form of German vocational training, with its emphasis on learning by doing and with the employers providing the training as its central element, meant that the regulations governing it could not be taken from education law alone.</p>
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with regard to national policies to promote qualification levels, for coordinating and integrating national education policy and national vocational training policy.

The Ministry of Education's tasks are performed by central, regional and local services, with the support of advisory bodies whose members include the social partners.

At central government level, the **Directorate-General for Innovation and Curricular Development (DGIDC)** helps to define policies on teaching methods and components and ensures implementation of those policies by defining study plans, objectives and essential curriculum content.

Legislative Framework

In Portugal, the legislative framework governing vocational education and training is based on the *Lei de Bases do Sistema Educativo* [Comprehensive Law on the Education System – LBSE], which has established guidelines for setting up and managing basic education curricula, and for assessing learning.

In 2004, under the reform of secondary education, guiding principles were established for the organisation and management of curricula and for the assessment and certification of courses at secondary education

Plans with unequal degrees of incidence, denoting a tendency to develop regional vocational training systems with its own dynamic. Therefore, the challenge is to articulate these Regional Plans into a Central Government Plan. The regions don't like the proposals of coordination as they limit their prerogatives in training. At the same time, the Government needs to coordinate them in a common framework to ensure responsibilities and commitments, and avoid duplication of regional resources.

The existence of a coordination framework and an agreed strategic programming for the entire system would measure the progress and achievement of the objectives of the implemented measures.

The INEM (National Employment Institute), within the Employment State Public Sector (SPEE), is the primary state manager for all employment training, in its four axes of activity, either directly or through the Tripartite Foundation for Employment Training.

The Tripartite Foundation for Employment Training is another pillar of the system, particularly in the subsystem for employment training.

It is a support organization for SPEE to manage employment training for employed workers.

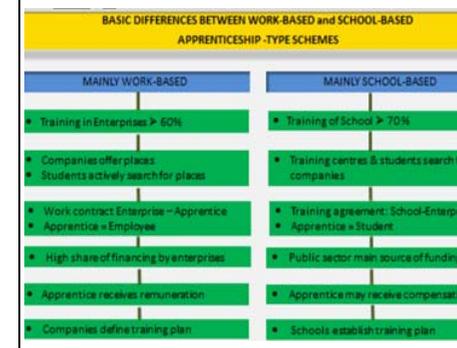
The management of the training demanded in companies depends on the Tripartite Foundation, although the autonomous regions, through its

The **regional advisory boards on apprenticeship** which consists of representatives of social partners are responsible for preparing experts opinions, proposals and suggestions concerning the apprenticeship training in respective provinces as well as the appointment of chairpersons of apprenticeship-leave examination boards.

Regional school inspectors are in charge of school inspection and fulfillment of all the agendas within their sphere of responsibility as well as for implementation of the federal framework curricula in the form of regional curricula.

The government is responsible for the legal conditions and the quality standards of the system. In addition, the responsible institutions are the ministry of education with Bundesinstitut für berufliche Bildung in cooperation with the industry and commerce, DIHK (roof organisation of all CCI), chambers of commerce and industry/handicraft Kultusministerkonferenz and federal states, which coordinate the theoretical part of the training Social partners.

Benefits: the relevant parties become active participants who are involved in implementing guidelines and agreements, which promotes social acceptance of vocational training.



<p>level. The new regulatory framework to adopted in 2007, has set up the National Qualifications System, bringing together under a new institutional framework vocational training which takes within the education system, and vocational training that takes place in the labour market, providing them with shared objectives and instruments.</p> <p>This system introduced the National Qualifications Catalogue, an instrument for the strategic management of qualifications and to regulate all dual certification training, and a National Qualifications Framework, designed based on the European Qualifications Framework (EQF).</p> <p><u>Joint funding of vocational training</u> Under the Comprehensive Law on the Education System, basic education is free. All costs associated with registration, attendance and certification are covered, and some pupils may be eligible for free use of school books and materials as well as for free food and accommodation, depending on the socioeconomic situation of their family. School transport is free for pupils attending basic education.</p> <p>The initial vocational education and training offered within the education system is essentially funded from the Ministry of Education's budget, though the European</p>	<p>specialized agencies, have powers to report, control and evaluate training activities in companies located in the same territory. The Tripartite Foundation also manages training offered at state level, while training offered at regional level is provided by the regions, in collaboration with regional tripartite institutions that have been created for that.</p> <p>The National Institute of Qualifications (INCUAL) coordinates the system with the following objectives: define, develop and update the National Catalogue of Professional Qualifications and the corresponding Modular Catalogue of Vocational Training. It supports the General Council for Vocational Training as well. In fact, INCUAL is under the functional supervision of the Council, which acts as its governing body.</p> <p>It is the axis of Qualifications and Vocational Training integrated system. This catalogue aims at identifying the most significant professional qualifications of the Spanish production system and describes them in terms of skills needed to organize them into professionals and families skills levels. This catalogue is the basis for developing the training offered by the vocational training and professional certificates, and includes training content associated with each qualification, according to an structure articulated in training modules. Thus, the catalogue constitutes the backbone of the entire system that facilitates the transition between the different</p>		
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<p>Social Fund's contribution to the funding of certain measures is also significant. Vocational courses are offered by the network of vocational schools – a system that has received strong support from the ESF within the framework of measures included in Operational Programmes.</p> <p>Most of the initial vocational education and training programmes, offered by the Ministry of Labour and Social Solidarity, are funded entirely from public funds, in the form of the allocation of resources from the Social Security budget and European Social Fund. Significant funding from the European Social Fund has also supported the apprenticeship system.</p>	<p>subsystems and between the same catalogue and the labour market.</p> <p>It rebuilds all training modules according to the skills required in the labour market. At the same time, some autonomous regions have created their qualifications institutes that collaborate with the INCUAL.</p> <p>Currently, a system for the recognition, evaluation and accreditation of skills is being built. The aim is to create a device, which is able to recognize and prove the skills acquired by individuals, irrespective of the means they have used to acquire them (the formal training, the non-formal or informal experience).</p>		
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SWOT: Role of the government / state / region?

Country*	Strength	Weakness	Opportunities	Threats
ES	<ul style="list-style-type: none"> The Spanish Government considers strategic Dual System incorporating the training process; INCUAL is the shaft of System of Qualifications and Vocational Training. 	<ul style="list-style-type: none"> Duplication of resources: local and state Inequality of Training Plans depending on local dynamics Poor flexibility. 		Government supervision that does not allow greater participation of the business.
PT	The existence of the National Agency for Qualification and Vocational Education and Training (NAQVET), which make an extraordinary work in this field.	The tendency of discontinuity of policies in the fields of education and vocational training very typical of Portugal.	The actual restructuring of the vocational training in Portugal, which means the responsibility of only one Portuguese entity – NAQVET.	The risk of disinvestment in VET system.
AT	<p>Because of shared competencies between federal and provincial level as well as the involvement of social partners a high legitimization of decision in the area of Dual VET is secured.</p> <p>Despite the fact that there are shared competencies between the federal state and the provinces all official apprenticeship occupations are recognized all over Austria. That means if an apprentice does his/her exam in a province the exam is recognized all over Austria.</p>	On the other hand this shared competencies could make it harder to implement necessary reforms to the Dual VET-system in Austria.	The competencies on a provincial level give the opportunity to adjust the Dual VET-system to regional needs.	The shared competencies and the danger on acting slow on reforms of the system may lead to slowly react on new trends (e.g. emerging job profiles) in specific industries.

<p>GE</p>	<ul style="list-style-type: none"> • Acceptance of VET within the society; • Close cooperation between government and business; • Relevant parties become active participants who are involved in implementing guidelines and agreements; • High quality of the results • National qualification standards; • Sustainability of the international competitiveness for Germany; • Low costs for the government in professional education; • Social stability and social dialog; • Additional funding programs of the government support weak people and integrate them in the society; • Chambers as competent bodies by law (vocational training act) offer support to companies in all questions of dual education; • VET is a system of initial dual education and further education. The system is also permeable to the academic system; • Even unskilled adult people can reach a professional qualification in special programs; • Guarantees per law a monthly salary for each apprentice (differs in dependency of the profession, increasing with the year of VET-training); • “Consensus principle” refers to mutual agreement of government and business regarding vocational training policy. 	<ul style="list-style-type: none"> • The social partners and labour market organizations are included in the decision-making; • Innovative training curricula in VET (regulatory process needs up to 10 years); • Flexibility of the system; • More than 370 different professions most with a training duration over 3 years; • Examiners work voluntary for the chambers. How can the quality of the examination and the further training of the examiners be guaranteed? E.g.: It becomes now a big challenge in Germany to introduce “activity-oriented” examinations because examiners are not trained on this; • Vocational training within the entire health sector does not belong to the German Vocational Training Act; • The position of the chambers “in between”: on the one hand they have a public-legal task in the vocational training system, on the other hand they have to finance privately. 	<ul style="list-style-type: none"> • Close cooperation between government and business; • To introduce a successful system in other countries helps to increase job opportunities; • Even unskilled adult people can reach a professional qualification in special programs. This could be of interest for countries who want to introduce the system and which have many people who obtain much work experience but no exam. 	<ul style="list-style-type: none"> • Long process for innovative reforms; • Competition between academically and vocational training in business; • “Negative” demography; • Sovereignty of the chambers (compulsory membership of companies).
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*Country codes: ES (Spain); PT (Portugal); AT (Austria); GE (Germany).

Best practice: Portugal	Best practice: Spain	Best practice: Austria	Best practice: Germany
Role of “training” company?	Role of “training” company?	Role of “training” company?	Role of “training” company?
<p>Enterprises involved in modernisation schemes or projects to improve workers' qualifications receive financial support, in accordance with the National Strategic Reference Framework. Continuing vocational training is offered at sectoral level by organisations belonging to the private sector, employers, cooperatives and associations. Finance and manufacturing are the sectors with the highest number of participants in training schemes.</p> <p>Enterprises in the more dynamic and competitive sectors also tend to invest in the development of the vocational skills of their collaborators in areas of knowledge related to or associated with their strategy and purpose.</p> <p>Cooperation agreements are frequently signed between large or medium-sized enterprises and universities or polytechnics for the provision of advanced training programmes (usually in the areas of management, finance, marketing and technology) which, while respecting the requirements of the tertiary education</p>	<p>The concept of work as a way of acquiring the skills and training required to introduce a new dimension to the criteria of work organization that provides a different view in the way of structuring the training in the company, still centralized in the school organization.</p> <p>Moreover, the training of student skills requires spaces in real working conditions, so that the company becomes a key part of the training systems. That is why we must identify and provide formulas to motivate and encourage the formative role of enterprises and their greater involvement in training systems.</p> <p>Study centres should not ignore the importance of these practices but, on the contrary, they have to facilitate and empower them. The centre should ensure that the coordination and mentoring of the studies are both aimed and linked to the company, and should ensure that the student practices are closely related to the studies completed.</p> <p>We have to keep always in mind that the practices are very important to find a job: many students end up working in that company. But</p>	<p>Training companies are responsible for the company-based training of apprentices. This training covers the following features (bmwfj 2012, p.9):</p> <ul style="list-style-type: none"> • It is held under real-life working conditions. Ideally the apprentice acquires the knowledge and skills which are defined in the job profile for the respective apprenticeship occupation (defined in cooperation by BMUKK, BMWFJ, BABB see above). The aim is that an apprentice is able to take up a qualified professional activity as a skilled worker immediately upon completion of the training. • The apprentice is fully integrated in the work process which means that most of the training is provided as part of productive activities. • If a company can't provide training for the all aspects described in a defined job profile, training companies have the possibility to use complementary practical training in a training alliance (apprentices receive) company-based training in two or more different 	<p>Learning Locations of Vocational Training</p> <p>(1) Vocational training shall be provided in companies engaged in economic activity, in comparable institutions not engaged in economic activity, especially those of the public service, in establishments of members of the independent professions, and in households (in-company training);</p> <p>(2) In vocational schools (school-based vocational training); and</p> <p>(3) In other vocational training facilities outside the system of school-based and in-company training (non-company training).</p> <p>The learning locations specified in subsection shall collaborate in the provision of vocational training (cooperation among learning locations).Parts of initial training may be completed abroad if this serves the purpose of training.</p>

<p>establishment involved, are also in line with the enterprise's needs and priorities.</p> <p>The number of workers involved in vocational training schemes varies widely from sector to sector and depending on the size of enterprise concerned, however, recent data indicate an upward trend in participation by workers in enterprises with, at least, ten or more employees. The results also indicate that workers' access to vocational training increases with the size of the enterprise concerned.</p> <p>To offer employees easier access to vocational training, the New Opportunities Initiative aimed to expand training opportunities by modularising and adapting courses and by employing organisational and cost-sharing mechanisms that, on the one hand, ensure that employees exercise their individual right to training and, on the other, are compatible with the current and future competitiveness of the company.</p> <p>The Dual System in Portugal was implemented by the Institute for Employment and Vocational Training and aims to target young people (maximum 24 years old) as an alternative for those who have abandoned the national education system and want to integrate the labour market without having previously any kind of qualification. This Dual Training System</p>	<p>the weight of coordination lies not only in schools but also in the role of companies at Vocational Training.</p> <p>The business sector, mainly composed of SMEs, is directly responsible for the adaptation of the teaching of vocational training to labour market requirements. Currently, this is done through training practices (FCT), which are the way to evaluate the skills of students in vocational training and to employ them in a real work environment.</p> <p>The utility of the practices is undeniable. Companies and institutions that hire workers seek a number of profiles with capabilities, skills and competencies that enable them to meet all their needs. These needs are becoming more specific so vocational training is getting more and more structured and is focused on certain jobs.</p> <p>These practices will allow students to acquire the necessary skills to confront the real problems of their professions. The best practices are those that link the theoretical knowledge taught in the classroom, with the labour market and business demands.</p> <p>We have to keep always in mind that the practices are very important to find a job: many students end up working in that company. Companies must evaluate their students in the right way, through a placement tutor and</p>	<p>companies in order to fully covering all aspects of an apprenticeship occupation).</p> <p>In consideration of the fact, that practical training makes up some 80 % of the whole training period (bmwfj 2012, p.5), companies bear a lot or responsibility in VET. It has also has to be mentioned that neither the training company nor the apprentice are obligated to sustain employment after the completion of the training (missing reference). This could possibly trigger a free rider problem (own opinion).</p>	<p>The total duration of such training abroad shall not exceed one fourth of the duration of training specified in the initial training regulations.</p> <ul style="list-style-type: none"> • Training is designed to meet the practical needs of the labour market • Business setting is essential for learning, since it is the only place where learning can occur under real-life conditions; • Most important party in the dual system provides for a VET-contract with the apprentice and pays for the apprentice a monthly salary and social insurance; the amount depends on the profession and the year of the training responsible for the practical training in the dual education, work experience; • Dual training is accepted as the system which provides for the up-coming of skill workers; VET guarantees the future existence of the companies; • Practical training is close to the company needs and represents what the economy needs; • Provide for skill workers in the company and for the German labour market. <p>Some companies are too specialized to be able to deliver all of the training content stipulated in the training</p>
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<p>is implemented in alternance between the Centre for Professional Training (where the Socio-cultural and Scientific-Technologic components take place) and the supporting “training” company where the practical part is conducted “on-site”.</p> <p>Pedagogic teams highly specialised in the different professional sectors design the development of the curricular structure and of the training programme for Dual Training Systems. Its consolidation and validation is performed in strict interaction with specialist panels consigned by the Ministry, Social Partners and other relevant actors, within the National Learning Commission. The development of the programmes also encourages the identification of practical activities to be performed by the trainees during their time spent in the company – reinforcement of acquired competencies.</p>	<p>following the internship program that has been coordinated with the school tutor.</p> <p>In addition, the company must contribute to promote the importance of vocational training in the labour market and help to improve its image. It is necessary to transmit to the students who choose this option that this kind of studies are practical and consistent.</p> <p>It is also necessary to make visible the needs of companies in terms of skills and abilities to adapt this training and not offer some out-dated studies and out of contact with reality.</p> <p>In addition, companies should identify improvements when they link training centres to real labour market conditions and then achieve a better match between the skills taught and practice.</p>		<p>regulations. In such cases, the trainees can receive extra training at chambers of crafts to cover the rest of the course content. By supplementing the practical training given at the company, this service enables more companies to offer vocational training and boosts the number of vocational training places. This system of “inter-company” training receives considerable funding from the Federal Economics Ministry.</p>
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SWOT: Role of “training” company?

County	Strength	Weakness	Opportunities	Threats
ES	<ul style="list-style-type: none"> • Companies trained in FCT practice; • Good relationship between companies and educational centres. 	Decrease of employees in enterprises (reduced availability of tutors).	Companies need to ensure the inclusion of qualified people.	Business community made up mostly of SMEs and micro SMEs.
PT	The recognition, by public bodies, VET providers and companies, of the necessity in the investment of getting close the VET system to work market.	<ul style="list-style-type: none"> • The dual training system is irregular in what concerns the distribution of time spent in the company – sometimes it can be just 1 afternoon; • The lack of involvement of the companies in the definition of the curricula programme. 	<ul style="list-style-type: none"> • Identification of the practical activities to be performed by the trainees during the “onsite” work. • The reinforcement of the time to spend in the company by NAQVET. 	The lack of information of companies (in general) about the Dual Training System.
AT	The fact that apprentices have to be fully integrated in the work process and their activities can be regarded as productive activities it could benefit companies by reducing costs and on the other hand increases apprentices motivation to learn.	Although the profiles of apprenticeship occupations are legally defined (curriculum & training outcomes) and the high share of the company based training (80%) the actual quality of the training depends on the quality of the training company and especially it’s motivation to train the apprentice in all aspects of the defined profile.	As companies are usually working in a competitive environment they tend to be up to date concerning new trends in a specific industry. Therefore apprentices have the possibility to work with state of the art technology and other related aspects of work processes.	Because of the high share of company based training the actual outcome of the training can substantially vary between different training companies in the same industry. Sometimes apprentices maybe used as cheap workers (only doing unskilled labour) and not fully integrated in skilled work processes.
GE	<ul style="list-style-type: none"> • Young people have practice from the first day of their dual training; • Companies integrate apprentices in the daily business requests and demands; • Companies can provide for their future because 	<ul style="list-style-type: none"> • Not all businesses that are authorized to train workers actually do so; • Imbalance between industries or companies in the number of young people trained, and the companies that 	<ul style="list-style-type: none"> • Companies can train “figure” their own skilled workers for the future. The increasing permeability between professions, which either contains two years or three years of 	<ul style="list-style-type: none"> • University vs. VET; • Negative Demography; • There has been a shift in the demand for staff from the industrial sector to the service

<p>the apprentice is part of the company and grows during the VET-training;</p> <ul style="list-style-type: none"> • Provide for social protection of young people; • Decreases unemployment rate of young people in Germany; • National training plan for each profession is flexible to the companies that they can adapt it to the companies needs; • High number of apprentices stay in the company after the exam and get a contract as skilled worker; • Each company needs a qualified instructor in the company (controlled by the chambers); • Companies need to invest in dual training; • Companies which provide for dual training have a good image in Germany; • Influence of the entrepreneurship on the subjects of the dual training is high; • The importance is more on the practice than on the theoretical training: regularly an apprentice spends 3,5 days per week in the company. <p>The training at the company is governed by training regulations that set out uniform, nation-wide standards for training content, the training timetable, and examinations. The nation-wide standards and the nationally recognized qualifications act as a quality benchmark for employers and serve as a basis for recruitment. This helps employees to find a new job more quickly. The broad applicability of the training ensures that employees trained within the dual system remain mobile.</p>	<p>train more workers than their quota actually pay considerably more for such training than the receive in benefits;</p> <ul style="list-style-type: none"> • System gets problems in the demographic change; there must be enough young people available; • When the economy is in a crisis the VET declines. But in this case national programs support the companies. 	<p>training, is a good opportunity for companies to become part of the system. E.g.: After two years learning “sales assistant” is it possible to upgrade the contract for another year to become “management assistant in retail sale”. In future it should be possible to change in both directions. This has consequences on how to develop content and practice in framework plans and training plans.</p> <p><i>Ranking of the advantages and disadvantages of “dual” training measures based on an international comparison</i></p> <table border="1"> <thead> <tr> <th>Advantages</th> <th>Disadvantages</th> </tr> </thead> <tbody> <tr> <td>1. Mixture of learning venues is enhanced through practical experience</td> <td>1. Training schemes dependent on economic climate create problems</td> </tr> <tr> <td>2. Trainers' knowledge of the latest technical developments is updated</td> <td>2. Difficulties in implementing curricula when the workplace only offers limited learning opportunities</td> </tr> <tr> <td>3. Social partners have more opportunities to influence the shape of training</td> <td>3. Technical changes which impact training are implemented in the company and school at different speeds (“time lag”)</td> </tr> <tr> <td>4. Productive work increases trainees' motivation and reduces the costs for the training companies</td> <td>4. Heterogeneity of companies' learning schemes leads to qualitative problems in training</td> </tr> <tr> <td>5. Inter-company training centres, as additional learning venues, can iron out deficits of practice-related learning</td> <td></td> </tr> </tbody> </table>	Advantages	Disadvantages	1. Mixture of learning venues is enhanced through practical experience	1. Training schemes dependent on economic climate create problems	2. Trainers' knowledge of the latest technical developments is updated	2. Difficulties in implementing curricula when the workplace only offers limited learning opportunities	3. Social partners have more opportunities to influence the shape of training	3. Technical changes which impact training are implemented in the company and school at different speeds (“time lag”)	4. Productive work increases trainees' motivation and reduces the costs for the training companies	4. Heterogeneity of companies' learning schemes leads to qualitative problems in training	5. Inter-company training centres, as additional learning venues, can iron out deficits of practice-related learning		<p>sector and new growth areas, where other forms of training and recruitment are practiced;</p> <ul style="list-style-type: none"> • New forms of work organization reduce the significance of skilled workers in the core workforce; • Company-specific qualifications and unskilled and semiskilled workers instead. <p>While some businesses train more workers than necessary, other fail to meet their quota or provide no training at all. In other words, they shift costs to other companies and the government, in effect acting as free riders.</p>
Advantages	Disadvantages														
1. Mixture of learning venues is enhanced through practical experience	1. Training schemes dependent on economic climate create problems														
2. Trainers' knowledge of the latest technical developments is updated	2. Difficulties in implementing curricula when the workplace only offers limited learning opportunities														
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5. Inter-company training centres, as additional learning venues, can iron out deficits of practice-related learning															

*Country codes: ES (Spain); PT (Portugal); AT (Austria); GE (Germany).

Best practice: Portugal	Best practice: Spain	Best practice: Austria	Best practice: Germany
Role of vocational schools?	Role of vocational schools?	Role of vocational schools?	Role of vocational schools?
<p>The Portuguese vocational education and training system is based on a set of principles which aim is to guarantee the right to education and training and to ensure equal opportunities of access and achievement. On completing their basic education, young people who go on to secondary education can opt either for courses in the sciences and humanities that prepare them for further study or for courses that provide them with vocational qualifications. The latter can be used to enter the labour market or to continue studying. The training offered by courses leading to a qualification is described in this section.</p> <p>Vocational courses Vocational courses provide a broad range of secondary-level training, their main purpose being to prepare students for the labour market. These courses last for three academic years. They are divided into modules of varying length, which can be combined in different ways and cover three components: socio-cultural, scientific and technical training. The technical component varies from course to course and accounts for approximately 52 % of total training hours, of which 13 % are spent training in a work environment. Successful completion of these courses leads to a Level 3 vocational qualification and a diploma in secondary education, allowing students to pursue their studies at a higher level. These courses are provided by the network of State schools run by the Ministry of Education and by vocational schools, most of which are privately run.</p>	<p>Meanwhile, the training centres will have to accept that learning is acquired not only at the training centre and subsequently applied as mere practice in the workplace, but also at work which is a source of learning complementary.</p> <p>This leads to changes in the design of the training centres. The practical development of the concept of learning throughout life will result in a new configuration of the centres and the training. At the same time it should relax its training according to training paths demanded "on demand" by the production system.</p>	<p>Their task is to expand the apprentice's general education and complement the specialist knowledge and skills, taught in the training enterprises.</p> <p>The focus of the education in vocational schools lies on professional knowledge (65 % of the curriculum). The remaining 35 % are invested in imparting general knowledge. The schools are equipped for different special professions and classes are formed by (similar) specific professions.</p> <p>There are three different forms of organisation (bmwfj 2012, p.13):</p> <ul style="list-style-type: none"> • Year-round (once a week whole day, or twice a week, half day); • Accumulated (once a year, for at least eight weeks); • Seasonal (cumulated in one season). 	<ul style="list-style-type: none"> • Second learning venue in the dual system • Existing national frame work plan for each profession • Schools are financed federal, responsibility lays on each state in Germany. <p>A combination of learning within the real work situation and school-based learning is the best way of developing the professional, methodological and social competence required to achieve this.</p>

<p>Courses provided under the apprenticeship system – initial alternance training – are intended for young people aged between 15 and 25 and are run by the Institute for Employment and Vocational Training and their purpose is to prepare and qualify students for their first job and ease their entry into working life by offering training profiles that cover three areas (1) Improving academic, personal, social and relational skills; (2) Providing knowledge and know-how in the field of science and technology; and (3) Offering practical work experience.</p> <p>Apprenticeships cover 14 fields of employment, such as management/administration, secretarial & administrative work, fisheries & ceramics; textiles, clothing and footwear; electronics and automation; electricity and energy; woodwork and furniture making and others. An apprenticeship contract is drawn up between the trainee and the training body, stipulating the rights and obligations of each party. Apprenticeship courses vary in length, depending on their nature, and include the following components: socio-cultural training, scientific and technological training, and practical training (taking place in a working environment and accounts for at least 30 % of total course hours).</p> <p>Training in the workplace is monitored by a tutor appointed by the body responsible for this training component. On successful completion of the training process, trainees receive a Level 2 vocational qualification and a certificate of completion of Cycle 3 of basic education, or a Level 3 vocational qualification and a certificate of completion of secondary education, depending on the trainee's profile on entry. Apprenticeship courses also enable trainees to pursue their studies at a higher level.</p>		<p>The variety of organisational types serves for different economic and regional sectors needs and is a result of consultation between the business sphere and those responsible for school instruction.</p>	
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SWOT: Role of vocational schools?

Country	Strength	Weakness	Opportunities	Threats
ES	<ul style="list-style-type: none"> • Training centres have begun to form in competitions; • Training Centres was developed, FCT in collaboration with companies. 		Use reference to Integrated Vocational Training Centres.	Educational Centres with significant investments in technical and human resources to be amortized.
PT	Vocational courses provide a broad range of secondary-level training, their main purpose being to prepare students for the labour market. These courses last for three academic years. They are divided into modules of varying length, which can be combined in different ways and cover three components: socio-cultural, scientific and technical training.			
AT	Because training standards of the company-based training can differ substantially between training companies the part-time vocational schools impart theoretical and practical knowledge and skills at a minimum standard. Also the pedagogical competences of teachers of part-time vocational schools have standardized level and a high quality compared to IVET-trainers in training companies (bachelor study at universities of teacher education)	Since only 20% of the training are in part-time vocational schools, teachers have relatively little contact to their students	The part-time vocational school gives the opportunity to impart a minimum standard of theoretical & practical knowledge/skills/competencies	Since the quality of the company-based training can differ substantially between training companies there is the threat that teachers of part-time vocational schools orientate their tuition on low-level apprentices (who receive low quality of company-based training).
GE	<ul style="list-style-type: none"> • Complementary part to the practical training in the company (regularly 1,5 days per week); • School is free of charge for apprentices; • Many teachers changed profession, come from the industry / business / economy and have practical experience; • School system opened to cross entrance for teachers. 	<ul style="list-style-type: none"> • The exchange between school and company does not always exist. 	<ul style="list-style-type: none"> • Better learning venue cooperation. 	<ul style="list-style-type: none"> • Less time teachers have to impart the subjects; • University education of the teachers is not close to industry / business / economy; • Lack of teachers.

*Country codes: ES (Spain); PT (Portugal); AT (Austria); GE (Germany).

Best practice: Portugal	Best practice: Spain	Best practice: Austria	Best practice: Germany
Role of awarding body / competent institutions in VET?	Role of awarding body / competent institutions in VET?	Role of awarding body / competent institutions in VET?	Role of awarding body / competent institutions in VET?
<p>The National Qualification System (NQS) promotes the effective articulation of vocational training actions developed both within the education system and the labour market. Its aim is to establish common goals and instruments in the context of a renewed institutional framework.</p> <p>The NQS ensures that training and learning actions are relevant for the personal development of individuals, as well as for the modernisation of companies and the economy. At the same time, it ensures that the national effort towards the development of training is effectively valued in terms of the academic and vocational development of citizens: either through the double certification training regulated by the National Qualifications Catalogue (Catálogo Nacional de Qualificações – CNQ), or through the New Opportunities Centres and the processes of recognition, validation and certification of competencies (RVCC).</p> <p>The structures composing the NQS are:</p> <ul style="list-style-type: none"> • The National Agency for Qualification and Vocational Training (Agência Nacional para a Qualificação e Ensino Profissional – ANQEP, I.P.), managing the New Opportunities centres network, preparing and updating the National Qualifications Catalogue (CNQ), planning 	<p>The relationship between the state and autonomous level, and the relationship of both to economic and social partners (employers and employees) is the most critical point of the current system. In most cases, the lack of consensus among these key players is blocking and delaying the adaptation of the system to the new demands of the labour market.</p> <p>Currently, when reporting and controlling learning activities is seen more clearly the uncoordinated duplication of powers between different administrations. In this area may involve the European Commission, Social Security, the State Treasury, the INEM, the Tripartite Foundation and autonomous regions, creating a confusion and significant legal uncertainty among the grantees.</p>	<p>The awarding body for apprenticeship training in Austria is the so called “apprenticeship-leave examination board” which is legally defined by law (Vocational Training Act §22). It consists of a chairman and two additional members. Its members (also see above under “role of state/region”) are appointed by the head of the regional apprenticeship office on the basis of a nomination by the regional advisory boards on apprenticeship for the respective province. At least two of its three members have to be self-employed persons or executives and registered as IVET trainer in the respective apprenticeship occupation. The third member has to have worked in the respective apprenticeship occupation at least for four years.</p>	<p>The self-regulatory competent bodies (the chambers) advise the companies providing training, monitor the training, determine the suitability of companies and instructors, register training contracts and conduct nationwide examinations. This serves to ensure a high level of quality by law (Vocational training act).</p> <p>Competent Bodies</p> <ol style="list-style-type: none"> (1) The chamber of crafts and trades shall be the competent body for the purposes of this Act in matters relating to vocational training in the occupations of the crafts and trades. (2) The chamber of industry and commerce shall be the competent body for the purposes of this Act in matters relating to vocational training in industrial and commercial occupations other than those of the crafts and trades. (3) The chamber of agriculture shall be the competent body for the purposes of this Act in matters relating to vocational training in occupations in the field of

<p>and rationalising the training offer and providing information and guidance on qualifications and employment;</p> <ul style="list-style-type: none"> • The National Council for Vocational Training (Conselho Nacional da Formação Profissional), responsible for the evaluation and global approval of the elements included in the CNQ; • The Sectoral Councils for Qualifications (Conselhos Sectoriais para a Qualificação), identify the CNQ's updating needs in terms of new competencies and occupational profiles, and cooperate with the ANQEP; • The New Opportunities Centres; • The basic and upper secondary education establishments; • The Direct Management Centres for Vocational Training and Rehabilitation; • The poles of excellence, created by training providers that distinguish themselves for the quality of their training interventions; • Other entities with accredited training structures (mainly VET providers). <p>Within the scope of the SNQ, mention should be made to the following instruments:</p> <ul style="list-style-type: none"> • the <i>National Catalogue of Qualifications</i> (Catálogo Nacional de Qualificações - QNQ), a strategic tool for the management of lower qualifications. The CNQ incorporates a system of competence-based qualifications and follows a double certification logic, thus identifying, in articulation with the National Qualifications Framework, the reference for each acquired competence, as well as its level of qualification and training; • the Individual Booklet of Competencies (Caderneta 	<p>In a simplified form, we could say that the Government has assumed global regulatory powers and the autonomous regions have assumed management powers, although it should be explained that, in initial training, the regions also have wide powers of regulation (e.g., in the definition of 45% or 35 % of the curricula of training courses according to whether or not a co-official language) while in training for employment skills they assume powers to develop a training system itself. (e.g., Basque Country).</p> <p>We should stabilize relations between the central government and regional administrations through a more regulated, predictable and less dependent channels on the political situation.</p> <p>The relationship between trade unions and employers organizations and the general public administrations follow others equally complex dynamics. One of the strengths of the Spanish education system is its tripartite nature, with a significant involvement of the social partners</p>	<p>At this point it has also to be mentioned that the apprenticeship leave exam is not only open to apprentices who completed the "standard" apprenticeship training (3-4 years dual education in training company and part time vocational school) but also for lateral entries. Everyone that could prove some practical experience (e.g. by working 18 months as a unskilled worker in a specific occupational field) is allowed to do the apprenticeship leave exam.</p> <p>The apprenticeship-leave exam assesses whether the apprentice has acquired the skills and competencies required for the respective apprenticeship occupation and is able to carry out the activities particular to the occupation him- or herself in an appropriate manner. The exam consists of a practical and a theoretical examination (apprentices who successfully completed part-time vocational school do not have to pass the theoretical part) (bmwjf, p.15).</p>	<p>agriculture, including domestic service in agriculture.</p> <p>(4) The chambers of lawyers, patent attorneys and notaries shall be the competent bodies for the purposes of this Act in matters relating to vocational training of skilled staff in their respective specialties in the field of judicial administration; the same shall be true of the notaries' funds for their sphere of activity.</p> <p>(5) The chambers of public accountants and chambers of tax advisers shall be the competent bodies for the purposes of this Act in matters relating to vocational training of skilled staff in their respective specialties in the field of auditing and tax consultancy.</p> <p>(6) The chambers of physicians, dentists, veterinarians and pharmacists shall be the competent bodies for the purposes of this Act in matters relating to vocational training of skilled staff in their respective specialties in the health care professions</p> <p>Advice</p> <p>(1) The competent body shall supervise the provision of</p> <ol style="list-style-type: none"> 1. Vocational training preparation; 2. Initial training; and 3. Retraining and shall provide support in the form of advice to the persons
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<p>Individual de Competências), approved in July 2010 (Ordinance No. 475/2010, July 8) which registers not only the skills acquired or developed throughout the individual's lifecycle that are specifically defined in the CNQ, but also other successfully concluded training activities;</p> <ul style="list-style-type: none"> the National Qualifications Framework (Quadro Nacional de Qualificações – QNQ), approved in 2009 (Ordinance No. 782/2009, July 23) and entered into force on 1 October 2010, a tool that structures qualification levels in accordance with the European Qualifications Framework for lifelong learning. <p>The NQS encloses the goals stated in the New Opportunities Initiative and develops the necessary tools for their effective implementation in articulation with its financial instruments, namely the National Strategic Reference Framework (Quadro de Referência Estratégico Nacional – QREN), through its Human Potential Operational Programme (Programa Operacional Potencial Humano – POPH). The POPH's set of interventions aims to promote initial qualifications, adaptability and lifelong learning, management and vocational improvement, advanced competitiveness training, support for entrepreneurship and transition to working life, citizenship, inclusion and social development and the promotion of gender equality.</p> <p>The CNQ establishes the link between the supply of and demand for qualifications and, as a dynamic instrument, it may be updated through the inclusion of new qualifications and the exclusion of others whose demand by young people, adults and the Portuguese business sector no longer justifies its supply. In other words, the CNQ tries to</p>	<p>at all levels. The social partners are present throughout the system:</p> <ul style="list-style-type: none"> Subsystem initial training: the social and economic agents are involved in school boards, both the state and the regional, and in the boards of vocational training in the case of the autonomous regions, in which they depend on departments education. Subsystem Training for employment: the Spanish model is practically tripartite co-management between the social and economic agents and State and regional public authorities. Trade unions and employer organizations are part of coordinating advisory bodies and boards of almost all bodies, both regulators and managers, subsystem, at the state level and in most autonomous regions. For example, are present in the General Council and Executive Committee of the Public State Employment Service (SPEE) and form part of the Board of the Tripartite Foundation for Training in Employment. Also part of the 		<p>involved in vocational training. To this end it shall appoint training advisers.</p> <p>(2) Training employers, retraining providers and providers of vocational training preparation measures shall upon request be obliged to furnish the information necessary for the purposes of supervision, produce documents and permit inspection of the training premises.</p> <p>(3) Initial training undergone abroad pursuant to section 2 subsection shall be supervised and supported by the competent body in an appropriate manner. If the duration of a period of initial training abroad exceeds four weeks, a plan agreed with the competent body shall be required.</p> <p>(4) Persons obliged to furnish information may refuse to answer questions the reply to which would subject them personally or one of the relatives specified in section 52 of the Code of Criminal Procedure to the risk of prosecution in a criminal court or proceedings under the Regulatory Offences Act.</p> <p>(5) The competent body shall inform the supervisory authority pursuant to the Act on the Protection of Young People at Work of observations which may be of significance for the implementation of said Act.</p>
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<p>match the qualifications and competencies covered by the SNQ with the operating mode and technology incorporation of the activities emerging from the different sectors. The definition of such needs requires not only a strong connection with enterprises and vocational training actors, but also a deep involvement of experts from the several activity sectors. The Sectoral Councils for Qualifications (CSQ) therefore work as a platform for updating and renewal by bringing together companies, training centres, schools, representatives of the social partners and other actors, thus establishing a connection with the evolution and needs of the economy.</p> <p>The CSQ seek, on the one hand, to ensure a sectoral representation of the national economic activity and, on the other hand, to facilitate the emergence of qualifications that promote individual mobility and flexibility. The covered sectors are: Agricultural and Food Industry, Handicraft and Jewellery, Trade and Marketing, Civil Construction and Urbanism, Culture, Cultural Heritage and Content Production, Energy and Environment, Chemical Industries, Pottery, Glass and Other Materials, Computer Science, Electronics and Telecommunications, Wood, Furniture and Cork, Metallurgy and Metal mechanics, Fashion, Services for Enterprises (financial activities, consultancy, secretariat), Personal Services, Health and Community Services, Transports and Logistics, Tourism and Leisure.</p> <p>The qualifications that make up the catalogue are subject to comprehensive evaluation and approval at least every two years by the National Council of Vocational Training, whose membership includes representatives of the government and employer associations and unions with seats on the</p>	<p>Tripartite Committee on Continuing Education.</p> <ul style="list-style-type: none"> • Trade unions and employer organizations are also the most important direct providers, both at the state and regional level, of training activities. This dual role as partners in the levels of system management in their role as social agents, and at the same time promoters and organizers of the training activities in its role of training actors direct grant recipients, is virtually unique in all Europe and becomes the key players of the entire system. <p>The strong involvement of the social partners is one of the factors that has contributed to developing the subsystem job training and to promote credibility with employers and employees, but also generates confusion of interests.</p> <p>The current situation is a mix between a model of functional specialization by regions, where the state level plays the role of regulator, controller and evaluator,</p>		<p>Establishment</p> <p>(1) The competent body shall establish a vocational training committee. The committee shall consist of six employers' representatives, six employees' representatives and six vocational school teachers, the teachers having the right to speak but not to vote.</p> <p>(2) The employers' representatives shall be appointed on the proposal of the competent body, the employees' representatives on the proposal of the trade unions and independent associations of employees concerned with matters of occupational and social policy established in the district of the competent body, and the vocational school teachers by the authority competent under Land law; all appointments shall be for a period not exceeding four years.</p> <p>(3) The members of the vocational training committee shall serve in an honorary capacity. Insofar as they receive no compensation from any other source, they shall be paid appropriate compensation for out-of-pocket expenses and loss of time, at a rate to be fixed by the competent body with the approval of the supreme Land authority.</p> <p>(4) Members may be removed from the committee for good cause after consultation with the parties involved in</p>
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<p>Permanent Committee for Social Dialogue (CPCS).</p> <p>Since 2008 there was a strong expansion and consolidation of the New Opportunities Centres network (CNOs), totalling 459 centres in 2010 and thus ensuring national coverage¹⁸. The enlargement process corresponds to an effective institutional and methodological consolidation of the national RVCC process, under which a comprehensive plan for the training, supervision and monitoring of the activity of the CNOs has been developed.</p> <p>The private sector is involved in the delivery of validation, but at different levels. ANQEP has established several protocols of cooperation with the private sector, in order to respond to their needs. The NO initiative has developed more than 500 protocols linking private enterprises, associations and federations, including public entities and enterprises. These protocols are cooperation agreements established with the aim to improve the qualification of workers within the framework of the SNQ, specifically through qualified training developed at the NO level; to identify training needs in enterprises and to improve the content of National Qualifications Catalogue; and to facilitate the professional insertion of young people in the labour market.</p>	<p>while the regional level assumes the role of executor (more similar to French model). And another federal type model, where the two fields agree to create a regulatory structure and shared management of the entire system (similar to German model). The participation of the autonomous regions in the General Council of Vocational training and the Tripartite Foundation would be closer to the federal model. However, the management model of INEM would be closer to French model.</p>		<p>their appointment. Each member shall have a substitute. Subsections (1) to (4) shall apply, mutatis mutandis, to substitutes.</p> <p>(5) The vocational training committee shall elect a member to serve as chair and another member to serve as deputy chair. The chair and the deputy chair shall not belong to the same group of members.</p> <p>Tasks</p> <p>(1) The vocational training committee shall be informed of and consulted on all-important matters connected with vocational training. Within the scope of its tasks, it shall endeavour to steadily improve the quality of vocational training.</p>
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SWOT: Role of awarding body / competent institutions in VET?

Country	Strength	Weakness	Opportunities	Threats
ES	There is a significant involvement of business and labour organizations in decision-making.	<ul style="list-style-type: none"> • There is no clear definition of the model managed by the System; • Chambers of Commerce does not have a weight function in the system. 	The labour market demands urgent update of the mechanisms of management, control and promotion of Vocational Training System Strategy 2020 has set a goal.	Conflict of interest due to participation as managers and training providers from the business and labour organizations.
PT	<ul style="list-style-type: none"> • (1) The existence of the Sectorial Qualifications Council, which allows the partnership between different stakeholders of VET system in the development, growth and actualization of the National Catalogue of Qualifications; • The role of National Agency for Qualification and Vocational Education and Training in the establishment of partnerships. 	<ul style="list-style-type: none"> • The ignorance of VET institution about market needs and distance between both of them; • High requirement of professional profile of coordinator of Dual Training courses. 	The strategic role that Centres of Qualification and Vocational Training (Centros de Qualificação e Ensino Profissional – CQEP) will take as a local partner in this matter.	The lack of interest and knowledge of VET institutions about Dual Training System.
AT	The certificate has an important signal function on the labour market. Successful apprentices are regarded as job-ready skilled workers.	There is no nationwide standardized examination (e.g. different examination examples).	<ul style="list-style-type: none"> • Creation of nationwide standardized examination in order to implement nationwide quality standards; • The fact that the apprenticeship leave examination is also open for lateral entries supports the flexibility of the labour market because it is possible to receive an apprenticeship exam in a relatively short period of time. 	Since there is no nationwide standardisation of apprenticeship-leave examination no minimum standards can be guaranteed.

<p>GE</p>	<ul style="list-style-type: none"> • Competent body acts by German law; • Quality assurance/control, advice, support for companies, apprentices, schools; • Cooperation with the vocational training committee, the ministry, companies (social partnership); • The self-regulatory bodies (the chambers) advise the companies providing training, monitor the training, determine the suitability of companies and instructors, register training contracts and conduct nationwide examinations. This serves to ensure a high level of quality; • Chambers: <ul style="list-style-type: none"> ○ Institutionalized, close to state and industry in its tasks in each city present; ○ Sustainable promotion of the economy. • Private vocational training institutions: <ul style="list-style-type: none"> - High number of private vocational training institutions; - Independent or belong to a branch of the economy; - Support the state especially when weak or disabled young people have problems to be integrated into the labour market; - Organize vocational training projects, realize learning venue cooperation; - Can support the companies with additional services during the dual training; • Offer further professional training to employees. 	<ul style="list-style-type: none"> • Too much bureaucracy; • Contradiction: chambers support the government in its tasks concerning VET but are financed by membership rates of the enterprises; • Private vocational training institutions depend often on federal money, labour market programs and projects. Orders are policy driven. 	<ul style="list-style-type: none"> • Vocational training act as a domestic law for the dual training regulations; • Stakeholders in VET with political power. There is an interesting development in Germany. Beside this well working national VET-system there is an increasing number of private schools: <ul style="list-style-type: none"> ○ Private state-approved vocational schools; ○ Schools providing dual studies (50% in-company-training, 50% in school, preparing bachelor degree). 	<ul style="list-style-type: none"> • Too much Administration and too less flexibility; • Intervention of the private training market; <ul style="list-style-type: none"> ○ <i>too much control</i> ○ <i>too much regulations</i> ○ <i>too much bureaucracy.</i>
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*Country codes: ES (Spain); PT (Portugal); AT (Austria); GE (Germany)

Best practice: Portugal	Best practice: Spain	Best practice: Austria	Best practice: Germany
Joint funding of vocational training?	Joint funding of vocational training?	Joint funding of vocational training?	Joint funding of vocational training?
<p>Under the Comprehensive Law on the Education System, basic education is free. All costs associated with registration, attendance and certification are covered, and some pupils may be eligible for free use of school books and materials as well as for free food and accommodation, depending on the socioeconomic situation of their family. School transport is free for pupils attending basic education.</p> <p>The initial vocational education and training offered within the education system is essentially funded from the Ministry of Education's budget,</p>	<p>The financing of initial vocational training is completely direct. Includes infrastructure, faculty, centres, etc. The employment training has a different infrastructure and organization.</p> <p>The financing of initial vocational training is based on:</p> <ul style="list-style-type: none"> • Ministry of Education, Culture and Sports • Regional Ministries / Departments of the CCAA with full education competences • Local corporations • Private funds • Structural Funds. <p>Ministry of Education, Culture and Sports The funds are not intended only to institutions of public education but can also reverse in grants for private schools and scholarships and grants to students. The secondary schools (IES) enjoy full free enrolment, families must pay for the use of complementary dining and transportation services. Scholarship programs and study aids are state application, except the Basque Country, which has assumed such jurisdiction for their community.</p>	<p>The apprenticeship training is jointly funded by the training companies (company-based training) and the public (part-time training in vocational schools). However the main part of costs are borne by companies (bmwfj 2012, p.18).</p> <p>The costs for the practical vocational training are paid by the respective training company. The amount of this "apprenticeship remuneration" is usually defined by legal bargaining (if not it has to be agreed on in the apprenticeship contract between the apprentice & the training company). With every year the remuneration increases until the final year, where the remuneration equates to app. 80% of the salary of a skilled worker. Costs for the health insurance coverage are omitted for the apprentice and for the entrepreneur in the first two years of the apprenticeship, but nevertheless the trainee is fully insured. Also the costs of apprenticeship training reduce the company's taxable profits which can be regarded as indirect co-financing of company-based training.</p> <p>Training (part-time and taking place in vocational schools), is funded by the government. Each province finances the schools facilities, such as machines, equipment and teaching materials and, shared with state, teacher's salaries.</p>	<ul style="list-style-type: none"> • Cost of the dual vocational training system are for borne proportionately by the government and the business community not all businesses that are authorized to train workers do so; • Benefits for businesses: vocational training programs can serve as an investment in a business recruitment strategy; • Benefits for society: the financial involvement of the business community makes it possible to keep government expenditure for vocational training at a relatively low level (<i>Euler</i>) <p>Allowance</p> <p>(1) Training employers shall pay trainees an appropriate allowance. It shall be so assessed in accordance with the trainees' age that it increases at least once a year as the initial training progresses.</p> <p>(2) Account may be taken of benefits in kind at the rate fixed for the value of such benefits under section 17</p>

<p>though the European Social Fund's contribution to the funding of certain measures is also significant. Vocational courses are offered by the network of vocational schools – a system that has received strong support from the ESF within the framework of measures included in Operational Programmes.</p> <p>Most of the initial vocational education and training programmes, offered by the Ministry of Labour and SocialSolidarity, are funded entirely from public funds, in the form of the allocation of resources from the Social Security budget and European Social Fund. The apprenticeship system has also been supported by significant funding from the European Social Fund.</p>	<p>Regional Ministries / Departments of the CCAA Mostly support spending. Public funding for vocational training is carried out through the Regional Ministries or Departments of Education or specific organisms of these CCAA. The resources come from the following sources of funding:</p> <ul style="list-style-type: none"> a) General State Budgets; b) Transfers from the Ministry of Education, Culture and Sports; c) Equity. <p>Local corporations Very limited contribution of around 5%, in some cases. These Corporations at the same time can receive funds through agreements of the Ministry of Education, Culture and Sports.</p> <p>Private funds They come from families, private institutions or companies. Usually used to cover the costs IES outside the regime "concerted". These usually receive a public subsidy of about 70%. In public IES, private spending is intended to fund those aspects not covered by the Administration. This is the case of books, transportation, school supplies, etc.</p> <p>Structural Funds Contributions especially the European Social Fund. The companies that participate in initial vocational training don't receive funding for their involvement in the practice of students in the FCT.</p>	<p>In addition to that there exists a range of subsidies schemes for training companies and apprentices. These schemes are financed by funds of the Austrian insolvency remuneration fund (basic & quality-oriented subsidies) or the labour market policy budget (for subsidies by the PES)</p> <p>Basic subsidies – A training company can apply for basic subsidisation at the end of each apprenticeship year. Corresponding to the year of training companies can receive between one and three gross apprenticeship remunerations.</p> <p>Quality-oriented subsidies options:</p> <ul style="list-style-type: none"> • Inter- and supra-company training measures; • Continuing education and training measures for IVET trainers (trainers for company-based training); • Apprenticeship-leave examinations taken with good or distinctive results; • Measures for apprentices with learning difficulties; • Equal access by young women & young men to different apprenticeship occupations; • International internship subsidies by the Public Employment Service (AMS): <ul style="list-style-type: none"> ○ Young women in apprenticeship occupations with a traditional low share of women; ○ Disadvantaged youngsters on the labour market; ○ Participants in integrative IVET schemes; ○ Person aged over 18 with difficulties finding a job without apprenticeship qualification. 	<p>subsection (1), first sentence, number 4, of Book Four of the Social Code [Sozialgesetzbuch], but not beyond 75% of the gross rate of the allowance.</p> <p>(3) Employment beyond the agreed normal daily hours of initial training shall be remunerated separately or compensated by corresponding time off.</p> <p>National funding for vocational training 2013 in Germany was done by:</p> <ul style="list-style-type: none"> • ministry of education (BMBF) • ministry of economy (BMWI) • ministry of labour (BMAS) • Federal states • National employment agency (BA) <p>In 2007 the main brute-costs for an apprentice in average per year are calculated with 15.288 €. These costs contain personal costs, company trainer cost, material expenses and other costs. The productivity of the apprentice covers 76% of the costs in average, so that the net costs are in average 3.596 € per year (Datenreport zum Berufsbildungsbericht 2013). Actual data from 2012 might be available in the report for 2014.</p>
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SWOT: Joint funding of vocational training?

Country	Strength	Weakness	Opportunities	Threats
ES	Training supported, at least partially.	Weak financial aid system, both students and participating companies		Different financial criteria depending on each region.
PT	All costs associated with registration, attendance and certification are covered, including books, materials, food and accommodation in some cases.	Highly dependent on European Funds.	Large number of unemployed young people which can be a factor of motivation to the option for Dual Training System, as a system with high level of employability.	High requirement of logistic resources (spaces, equipment, material).
AT	There is a range for different subsidies offers (quantity & quality orientated).	Despite different subsidies offers, the costs for the training companies are relatively high	Since the costs of the company-based training are relatively high companies have an interest in delivering a high quality of company-based training in order to use apprentices as productive human resource factor.	On the other hand the high costs for the training company could prevent companies to work as training companies.
GE	<ul style="list-style-type: none"> • Benefits for businesses: vocational training programs can serve as an investment in a business recruitment strategy; • Benefits for society: The financial involvement of the business community makes it possible to keep government expenditure for vocational training at a relatively low level (<i>Euler</i>); • Nobody should stay without a professional training in Germany; VET has a high priority in Germany; • Economical decreases can be counterbalanced. 	<ul style="list-style-type: none"> • Not all businesses that are authorized to train workers do so: <ul style="list-style-type: none"> ○ The state intervenes the economy; ○ The state discharges the economy from its duties. 	<ul style="list-style-type: none"> • Benefits for businesses: vocational training programs can serve as an investment in a business recruitment strategy; • Benefits for society: the financial involvement of the business community makes it possible to keep government expenditure for vocational training at a relatively low level (<i>Euler</i>). 	Not all businesses that are authorized to train workers do so.

*Country codes: ES (Spain); PT (Portugal); AT (Austria); GE (Germany).

Best practice: Portugal	Best practice: Spain	Best practice: Austria	Best practice: Germany
Social acceptance of VET?	Social acceptance of VET?	Social acceptance of VET?	Social acceptance of VET?
<p>The national strategy to overcome the problem of low qualifications among the Portuguese population is aimed mainly at the upper secondary education level. Over the last years, good results were obtained with the implementation of some measures that have contributed to increase the number of young people who have completed this education level:</p> <ul style="list-style-type: none"> • The enlargement, diversity, flexibility, modulation of multiple combinations of education/training offers directed at adults, with double certification training offers after working hours; • The integrated management of training offers and the network of public and private institutions, thus ensuring training actions at national level, aimed at several target groups and occupational areas; • The generalisation and dissemination of the System for the Recognition, Validation and Certification of Competencies (RVCC) through the New Opportunities Centres network. <p>The attendance of upper secondary level double certification courses was strongly encouraged by the New Opportunities Initiative and has been continually and sustainably growing over the last years. Young people enrolled in basic level double certification routes predominantly attend Education and Training</p>	<p>In December 2011, job applicants with vocational qualification registered in the Public State Employment Service reached the figure of 480.000 people, which is approximately 10% of all assets VET graduates, of which 60% are demanding administration and management professions, health and social and community services: only 16.000 applicants were graduates in family building and civil works.</p> <p>Although currently training is gaining social recognition, which is growing, for a long time was considered as a second-rate option after high school and university education. This is due to the assessment of vocational training as a valid way of access to employment, primarily IVET formal titles vocational middle and top grade, and the recovery, by companies, of qualification professional as a criterion of internal and external value.</p>	<p>Apprenticeship training is highly valued as a VET path: In 2011 36% of the Austrian population had an apprenticeship diploma as their highest educational attainment (Statistik Austria 2011).</p> <p>The apprenticeship training is very valued because of its practical approach, good job perspectives, the usability for practical oriented people and the possibility to be self-employed in the future. A study shows that more than 60% of the participants have a positive image of apprenticeship training (Ebner 2006, p.42).</p> <p>This high importance and in relation to that the social acceptance is also reflected by transition rates from lower secondary education to upper secondary education. A high</p>	<p>Vocational training has always enjoyed relatively high level of social acceptance</p> <ul style="list-style-type: none"> • Difference in acceptance across different occupations; • Skilled workers are a synonym for quality and a healthy economy. <p>Qualifications need to be comparable. This provides workers with a high degree of mobility and enables companies to conduct efficient human resources recruitment. Standards create transparency on the educational and labour market, facilitate the further development of qualifications and permit cross-connections between educational pathways.</p> <p>This is an area where Germany has much to offer. Established negotiating mechanisms between the state, trade and industry and civil society guarantee broad societal acceptance of standards. The parties work jointly on the drawing up of initial training profiles. Training regulations</p>

Courses. Between 2005/2006 and 2009/2010 there was an increase of 23,877 students attending this route. With regard to secondary level, Vocational Courses represent the double certification route where the largest number of students is enrolled. From 2005/2006 to 2009/2010 the number of students enrolled in Vocational Courses rose from 36,943 to 107,266, thus registering an increase of 70,323 students. This strong growth is greatly due to the expansion of this training offer to public educational institutions. In 2005/2006 only 12% of students attended Vocational Courses in public schools against 88% in non-public entities.

According to the “Adult Education Survey 2007”¹, in 2007 nearly one third (30.9%) of the Portuguese population aged between 18 and 64 participated in at least one learning activity, whether formal or informal. The proportion of individuals in this age group who attended some level of education or school equivalency programme (formal education) in the same reference period was 12.0%. The proportion of those who attended non-formal education through private lessons or courses, distance learning courses, seminars or workshops, or a support in a workplace context was 23.1%. With regard to adults, the recognition, validation and certification of skills acquired in formal, non-formal and informal learning was valued, as was the provision of vocational training. In both cases, conditions for access and attendance were created. It was also sought to

The attraction of cycling professionals is growing. The number of students has increased by almost 30% in the last four years. There are factors outside the system behind this increase, which is expected to continue. Vocational training has historically been a refuge in times of crisis, in which jobs are scarce. Even people already qualified, up to university level, come back to vocational training as a way of employment.

There are also internal factors of the system: the easing of access, the modular organization of studies, partial accreditation, the training offer distance and online, the improvement of the social image of vocational studies, which play for a highest consideration.

Initial Vocational Training has proven to be the most reliable indicator regarding the employability and job retention. In this case Spain, in relation to the European Union, shows a significant gap in the percentage of workforce with average qualifications, professional training medium and top grade.

quantity of upper secondary students in Austria chooses a VET pathway after finishing compulsory education. Beside different forms of schools (VET-Colleges or school-based-VET), 40 % take up an apprenticeship after finishing compulsory school (bmwfj 2012, p.4). About 125.000 attend an apprenticeship in dual system in 2013 (Dornmayr, Nowak 2013, p.13).

According to a study with 520 participants, apprenticeships in health sector are highly reputable. Participants chose out of 31 professions an more than 50 % (50 to 59 %) consider doctor’s assistants, masseurs, massage therapists and druggists to be recommendable apprenticeships. The situation seems quite similar regarding office-workers and electricians. Handcraft does not enjoy such good reputation. 20 up to 30 % mentioned typical handcraft professions, for instance hairdressers, bricklayer, welder or lathe operator. Up to 40 %

ensure that vocational education and training is of the same high quality in all companies, regions and schools. Trade and industry monitor compliance with the training regulations and take part in the conducting of examinations in conjunction with representatives from the employees and schools. (Federal Ministry for Economic Affairs and Energy).

¹Inquérito à Educação e Formação de Adultos – 2007, published by INE in 2008

<p>diversify and expand provision so as to encompass, with due adaptations, the population holding qualifications below secondary level. This development has involved, namely:</p> <ul style="list-style-type: none"> • An increase in adult education and training courses (EFA Courses); • the expansion of the New Opportunities Centres network; • The design of a key competencies referential for the education and training of adults at the secondary level; • The promotion of an integrated management of training offers and network of providers and the implementation of a Quality Certification System. 	<p>One of the objectives of the European Union would be to increase the skills of graduated workers. This is a major challenge in Spain: reach some five million graduates in 2020, so a million and a half of new graduates would be required. Another objective is to reduce substantially the number of young people leaving before obtaining a basic qualification. The dropout rate among young people aged 18 to 24 years is high: 31.2%, well above the 14.4 % on average in the EU.</p>	<p>named cook and pastry chef to be professions of good standing, but less than 20 % did this for waiters or waitresses (http://www.kleinezeitung.at/allgemein/jobkarriere/347635/index.do & www.news.at/a/lehrberuf-gesundheitsbereich-ansehen-kellner-164732).</p>	
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SWOT: Social acceptance of VET?

Country	Strength	Weakness	Opportunities	Threats
ES	<ul style="list-style-type: none"> • Increase student training cycles; • Good employment index; • High recognition practices in companies associated with studies. 	<ul style="list-style-type: none"> • Although not overcome the perception that second-level training is done; • Slow adaptation of training cycles to labour market needs; • Difficulty bridges between the Higher Degrees and University System. 	<ul style="list-style-type: none"> • Professionalize business practices; • Development of online degrees for easy access to a larger population. 	
PT	<p>The worker has higher probability of obtaining a full-time contract, on-the-job promotion and better work-conditions.</p>	<p>High involvement and responsibility of companies in the evaluation of trainees.</p>	<p>High recognition of the positive impact of Dual Training for:</p> <ul style="list-style-type: none"> • Motivation of young students to innovative and alternatives VET paths; • Reinforcement of the capacity of VET system to answer to productive structures needs; • The qualification of professionals of VET system in organizing apprenticeship; • Decrease of the dropouts of young students from apprenticeship system. 	<p>Dual Training in Portugal is implemented by a very specific VET entity.</p>
AT	<p>The high importance (in terms of participants in this type of VET-system) of the apprenticeship training can be regarded as one indicator for the high quality of this type of VET.</p>	<p>On the other hand the social acceptance in companies (concerning their willingness to work as training companies) is sometimes sub-optimal => there is a lack of training companies.</p>	<p>The strong dual system contributes to low youth unemployment “Youth unemployment rates are low and the transition from education to first employment is smooth by international standards. This can be attributed to a large extent to the well developed dual VET system (Quintini and Manfredi, 2009)”.</p>	<p>Workshop-based dual programmes offered by PES (Überbetriebliche Ausbildung) to compensate missing training companies are expensive and risk reducing the incentives for employers to provide apprenticeships.</p>

<p>GE</p>	<ul style="list-style-type: none"> • Good cooperation between state and economy; • Acceptance of VET within the society; • Close cooperation between government and business; • Relevant parties become active participants who are involved in implementing guidelines and agreements; • High quality of the results; • National qualification standards; • Sustainability of the international competitiveness for Germany; • Low costs for the government in professional education; • Social stability and social dialog <ul style="list-style-type: none"> - low unemployment rate for young people; 	<ul style="list-style-type: none"> • University vs. VET; • Negative Demography. 	<p>Increasing the acceptance through:</p> <ul style="list-style-type: none"> • Permeability between VET-system and academic education; • Easier recognition of foreign qualifications / certificates which integrate more people into the labour market. 	<ul style="list-style-type: none"> • University vs. VET; • Negative Demography.
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*Country codes: ES (Spain); PT (Portugal); AT (Austria); GE (Germany).

2. Learning within the work process

Best practice: Portugal	Best practice: Spain	Best practice: Austria	Best practice: Germany
Learning within the work process	Learning within the work process	Learning within the work process	Learning within the work process
<p>On completing their basic education, young people who go on to secondary education can opt either for courses in the sciences and humanities that prepare them for further study or for courses that provide them with vocational qualifications. The latter can be used to enter the labour market or to continue studying. The training offered by courses leading to a qualification can be vocational courses (secondary-level training that last for three academic years and leads to Level 3 vocational qualification and a diploma in secondary education), courses under the apprenticeship system (initial alternance training, intended for young people – between 15 and 25 – and that leads to Level 2 vocational qualification and a certificate of completion of Cycle 3 of basic education, or a Level 3 vocational qualification and a certificate of completion of secondary education) and education and training courses (intended for people aged</p>	<p>Although work experience are part of the curriculum of middle and senior vocational training, the quality of these practices and their integration into the rest of the curriculum cycle, especially when grown in small companies or productive networks underdeveloped, are still far suboptimal.</p> <p>Promoting alternating between school and work as a training strategy, the elongation of the practices in the workplace and its extension to occupational training, implementation of contracts between companies and students in initial training are measures that facilitate the relationship between training and labour market.</p> <p>The Job Training in Companies (FCT): theoretical and practical professional modules designed to develop a range of skills that have been defined in relation to a specific job positions. They are carried out in an external centre to school production, generally practices in a company. This has been a major innovation in the traditional culture of the Spanish school training. The practices in companies have helped to open vocational</p>	<p>Learning within the work process is the founding principle of dual VET-system (apprenticeship training). As explained above 80% of the training takes place in a training company. In the training company companies are expected to integrate apprentices in the work process so at the end of the apprenticeship training apprentices are job-ready skilled workers. How the alternation of company-based training and training in part-time vocational schools is organised differs between regions and occupations (Year-round, Accumulated, Seasonal).</p> <p>In order to make some apprenticeship occupations better adjusted to company needs the modularisation of some apprenticeship occupations was</p>	<p>The aim of German vocational education and training is to create comprehensive employability skills – the ability to work autonomously. A combination of learning within the real work situation in company and school-based learning is the best way of developing the professional, methodological and social competence required to achieve this.</p> <p>Active learning within the work process is considered to be the most effective and most efficient form of vocational education and training. Instead of engaging in mere theoretical exercises, which are far removed from the realities of</p>

<p>15 or over who left or are in risk of leaving the regular education system and for young people who have completed 12 years in school and wish to acquired a vocational qualification; lead to an academic certificate equivalent to year 9 or 12 of school and a Level 2 or 3).</p> <p>The National Qualification Catalogue is a framework that reflects the system of continuing vocational and training in Portugal: a range of flexible training pathways which make possible to build a vocational qualification project organised in short credit units that allow for the independent certification of skills.</p> <p>The main forms of continuing vocational education and training are aimed at adults of working age (employed, unemployed and groups at risk of exclusion), including adult education and training courses that are intended to raise academic ability and vocational qualifications and enhance employability and certification of acquired learning (aimed at adults over the age of 18 who have no qualification or whose qualifications are inadequate for integration in labour market and lead to a Cycle 3 basic education certificate and a Level 2 vocational certificate or a secondary-education certificate and a Level 3 vocational certificate). The Recognition,</p>	<p>training centres, improving the relationship between the centres and the productive world, habituating teachers to interact with companies and, above all, to facilitate the employment of young people once obtained their degree.</p> <p>Companies hire many young people where they have made practices. The FCT is a measurable training module that has a tutor at school and another in the workplace, with a work plan previously established and supervised by both tutors.</p> <p>This practice training modality doesn't reach the alternation of the German dual system, or the alternation programs and learning French system, but has helped to overcome the traditional isolation of the training centers in relation to companies and has valued the practical aspects of vocational training. Business practices account for 25% of the teaching time of a cycle, between 350 and 500 hours.</p> <p>However, the quality of these practices and their integration into the overall curriculum of the cycle, especially when they are performed in small companies or in underdeveloped productive networks, are still far from desirable levels.</p> <p>Finally, it is also important to note that professional families, which are large groupings of occupations or professions, organize training courses. Some of them have a specific character, others have a cross character but they cover most of the professional content of the labour market.</p>	<p>introduced in 2006. Modularisation means that the training consists of a basic module, which aims at imparting basic knowledge and skills, required carrying out basic activities of a respective occupation (usually 2 years). A main module comprising the knowledge and skills required for exercising the chosen specialisation (e.g. ventilation technology in the modular apprenticeship "Installations and Building technology") (usually 1 year). And a special module that aims at imparting the knowledge and skills for special services, products or their production (usually ½ to one year).</p> <p>With the inclusive (integrative) IVET sheme (IBA in German) the legislator has created a flexible model for people who are disadvantaged in the labour market. The aim is to enable acquisition of vocational qualification and integration into work life for these people. It is open e.g. to the following groups: special learning needs, without qualification on lower secondary level, people with disabilities. There are two forms: 1) prolongation of the apprenticeship period (usually prolonged by one year, in specific cases up to two years). 2) acquisition of parital</p>	<p>working life, trainees learn their occupations in authentic work situations with the support of their colleagues and other skilled workers.</p> <p>This enables them to learn on a step-by-step basis how to assume responsibility for tasks, which are increasingly demanding and complex in their nature. The inherent danger of vocational training, which is purely school-based, is that a gulf may open up between training content and the actual requirements of working life. In acting as a learning venue, the company fulfils the crucial prerequisites for the development of employability skills. (Source: http://www.edvance.info/en/269.php)</p> <p>Training is designed to meet the practical need of the labour market. The business setting is essential for learning (real life settings.) occupational skills are developed that are relevant to the labor market but not</p>
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<p>Validation and Certification of Skills process is the most common platform for access to these courses.</p> <p>In addition to the precedent forms of training there are also courses aimed specifically at groups that face problems in joining the labour market (most of these courses are promoted by the Institute for Employment and Vocational Training). In Portugal, apprenticeship training is an IVET pathway and not a separate sub-system. Apprenticeship courses are initial training courses aimed at young people, carried out in alternance training schemes, which privilege entry into the labour market and the continuation of further studies.</p> <p>There are also continuing vocational education and training at the initiative of enterprises or social partners in accordance to the Labour Code that enshrines in law the employers' obligation to ensure that every year, at least 10% of workers on permanent contract take part in training courses and to assert the right of every work to receive a minimum of 35 hours certified training each year.</p>	<p>After the last update of the National Catalogue of Professional Qualifications, there are 26 professional families, which cover the primary sector, with family land and sea-fishing; the secondary sector, for example, chemistry, mechanical engineering, electricity and electronics, graphic arts; and the tertiary sector, such as hospitality and tourism, socio-cultural and community services, health, etc.</p> <p>Each family includes several professional specialized cycles, led to a smaller number of jobs in the labour market altogether. Not all intermediate cycles have continuity in the top level, consistent with the modern conception of vocational training as a specialization for the labour market and not as an alternative to the general teaching career.</p> <p>If autonomy, flexibility and affordability are three basic features for any system of lifelong learning, recognition and certification of non-formal and informal learning is the fourth pillar of the system. The adult learning that takes over his life, including professional, are made mostly informally through the experience or participation in many activities (e.g., attending conferences as part of a working group, etc.) with educational value, although informal character.</p> <p>It is hoped that by assessing the experience, individuals are motivated to join the dynamics of lifelong learning as a means to enrich and update their skills.</p>	<p>qualification (only a part of an apprenticeship occupation is taught).</p> <p>However the actual learning within the work process might differ between occupations (e.g. in high tech occupations like mechatronics it can't be expected that apprentices are fully integrated in the work process right from the start) and especially between training companies. Although the occupational profile is legally defined (curriculum and outcomes of the training) the responsibility to follow these definitions lies within the individual companies. Some studies show big differences in practice and there are apprentices who complain that they are mainly used for back work (e.g. cleaning of facilities).</p> <p>In order to foster quality in the company based part of the apprenticeship training the IBW (educational institute of commerce) is currently working on training handbooks for some apprenticeship occupations (also see under nationwide standards).</p>	<p>narrowly focused on the requirements of individual business.</p> <p>The aim of German vocational education and training is to create comprehensive employability skills – the ability to work autonomously. A combination of learning within the real work situation and school-based learning is the best way of developing the professional, methodological and social competence required to achieve this.</p>
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SWOT: Learning within the work process

Country	Strength	Weakness	Opportunities	Threats
ES	<ul style="list-style-type: none"> The alternation between theoretical and practical training in companies; The scope and organization of the Formative Family. 	<ul style="list-style-type: none"> Difficulty in SMEs and micro SMEs to offer high quality practices; Little flexibility to modify or enter a new cycle demanded by the labour market. 	Incorporation of experienced learning method and its formal recognition.	Not all intermediate cycles have continuity in advanced vocational.
PT	Decisions makers, VET institutions and companies are now and more than ever, interested in working together in an effort to prepare young people to the work market.	There isn't a real dual system implemented in Portugal. Only a few courses (more industrial) have a special protocol with some companies where trainees can have the possibility to combine moments of learning and moments of working. Nevertheless, these referred "moments" are almost always simultaneous. The gap between the perception of employers, young students and VET Institutions about preparation of young people to the labour market.	The low existence of partnerships between the labour market and the training institutions calls for a methodology, which requires a common structured approach.	<ul style="list-style-type: none"> The approach and development of transversal skills (soft skills) is artificial; The correspondence between the training courses and the real needs of the labour market is not accurate.
AT	<p>Learning within the work process could be beneficial for both – the training company as well as the apprentices:</p> <ul style="list-style-type: none"> Training is provided as part of productive activities which could lead to cost reduction; Apprentices are more motivated to learn. 	Since there is no direct control of the company-based training quality, the actual quality of the company-based training can differ substantially between training companies.	<p>The high motivation of apprentices triggered by the integration in productive work processes of the company could contribute to high completion rates.</p> <p>In addition the flexibility of training forms (modularisation, open to lateral entries, integrative apprenticeship training) allows to adjust more specifically to the needs of labour market and also makes it easier for disadvantaged groups to obtain a vocational qualification.</p>	Some VET qualifications may be too narrow to provide an adequate foundation for a career as well as a first job.

<p>GE</p>	<p>In-company learning fosters knowledge and skills and promotes social and personal competences. Participation in working life motivates trainees, improves learning outcomes and reduces dropout numbers. This supports the social integration of young people.</p>	<p>Not all companies who are allowed to train an apprentice are interested do such.</p>	<ul style="list-style-type: none"> • Making real work processes within companies the reference point for learning processes also allows a high degree of labour market relevance to be achieved within VET systems which are more school based; • Participation in working life motivates trainees, improves learning outcomes and reduces drop-out numbers. This supports the social integration of young people. 	
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*Country codes: ES (Spain); PT (Portugal); AT (Austria); GE (Germany).

3. Acceptance of national standards

Best practice: Portugal	Best practice: Spain	Best practice: Austria	Best practice: Germany
Acceptance of national standards	Acceptance of national standards	Acceptance of national standards	Acceptance of national standards
<p>Quality assurance in VET is a transversal issue that has gathering a higher relevance nowadays, not only to achieve important changes (like guaranty the efficacy of VET systems, make easy the access into VET and reinforce the relation between VET and labour) but also to enhance the process of monitoring the results obtained (by reference to the objectives proposed).</p> <p>Facing the complexity of the VET system different entities are involved in the quality assurance process, either in the dependence of the Ministry of Labour and Social Solidarity (MTSS) or in the dependence of the Ministry of Education (ME). There are also entities regulate by both Ministries. The most relevant entities in this matter are the following:</p>	<p>A key aspect is the continuous adaptation of content to the changes and developments of the qualification requirements of the production network. To achieve this better fit is not so much to reform the current contents, but to formalize the process of adaptation of qualifications for employment by reducing it to the specific needs of the job. This could have positive effects on the productivity of companies and the working conditions of the new contract.</p> <p>This increase in efficiency in the process of adapting the contents can be approached from different perspectives:</p> <p>Extend the period of practices of students in vocational training and standardize practices in full training, both initial and occupational, so that students have a longer learning period</p>	<p>Austria enjoys a good reputation regarding vocational trainings and apprenticeship. In spite of, or due to, this and the positive key data, there's a lack of systematically quality management. Models for quality assurance are common practice regarding e.g. school and university but not in the field of apprenticeship which therefore does not guarantee minimum standards (Hoeckel 2010, S.13).</p> <p>The following table gives an overview where measures of quality assurance in the area of apprenticeship training. It differentiates quality measures for specific dimensions of the dual system of apprenticeship training – input, company, part-time vocational school, output. However not all of these measures are formal (which means that standards are defined by law or that the accordance to these measures is obligatory):</p>	<p>Balance between standardization and flexibility. Government regulation of minimum standards to ensure high-quality training</p> <p>The training at the company is governed by training regulations that set out uniform, nation-wide standards for training content, the training timetable, and examinations. The nation-wide standards and the nationally recognised qualifications act as a quality benchmark for employers and serve as a basis for recruitment. This helps employees to find a new job more quickly.</p> <p>The broad applicability of the training ensures that employees trained within the</p>

Directorate-General for Employment and Industrial Relations (DGERT) – MTSS: central service, directly administrate by the state whose mission is support the conception of the policies related to employment, training and professional certification and certification of training entities by one hand and to professional relations, job environment and health in workplace by the other hand.

Institute for Employment and Vocational Training (IEFP) – MTSS: public service of national employment whose mission is promote the creation and quality of work, fighting the unemployment with active policies of employment and vocational training.

Cabinet for Strategy and Planning (GEP) – MTSS: has the mission of guaranty the technical support to the formulation of policies and to sustain the operational planning. Is also responsible for the monitoring and evaluations the execution level of the policies, planning instruments and results of the management systems in articulation with other services of the MTSS.

in the company and may well acquire the skills specific to a particular job.

Companies could specialize students, according to their needs, before their contractual incorporation.

On the other hand, we find a poorly developed system in relation to complementary functions such as orientation, innovation, quality, assessment and monitoring.

It should be identified who is going to organize the monitoring function within the system and how this organization should be. We will have to develop the capacity to supply all system actors, in their respective fields, the necessary information so they can make decisions based on proven information.

The same question happens with the function of quality and innovation. Both functions require a plan, a driver and an active supervisor.

There is no need to create new agencies for each of the complementary roles of the system, but it is necessary that all of them are clearly defined and organized.

Table 1: aspects of quality assurance and standards in the dual VET-system in Austria

Input	Company	Part-time vocational school	Output
Determination of suitability of training companies for apprenticeship training	Company internal quality assurance, graduation, retention rates	QIBB	Apprenticeship-leave examination
Authorised apprenticeship trainers	Incentives for fostering quality	School marks	Examination-clearing
Training regulation with training profile	awards	School inspectors	Indicators in relation to labour market data
		Training standards for teachers of part-time vocational schools	

Source: WIFI 2014, p.97, supplements by the author

dual system remain mobile. This is a major factor for the high level of acceptance of the system within the business community.

The vocational training regulations are revised in accordance with technical progress, developments in professional practice and economic and social change. This involves modernising current regulations or creating new ones to meet the needs of business. The availability of employees who have been trained in line with the latest technical developments has a positive impact on companies' innovation and therefore on their competitiveness.

There are vocational training qualifications for all areas of business and administration; depending on the breadth and depth of the course content, training lasts for between two years and three and a half years. (source: The dual system of vocational training in Germany - Federal Ministry of Economic Affairs and Energy).

<p>Observatory for Employment and Vocational Training (OEFV) – MTSS: is an advisory entity whose mission is contributing to diagnose, prevention and solution of problems in the scope of employment and vocational training.</p> <p>Inspectorate-General of Education (IGE) – ME: has the competence to act directly on the education settings in the services of the ME. It has the responsibility of monitoring, controlling, evaluation and audit technical-pedagogical and administrative-financing activities of the education establishments.</p> <p>Cabinet for Education Statistics and Planning (GEPE) – ME: has the mission of guaranty the production and analysis of the statistics about education, concerning the technical support to the policies formulation, operational planning and the observation and evaluation of the global results obtained in the educational system.</p> <p>Directorate-General for Innovation and Curricular Development (DGIDC) – ME: has the mission of assuring the concretization of the policies related with the pedagogical component of the education and to guaranty the technical</p>	<p>The evaluation function could be assumed by agencies involved in other functions, such as quality and innovation or observation, or could be included as an action plan within agencies more general evaluation, either the education system or public policy. However, what is needed is a systematic plan of evaluation of the whole system.</p> <p>We must promote more decisively the guidance function in order to improve the transparency of the entire system. The complexity of the system and the multiplicity of actors don't advise a single device orientation, but should ensure the contemplation of the guidance and make it sure through different areas of the system.</p> <p>Innovation and experimentation have been entrusted to the 'national reference centers' sectorally specialized, but it is clear their connection with the rest of the subsystem with the training and regional level structures.</p> <p>An important factor to detect aspects to improve, and then be able to so innovate, is to have observation mechanisms for gathering information</p>	<p>INPUT Determination of suitability of training companies for apprenticeship training (bmwfj 2012, p. 10) – Companies, which want to work as training companies, have to submit an application for determination of suitability for apprenticeship training to the regional apprenticeship office of the chamber of commerce. To receive a declaration certifying that the company is entitled to recruit apprentices the following prerequisites have to be met:</p> <ol style="list-style-type: none"> (1) Fulfilment of legal conditions – the company has entitled to carry out the activities in which the apprentice is to be trained according to the Trade, Commerce and Industry Regulation Act (Gewerbeordnung); (2) Fulfilment of corporate conditions – the company needs to be equipped and managed in a way that allows the company to impart the apprentice all the knowledge and skills included in the legally defined apprentice occupational profile (as mentioned above, if a single company can't impart all aspects of a occupational profile it can train apprentices within the framework of a training alliance). In addition, a sufficient number of professionally and pedagogically qualified trainers must be available in the company. <p>Authorised apprenticeship trainers (IVET trainers) (bmwfj 2012, p.11) – A authorised apprenticeship trainers requires to have the following qualifications:</p> <ul style="list-style-type: none"> • Subject-specific qualifications (in relation to legally defined apprentice occupational profiles); • Vocational education know-how; • Legal knowledge; <p>There are three ways of proofing the necessary</p>	<p>Training standards are designed to be flexible to accommodate differences in business size, sector and training requirements. Standards may be modified at different times and in different sectors. Flexibility in conducting training (duration) Standards Examinations.</p> <p>For the purpose of developing and testing new training occupations, new forms of examinations, the Federal Ministry of Economics and Labour or such other ministry as may be competent, acting in agreement with the Federal Ministry of Education and Research and after consulting the Board of the Federal Institute for Vocational Education and Training, may by ordinance which shall not require the consent of the Bundesrat permit exceptions to section 4 subsections (2) and (3) as well as sections 5, 37 and 48 which may also be limited to a specific type and number of training premises.</p>
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<p>support to the formulation of these policies related with curricular innovation and development.</p> <p>National Qualifications Agency – MTSS/ME: is a public institute integrated in the indirect administration of state. Regulated by the MTSS and ME has the mission of coordinating the execution of the educational and vocational training policies related with young people and adults and assuring develop and management of the RVCC system.</p> <p><u>Quality of the Training Programmes and of the trainers</u> The National Centre for the Qualification of Trainers (<i>Centro Nacional de Qualificação de Formadores-CNQF</i>) designs and tests training references – programmes and resources – for the initial and continuing training of trainers and other professionals (except teachers) working in the education and training system. After validation and the necessary training of trainers, these references are integrated in the training supply of the Vocational Training Centres network of the IEFP and are also available to all national training entities that operate in the field of training for trainers. The produced</p>	<p>about the system. These data provide the basis for setting goals and guide actions to be taken.</p> <p>The INEM develops a longstanding observation function. The INCUAL also has among its objectives to develop this function refers to qualifications. In fact, many autonomous regions have developed programs or institutions dedicated to this function, because of the lack of information available for the planning of training at regional and local level since there is no formal program of networking observing the different modules in order to capitalize on the resources and cover all information needs for decision-making by different actors.</p> <p>The collect of information about various operating parameters of the system and its dissemination is an issue that certainly needs to be improved. The little information available is scattered and little homogenized and, in some cases, not very reliable due to lack of clear statistical criteria and confusion of both the data and the criteria in the administration and processing of statistical data.</p>	<p>qualification:</p> <ul style="list-style-type: none"> • IVET trainer exam; • Successful completion of IVET trainer course (40 hours); • Legally defined equivalent qualifications (e.g. master craftsman certificate). <p>Training regulation with training profile (Tritscher-Archan, p.8) –As explained above occupational profiles are defined by the Federal Ministry of Economy, Family and Youth (BMWFJ) on the basis of expert opinions from the Federal Advisory Board on Apprenticeship (BBAB). This training regulation consists of a training profile (curriculum for the enterprise-based training) and competence profile (profile of learning outcomes). In addition to that the IBW is currently working on training handbooks for apprenticeship occupations in order to support and foster quality of the work of IVET trainers. At the moment training handbooks for the following occupations exist:</p> <ul style="list-style-type: none"> • Office clerk • Hair dresser • Installations and building technologies • Cook/chef • Restaurant specialist <p>Training handbooks for respective occupational profiles are based on the legally defined apprenticeship occupations. Since these apprenticeship definitions are written in a rather juristic language the primary aim of these training handbooks is to offer information on the legally defined occupations in an easy to read language and format for trainers. Beside training goals it also contains tips and best practice examples from well experienced vet trainers in the respective apprenticeship occupation</p>	<p>Inter-company occupational standards and uniform examination standards guarantee the quality of qualifications. Comparable training qualifications and certificates form the basis for employability, mobility and social acceptance and foster lifelong learning.</p> <p>Qualifications need to be comparable. This provides workers with a high degree of mobility and enables companies to conduct efficient human resources recruitment. Standards create transparency on the educational and labour market, facilitate the further development of qualifications and permit cross-connections between educational pathways.</p>
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<p>references take into consideration the training needs of trainers and the strategic priorities defined by training policy.</p> <p>In Portugal, there have been a number of changes, with particular emphasis on the restructuring of the teaching profession, the teacher training system and teacher performance evaluation to improve the quality and efficiency of education, learning and teaching practice. Within the scope of initial training for teachers, special mention should be made to the new Legal Framework of the Qualification for Teaching in pre-school, basic and upper secondary education regulating access to teaching. This regulation establishes that, the qualification of non-tertiary education teachers shall be attained through the attendance of higher education courses conferring the master degree (according to the Bologna Process).</p>	<p>It hasn't been covered yet the need for a reliable statistical entire system that involves both the central government and the regional administrations, and that offers to all players in the system, regardless of its scope, the information needed to make decisions that correspond to every one.</p> <p>However, we must recognize the progress that INE has managed to incorporate their statistical training plans and to conduct special modules that provide information on the transition from school to work.</p> <p>Similarly, at the state level and at the regional level, it is observed a widespread weakness in both the deployment of systematic programs of evaluation of programs and activities that are performed on the same system.</p>	<p>Company: Incentives for fostering quality - To assure high standards of quality, companies can apply to different types of seals of quality, granted by the chamber of commerce, for excellence in vocational training (e.g. "staatlich ausgezeichneter Ausbildungsbetrieb" referring to §30a, BAG or "fit-for-future"). Awards - There are regional competitions like the "apprentice-competition of the chamber of commerce in lower austria" regarding industry or "amuse bouche", organized by a private initiative and regarding gastronomy. This to reward companies who give special interest and engage in vocational training and to motivate apprentices.</p> <p>Company internal quality assurance – Although company internal quality assurance processes are very important for the training quality there are no obligatory internal quality assurance systems/processes for training companies. To foster company internal quality assurance the IBW (Institute for educational research of the economy) developed a checklist containing identified quality factors. In addition the IBW also developed a training guide for specific occupational profiles (WIFI 2014, p.92).</p> <p>Graduation/Retention rates – On a system level statistics of graduation and retention rates allow assumptions on the overall quality of company-based apprenticeship training (WIFI 2014, p.97). Here data shows that nearly 17 % of vocational trainings do not lead to a successful graduation – apprentices fail exams or quit the training before it is completed.</p>	
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		<p>year bachelor course at universities for teachers education. The first and third year of the study are completed on a part-time basis, the second is a full time study. There are different prerequisites concerning the qualification before entering such a study depending on the subjects groups of teachers (general education, occupation-related theory, occupation-related practice. In addition at least three years relevant professional practice is required for admission to the study programmes (bmwfj 2012, p.14).</p> <p>OUTPUT</p> <p>Apprenticeship-leave examination – The apprenticeship-leave examination which is conducted by external awarding body (a dedicated body only responsible for conducting examination, no representatives of respective part-time vocational school or training company of an apprentice). Here the IBW (Institute for Educational Research of the Economy) prepares examples for the theoretical and practical part of the examination (WIFI 2014, p. 94) However questions and examples for passing the exam are not obligatory standardized for Austria but can differ between provinces. Despite this fact each existing apprenticeship occupations are recognized all over Austria no matter in which province the exam was taken.</p> <p>Examination Clearing House of the IBW (Institute for Educational Research of the Economy) – In this newly introduced project examples for apprenticeship-leave examination are labelled with a seal of quality, examination chairmen are trained and examination modalities are further developed. The aim is to establish Austrian-wide standards for apprenticeship-leave examination (WIFI 2014, p. 94).</p>	
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SWOT: Acceptance of national standards

Country	Strength	Weakness	Opportunities	Threats
ES		Limited development of complementary system functions, as are the orientation, innovation, quality, evaluation and observation. There is no reliable statistical and joint system that offers all the actors of the system, the information needed to make decisions.		
PT	The work of the National Agency for Qualification and Vocational Education and Training at national and European level, in the field of quality for VET.	Diversity of the profile of VET institutions; Difficulty in the development of projects in partnership at national level;	The restructuring of VET System in Portugal, which takes place in this moment.	
AT	There is a wide range of standards concerning different aspects of the apprenticeship scheme – input, training companies, part-time vocational schools, training outcomes.	However most of these standards are not obligatory or the compliance to it is not monitored sufficiently. Compared to other educational areas (Universities, VET-schools, general education) quality assurance is under-developed. There is lack of guaranteed minimum standards.	Missing standards allow more flexibility in the training approach and may contribute to innovative approaches. Despite the fact that there are missing standards or existing standards are not obligatory apprenticeship exams are recognized all over Austria no matter in which province it was taken.	On the other hand missing standards could weaken the value of apprenticeship programmes on the labour market.

<p>GE</p>	<p>Transparency regarding the level of skills acquired by trainees; transparent basis for both job applicants and companies in the application process; Quality standards allow employees to change their job because they are prepared for the job market; Quality standards let employers know what they can expect from a job candidate who run the dual system; High standard in the companies.</p>	<p>Many formal conditions in the dual education for trainees and for companies.</p>	<p>Training directives guarantee uniform national standard. It affords company's flexibility to agree on a company-training plan with the trainees. National Qualification Framework referenced to EQF.</p>	<p>Flexibility in/for the companies.</p>
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4. Qualified VET staff

Best practice: Portugal	Best practice: Spain	Best practice: Austria	Best practice: Germany
Qualified VET staff	Qualified VET staff	Qualified VET staff	Qualified VET staff
<p>In Portugal there are three main types of professionals who ensure vocational education and training:</p> <ul style="list-style-type: none"> • Teachers; • Trainers; • Tutors. <p>The initial training of teachers is carried out in higher education institutions – polytechnic and universities. According to the changes introduced under the Bologna Process, the Master’s degree is the minimum academic qualification for the teaching profession.</p> <p>Specialised training takes place in higher education institutions and aims to qualify teaching staff for specific specialised educational positions, duties or activities of a pedagogical or administrative nature, directly linked to the operation of the educational system and schools. Continuing training follows the same</p>	<p>The GLSES incorporated a novelty of great importance for the current training. It reates the Secondary Education or IES, opening the possibility that in one school are offered studies ESO, high school and vocational training courses.</p> <p>This proposal was consistent with the philosophy of inclusive secondary, predominantly in Spanish education, and partly also internationally.</p> <p>The result is that, despite the problems of resistance and initial implementation, training has acquired a new school status, considered as a separate and alternative way to general school education.</p> <p>The consequent homogenization and equalization of teachers, sharing</p>	<p>Corresponding to the dual principle of vocational education there are two areas:</p> <ul style="list-style-type: none"> • Training companies & respective IVET trainers; • Teachers of part-time vocational schools <p>Training companies & respective IVET trainers – Besides legal conditions a training company has to fulfil the following conditions:</p> <ol style="list-style-type: none"> 1. The company needs to be equipped and managed in a way that allows the company to impart the apprentice all the knowledge and skills included in the legally defined apprentice occupational profile. In addition, a sufficient number of professionally and pedagogically qualified trainers must be available in the company; 2. Company trainers have to 	<p>Regulation of minimum standards for the personal, professional and pedagogical qualification:</p> <ol style="list-style-type: none"> 1. Trainees may only be engaged and given initial training if: <ol style="list-style-type: none"> (1) the nature and equipment of the training premises are suitable for initial training; and (2) the ratio between the number of trainees and the number of training places or the number of skilled staff employed is appropriate(unless such other ratio is not detrimental to initial training). 2. Training premises where the necessary vocational skills, knowledge and qualifications cannot be imparted in their entirety shall be deemed to be suitable if these can be imparted through initial training measures taking place outside the training premises. 3. The nature and equipment of training premises shall only be deemed to be suitable for initial training in occupations in the field of agriculture, including domestic service in agriculture, if the training premises have been recognized as such by the authority competent under Land law. The

<p>pathway for all non-higher education teachers and aims to improve the quality of teaching and learning.</p> <p>Teachers can either teach in public (civil servants) or private education establishments, vocational schools and vocational training centres. They can teach socio-cultural and scientific training components in vocational courses.</p> <p>Trainers are highly qualified professionals in their occupational area. They are expected to complete an initial pedagogical training course for trainers (Curso de formação pedagógica inicial de formadores), after which they are granted a Trainer Pedagogical Aptitude Certificate (Certificado de Competências Pedagógicas – CCP) issued by the Institute for Employment and Vocational Training (IEFP), which also approves these courses. Initial training courses last 90 hours or more and their certification is valid for five years. After this period, certification renewal requires updated continuing training (60 hours) and 300 hours of training experience.</p> <p>The trainer profession requires psychosocial preparation, as well as scientific, technical, technological and practical training. Trainers develop their</p>	<p>facilities with the high school, which concentrated prestige as a natural way to college, and the rise of the quality of teaching and students by requiring a minimum entry qualification, have been, for sure, the elements that have contributed to the prestige of a teaching considered time ago as second-rate.</p> <p>But the integration of vocational training in the IES generates several difficulties. The lack of autonomy in the management of schools and stiffness criteria peration of government, take on a special significance when it comes to training. A vocational training center requires a higher dose of flexibility and adaptability to the environment than any school. The most integration in the educational system of vocational training courses has also led, in return, a stop to the move towards greater flexibility and adaptation to the needs of the labor market.</p> <p>The rigidity in the planning training cycles, the difficulties in adapting and flexible curricula according to the demands of local production, the difficulties in building a team of teachers according to the needs of</p>	<p>prove their expert knowledge and their capability to train an apprentice – so called authorised apprenticeship trainers (IVET trainers) (bmwfj 2012, p.11).</p> <p>A authorised apprenticeship trainers requires to have the following qualifications:</p> <ul style="list-style-type: none"> • Subject-specific qualifications (in relation to legally defined apprentice occupational profiles); • Vocational education know-how; • Legal knowledge. <p>Therefore they have to comply with one of the following requirements:</p> <ol style="list-style-type: none"> 1. Pass of an exam; 2. Specific course (40 hours); 3. Compensatory Exams (e.g. master craftsman certificate). <p>As mentioned above, to support the work of IVET trainers and the quality of training, training handbooks have been elaborated by the IBW (educational institute of commerce).</p>	<p>Federal Ministry of Consumer Protection, Food and Agriculture, acting in agreement with the Federal Ministry of Education and Research and after consulting the Board of the Federal Institute for Vocational Education and Training, may by ordinance which shall not require the consent of the Bundesrat lay down minimum standards for the size, equipment and standard of management of training premises.</p> <p>4. The nature and equipment of training premises shall only be deemed to be suitable for initial training in occupations in domestic service if the training premises have been recognized as such by the authority competent under Land law.</p> <p>The Federal Ministry of Economics and Labour, acting in agreement with the Federal Ministry of Education and Research and after consulting the Board of the Federal Institute for Vocational Education and Training, may by ordinance which shall not require the consent of the Bundesrat lay down minimum standards for the size, equipment and standard of management of training premises.</p> <p>Suitability of Training Employers and Instructors</p> <ol style="list-style-type: none"> (1) Training employers who have the necessary personal qualifications may only engage trainees. Persons who have the necessary personal and technical qualifications may only train trainees. (2) Training employers who do not have the necessary technical qualifications or do not provide the initial training themselves may only engage trainees if they appoint instructors with the
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<p>activity in vocational schools and training centres. In vocational schools they can teach technical/technological subjects, as well as practical simulated workplace training. In training centres they teach socio-cultural subjects, scientific and technical/technological modules, as well as practical simulated workplace training.</p> <p>Trainers are involved in the following areas:</p> <ul style="list-style-type: none"> • Design/conception of programmes for a thematic area by defining its goals and its content in accordance with skills needs; • Definition of criteria and selection of methods and pedagogic techniques to be used according to the established goals and themes, as well as trainees characteristics; • Definition, preparation and/or design of teaching support means such as audio-visual materials, pedagogic games and teaching documentation; • Development of training sessions; • Assessment of training actions and/or trainees by using different evaluation techniques and means, such as inquiries, questionnaires, practical works and observation. 	<p>schools or barriers to the companies demand to organize training activities are examples of the problems that the management of the centers have to face.</p> <p>This rigidity in the management is also reflected in the facilities and endowments, which, despite having a minimum more or less reasonable, never have the technology to train qualified personnel policy innovation that companies require.</p> <p>Another challenge that schools must face up to improve the quality of training they provide, is their own teacher training. The level of teacher preparation has established quality standards of theoretical teaching function, but instead presents gaps in professional experience in the productive fabric of the specialties they provide.</p> <p>Many of the teachers joined straight out of college without having enough contact with the labour market, and having a low educational and vocational training to develop their teaching. As a result, students have been transmitted some professional learning powers which are</p>	<p>Teachers of part-time vocational schools - Depending on the school subjects, teachers need to have different qualifications. Basically: Subject-specific school diploma or examination for the master craftsman's certificate, a general qualification for university entrance and at least three years of practice in the regarding field. Teachers have to achieve their pedagogical skills during a tri-annual course at a university of teacher education. The first and the third year are extra-occupational; the second year is designed as full time study. Graduates receive a „Bachelor of Education“ (BEd).</p>	<p>necessary personal and technical qualifications to directly impart the essential initial training content in a responsible manner on the training premises.</p> <p>(3) Under the responsibility of the instructor, persons may also participate in the provision of initial training who are not they instructors but, notwithstanding the special prerequisites set out in section 30, possess the vocational skills, knowledge and qualifications as well as the personal qualifications necessary to impart subject matter covered by initial training.</p> <p>Persons shall in particular be deemed to not have the necessary personal qualifications if they:</p> <ul style="list-style-type: none"> • are not allowed to employ children and young persons or • have been guilty of repeated or serious contraventions of this Act or of the provisions and regulations issued on the basis of this <p>Technical Qualifications</p> <p>(1) Persons shall be deemed to have the necessary technical qualifications if they possess the vocational and skills, knowledge and qualifications as well as the teaching skills, knowledge and qualifications required to give initial training in the occupation and processes concerned.</p> <p>(2) Persons shall be deemed to possess the necessary vocational skills, knowledge and qualification sif they:</p> <ol style="list-style-type: none"> a. have passed the final examination in a technical field corresponding to the training
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<p>Tutors are responsible for workplace training within enterprises. They provide counselling and support to trainees and develop their activity in partnership with training coordinators and trainers. They must have at least three years of registered working experience and preferentially hold a pedagogic training qualification.</p> <p>The role of tutors is usually developed by experienced professionals, some of who are responsible for the respective enterprises/organisations. In general, they are also experienced trainers. They can participate in the development of practical training components in a workplace context, namely by proposing recommendations which are generally accepted by the training coordinators.</p> <p>In addition to teachers, trainers and tutors, who are directly involved in the provision of training, the training coordinator is in charge of preparing and ensuring the provision of one or several training actions by planning, programming, organising, supporting, controlling and assessing the activities included in each training action.</p>	<p>recognized as acceptable by the same companies, but without practical expertise and capacity to meet the demands of employers. Usually, practices in workplaces are not enough to offset these deficiencies.</p> <p>The subsystem of IVT should improve the following aspects: its small size, the lack of integration with on-going training, the low-profile identity, some specialized teachers and the lack of tools to enable the centres to manage efficiently their adaptation to the training needs of the market.</p> <p>The company tutor: tutor training activity is focus on tasks accompaniment, counselling and monitoring of self-learning processes, which develop in production processes.</p> <p>His intervention in the process of training is generally carried out in the workplace. Their training needs are primarily pedagogic education. It is often noted in its activity some difficulty in linking with the practical and theoretical skills and also to organize such competitions based on recipients who are entrusted.</p>		<p>occupation;</p> <ul style="list-style-type: none"> b. have passed a recognized examination at a training facility or before an examination authority or a final examination at a state or state-accredited school in a technical field corresponding to the training occupation; or c. have passed a final examination at a German higher education institution in a technical field corresponding to the training occupation and have been employed in a practical capacity for an appropriate period in their own occupation. <p>(3) In cases covered by subsection (2), number 2, the Federal Ministry of Economics and Labour or such other ministry as may be competent, acting in agreement with the Federal Ministry of Education and Research and after consulting the Board of the Federal Institute for Vocational Education and Training, may by ordinance which shall not require the consent of the Bundesrat prescribe which examinations are to be recognized for given training occupations.</p> <p>(4) The Federal Ministry of Economics and Labour or such other ministry as may be competent, acting in agreement with the Federal Ministry of Education and Research and after consulting the Board of the Federal Institute for Vocational Education and Training, may by ordinance which shall not require the consent of the Bundesrat prescribe in respect of individual training occupations that notwithstanding subsection (2), persons shall only be deemed to possess the necessary vocational skills, knowledge and</p>
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<p>Fields of action of the company instructors and identification of the competences needed by the company instructors to be able to train the apprentices In Portugal, the company instructors are formally known as “Tutors” and their fields of action include three key-levels of knowledge:</p> <ul style="list-style-type: none"> • The knowledge which is related to the theoretical contents necessary for the accomplishment of his/her actions (“Competências ao nível do Saber”) • The knowledge which is related with its practical application and exploitation (“Competências ao nível do Saber-Fazer”); • The knowledge which is related with personal assets (“Competências ao nível do “Saber-Ser”). <p>Generally speaking, the Tutor’s activities can be summarized into 3 key-actions:</p> <ul style="list-style-type: none"> • Planning and organisation; • Development; • Evaluation and assessment of the “in-company” training. 	<p>Technological development is also essential for these professionals.</p> <p>Its main functions are:</p> <ul style="list-style-type: none"> • To develop training activities integrated in the normal course of work with a view to updating and acquire vocational skills training activities. • To design individualized training in order to cover the skills required in the work plans and professional areas. • To present competent performance models adapted to each individual and work situation. • To evaluate processes and learning outcomes, tracking and constant supervision throughout the entire process, remaining open to innovation that occur in their professional environment and in collaboration with the tutor of the school. 		<p>qualifications to be technically qualified if they meet the prerequisites set out in subsection(2), number 2 or 3, and have been employed in a practical capacity for an appropriate period in their own occupation or if they meet the prerequisites set out in subsection(2), number 3, and have been employed in a practical capacity for an appropriate period in their own occupation or are licensed to practice an independent profession or have been appointed to public office.</p> <p>(5) The Federal Ministry of Education and Research, after consulting the Board of the Federal Institute for Vocational Education and Training, may by ordinance which shall not require the consent of the Bundesrat prescribe that persons separately produce evidence that they have acquired the teaching skills, knowledge and qualifications required to give initial training in the occupation and processes concerned. The ordinance may also lay down rules for the subject matter, scope and completion of the measures constituting such evidence.</p> <p>(6) The authority competent under Land law, after consulting the competent body, may revocably recognize persons not meeting the prerequisites set out in subsections (2), (4) or (5) as having the necessary technical qualifications.</p>
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SWOT: Qualified VET staff

Country	Strength	Weakness	Opportunities	Threats
ES	<ul style="list-style-type: none"> • There are companies and tutors trained by the FCT • Teaching Centres with good technical skills. • Some Training Centres are used by companies to train their workers. 	<ul style="list-style-type: none"> • Little work experience teacher training; • Slight pedagogical training company tutors; • Short periods of practice in companies. 	<ul style="list-style-type: none"> • Establish standard training tutors companies; • Integrate vocational education and training; • Identify faculty by specialization. 	Lack of autonomy in the management of vocational training centres.
PT	High qualification of trainers and its social recognition.	High requirement for the coordinator profile for the Dual Training.	European Projects of training and transfer of good practices in the Dual Training System.	Tutors don't have Certificate of Pedagogical Skills or even a training in evaluation of trainees.
AT	The high share of company-based training allows a good preparation for practical work in a company and thereby supports the transition from VET to work life.	On the other hand provision of basic literacy and numeracy skills to VET students is – particularly in the dual system - limited.	In a fast changing economy the high share of company-based training could help to train workforce that optimally matches to the needs of the labour market.	Since the quality assurance for the company-based training is insufficient the actual performance (skills & knowledge) of apprentices could differ very much between different training companies.
GE	<ul style="list-style-type: none"> • Apprentices have a qualified person in their company who is responsible for them. • The quality of the dual training increases. 	Some companies refuse because of the restrictions of the dual system	The on-going development of the qualification of company trainers will improve the quality and the standard of VET in the companies.	Overregulation.

5. Institutionalized research and consultancy

Best practice: Portugal	Best practice: Spain	Best practice: Austria	Best practice: Germany
Institutionalised research and consultancy	Institutionalised research and consultancy	Institutionalised research and consultancy	Institutionalised research and consultancy
<p>The National Agency for Qualification and Vocational Education and Training (ANQEP) is a public body under the joint supervision of the Ministry of Solidarity, Employment and Social Security, and the Ministry for Education and Science in articulation with the Ministry of Economy. As a central service involved in indirect State administration, the ANQEP has administrative and financial autonomy and pedagogical independence to pursue its official activity.</p> <p>The mission of the National Agency for Qualification and Vocational Education and Training (ANQEP) is to coordinate the implementation of policies regarding the education and vocational training of young people and adults, as well as to ensure the</p>	<p>The Spanish labour market has not been able to provide the necessary manpower with suitable qualifies, thus the productive fabric have had to improvise the qualification with a workforce with a low level and inadequate skills and. An example of this is the hotel industry and catering. In order to avoid wage increases, companies have hired staff with low qualifications.</p> <p>This situation shows the shortcomings of the training system to be responsible for the production of the necessary qualifications for the productive fabric. It shows as well the deficiencies to maintain their standards of quality and professionalism that seemed bound, at least in competitive sectors of the economy. The Spanish labour market is also characterized by a low efficiency in the use of skilled labour. The capacity of the training system to provide more people with intermediate and higher skills will be the key to transform the skills model, as the current model has clear limitations.</p> <p>If we analyse the adequacy of the training system to the skills needed in the labour market, two conclusions are</p>	<p>The Austrian association for educational research and development (ÖFEB) organizes the biyearly Austrian vocational education conference.</p> <p>The aim of this scientific conference is to enable scientific information exchange, networking and the advancement of scientific quality. It is addressed to experts in the regarding fields, such as pedagogical science, science regarding qualifications or vocational science. The federal ministry of education, arts and culture (BMUKK), the consortium of science in vocational education (abf-Austria) and</p>	<p>The Federal Institute for Vocational Education and Training shall carry out its tasks within the scope of the education policy of the Federal Government.</p> <p>The Federal Institute for Vocational Education and Training shall have the task of contributing to vocational training research by means of scientific research. This research shall be carried out on the basis of an annual research programme requiring the approval of the Federal Ministry of Education and Research. Further research tasks may be assigned to the Federal Institute for Vocational Education and Training by supreme federal authorities in agreement with the Federal Ministry of Education and Research.</p>

<p>development and management of the National System for the Recognition, Validation and Certification of Competences.</p> <p>The National Agency's main responsibilities are the following:</p> <p>a) To develop and manage the educational and training branches of the National System for Recognition, Validation and Certification of Competences by assuring the coordination of providers, as well as the monitoring, assessment and regulation of the system in close cooperation with the bodies included in the National Qualifications System;</p> <p>b) To coordinate, foster and manage vocational education and training courses developed according to dual-certification schemes, to coordinate the information, guiding and provision network, and to ensure a complementariness of the educational and the training systems as well as the provisions' quality;</p> <p>c) To guarantee the monitoring, assessment and regulation of dual-certificated education and training provisions offered to</p>	<p>found. The first one is the lack of intermediate skills in the labour market, as a result of low skill requirements in the productive system and the limited supply of these skills by the training system. The factor that may allow overcoming this limitation in the training system is an improvement of the results of the ESO that allows a substantial increase in young people entering the average degree cycles. The second conclusion is that the system faces up the challenge of improving the fit between the training offered and the needs of the labour market, through the introduction of measures to adapt the offer to the changing market conditions.</p> <p>The actual integration of occupational and continuing training in a single subsystem of continuing education, for both the unemployed and the employed, would also help to have a better approach between supply and demand. In this sense, the high number of employed persons with low qualifications is a major challenge for continuous training subsystem. Once achieved a significant amount of required participants, prioritize content to enable greater skill in proportion to the direct needs of the post work or professional expectation. This challenge is totally contradictory to the fact that all the companies that offer credit for organizing the training of their workers don't spend it and also contrasts with the situation of training provided in enterprises, primarily aimed at improving attitudes rather than knowledge and skills.</p> <p>Thus, a priority for the subsystem occupational training should be the recycling of adult workers with low levels of basic education, both unemployed and employed, to complement their general education and provide them with</p>	<p>the AMS supports the ÖFEB related to financial and organisational aspects. In the frame of this conference, the BMUKK presents the Austrian vocational education science award to young scientists.</p> <p>In 1970 the institute for vocational advancement (bfi) in cooperation with federal ministries of labour, social affairs, economy and science initiated the founding of the Austrian institute of vocational education science (öbif) which was the first department of this field in Europe. This non-profit-organisation does research and aims at bringing findings of different fields together to generate broad knowledge. Main work-fields are: Initial Vocational Training, Advanced Vocational Training, Information and Guidance, Evaluation, Teaching and Learning, economy in the vocational sector.</p> <p>The chamber of commerce and the industry-union founded the institute for science in education (ibw) in</p>	<p>The substantive results of the research work carried out by the Federal Institute for Vocational Education and Training shall be published. The Federal Institute for Vocational Education and Training shall have the following further tasks:</p> <ul style="list-style-type: none"> • in accordance with the instructions of the competent federal ministry, • to take part in the drafting of initial training regulations and other ordinances to be issued under this Act or under Part Two of the Crafts and Trade Code; • to take part in the preparation of the Report on Vocational Education and Training; • to take part in the compilation of vocational training statistics pursuant to section 87; • to promote pilot schemes, including scientific monitoring and evaluation; • to take part in international cooperation in the field of vocational education and training; • to assume further administrative tasks of the Federation for the promotion of vocational education
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<p>young people and adults;</p> <p>d) To coordinate and promote the design of pathways, the curricula development, and the specific methods and materials of dual-certificated education and training provisions offered to young people and adults;</p> <p>e) To establish relations of cooperation or association with other public or private, national or international bodies in order to foster the development of a quality lifelong learning within the framework of its mission, and without prejudice to the responsibilities of the Ministry of Foreign Affairs;</p> <p>f) To participate in exchange and cooperation dynamics at European level, including the issues of parity in what concerns the education and training systems for young people and adults;</p> <p>g) To promote the diagnosis, production and comparability of national and international qualifications that are considered essential to a modern, competitive economy, by means of the necessary structures and methods – particularly through the build-up</p>	<p>a solid foundation training to adapt to technological and organizational changes coming.</p> <p>This requires the design of specific training programs for this group, both as regards its content and its methodology, and the implementation of a mechanism for certification and recognition in the labour market to make these programs attractive.</p> <p>The adequacy of the training to the needs of the productive system is more a question of accessibility to the formation for new groups and institutional reforms in the area of the relationship between supply and demand than a question of content adaptation. But despite this is an important issue, it is comparatively low.</p> <p>The application of the approach to vocational skills training has also been a major transformation of training systems with respect to the definition of the content of the training, the way to organize and its evaluation.</p> <p>Reframing training content, by replacing the themes that define the educational objectives for the skills to train, involves a complete change. In the Spanish case, corresponding to the intermediate vocational training and higher qualifications are associated with skills that students must master to finish learning, but the curricula of the titles are still described in terms of syllabus content.</p> <p>The redefinition of learning contents in terms of skills is a complex task that requires the participation of experts and training professionals trained to identify the skills needed in order to perform a specific professional function.</p>	<p>1975 which represents Austria in Refer Net (network of institutes, created by the European centre for the development of vocational training). Applied research and economically relevant topics build the main focus in their projects and the ibw operates interdisciplinary. Besides research activities the IBW also elaborates support material e.g. training handbooks for specific apprenticeship occupations to support the work of IVET-trainers.</p> <p>As mentioned above, the Federal Advisory Board on Apprenticeship (BBAB) submits proposals to the federal ministry of economy, family and youth (BMWFJ) by rendering expert opinions. The members of the BAB are suggested by social partners (Chamber of commerce and Chamber of labour) and nominated by the BMWFJ. Teachers of VET-schools act in advisory capacity as members.</p>	<p>and training;</p> <ol style="list-style-type: none"> (1) In accordance with general administrative provisions of the competent federal ministry, to implement the promotion of intercompany training centres and support the planning, establishment and further development of these facilities; (2) to maintain and publish the register of recognized training occupations; (3) to carry out the tasks described in the Distance Learning Protection Act in accordance with the guidelines issued by the Board and approved by the competent federal ministry and to contribute to the improvement and extension of vocational distance learning through the promotion of development projects. <p>The Federal Institute for Vocational Education and Training may, with the consent of the Federal Ministry of Education and Research, conclude contracts with parties outside the federal administration for the assumption of further tasks.</p>
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<p>and continual updating of the National Qualifications Catalogue –, combined with the encouragement of a more active role from the scientific community, the entrepreneurs, other public or private bodies involved in the education/training of young people and adults;</p> <p>h) To promote the assessment of the qualification routes under its coordination;</p> <p>i) To participate, within the framework of its mission, in the in-depth development of the Regulation System for Access to Professions;</p> <p>To participate in the development of Initial and Continuing Training Standards for teachers, trainers and other professionals who provide dual-certificated education and training courses for young people and adults, as well as in the implementation of the System for the Recognition, Validation and Certification of Competences, in full cooperation with teachers' and trainers' training providers, namely higher education institutions.</p>	<p>This process is strengthening the vocational orientation to the labor market, and the training and collaboration between experts and practitioners contribute to a closer relationship between training and productive and economic fabric. As a result of this effort, there is a better identification of training needs and a greater number of technicians, experts and trainers trained in this methodology. The learning skills have been achieved and disseminate in the field of training and enterprise.</p> <p>Another course of action is to improve career guidance offered to young people and their families. Young people choose the training specialties depending on many parameters, mainly the perception of future professions. Thus, young people choose those specialties that think they have more "exit" and refuse those they believe that have no future. This perception is based on various sources, from stereotypes disseminated by the media and public opinion to the experience gained in their immediate environment, whether family, friends or local type.</p> <p>Professions with unattractiveness because of their working conditions or poor social image, or those professions which are perceived as small future, have great difficulties to complete their courses.</p> <p>Although the capacity of absorption by the labour market is much higher than the number of young people who obtain the degree, an improved guidance and the knowledge of the labour market by young people and their families would allow a better match between supply and demand for training.</p>		
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SWOT: Institutionalised research and consultancy

Country	Strength	Weakness	Opportunities	Threats
ES	<ul style="list-style-type: none"> Define training contents in terms of skills; Good collaboration between professionals and training experts; Dissemination of competence in the education and business fields. 	<ul style="list-style-type: none"> Little knowledge of the labour market and its opportunities by students before deciding their training; Poor image of formations with high employability; Defining out-dated curricula titles. 		
PT	<p>There are some sectors of the Portuguese economy, which are highly relevant for the vocational and professional system.</p>	<ul style="list-style-type: none"> There is a mismatch between the existing qualifications and the real needs of the market. There is a phenomenon of "rareness" supply in some occupational groups with high employment rates but without significant production volume of qualifications. 	<p>Regarding the match between supply and demand for qualifications, it is necessary some "weighting" as there will be "overproduction" of qualifications in high-level areas for development of education and vocational training at the secondary level, namely when considering the direct professional and private services and intermediate technicians.</p>	<ul style="list-style-type: none"> The economic and social crisis that the country is facing poses serious constraints to the evaluation and update of the educational programmes. Some areas of the country, such as Alentejo and Algarve are in a "situation of high saturation of supply in all segments of training."
AT	<p>There are dedicated research bodies, which constantly monitor the VET-system in Austria and also</p>			

	<p>contributes expertise for the further development of the system especially in the area of development of new occupational profiles.</p>			
<p>GE</p>	<p>The dual system is well developed but is permanently analysed.</p>	<p>Many studies and statistics are available, which can be confusing.</p>	<ul style="list-style-type: none"> • International cooperation in the field of vocational education and training; • To assume further administrative tasks of the Federation for the promotion of VET; • In accordance with general administrative revisions of the competent federal ministry, to implement the promotion of intercompany training centres and support the planning, establishment and further development of these facilities; • To maintain and publish the register of recognized training occupations; <p>The BMBF has established within the BIBB the task force German office for International Cooperation in Vocational Education and Training “GOVET”. They are responsible for consulting and initializing international cooperation with interested countries in vocational education and training.</p> <p>The German Office for International Cooperation in Vocational Education and Training is an essential component of the strategy of the Federal Government to move towards greater cohesion in international VET cooperation by delivering services from a single source, which was adopted by the Federal Cabinet under the lead management of the Federal Ministry of Education and Research (BMBF) at the start of July 2013. It provides specialist support to the Federal Government in international vocational education and training cooperation and creates transparency both within and outside Germany by forming an information exchange platform.</p>	

			<p>The high quality of the dual system of vocational education and training in Germany is attracting increasing interest from abroad. More and more enquiries are being received for advisory services regarding the adaptation of individual elements within different national contexts. The comparatively low level of youth unemployment in Germany and the fact that the transition from training to work takes place smoothly in most cases are the object of regular praise and are seen as evidence of the successful nature of the dual system. Even the OECD "Education at a glance" study, which has traditionally tended to take a critical view of dual vocational education and training, has produced a paradigm shift in its latest report for 2013. The German VET system is presented in an extremely positive light and is identified as one of the main reasons for Germany's success during the European economic crisis.</p> <p>A multitude of German institutions and departments have been offering consultancy services abroad for some years. This has led to a somewhat incoherent presence by German stakeholders in some cases. GOVET is now the central contact point for national and international VET stakeholders and acts in the capacity of a "one-stop shop" in this regard. The individual tasks of GOVET are as follows.</p> <ul style="list-style-type: none"> • An administrative arm for Round Table discussions on international vocational education and training cooperation • The main point of contact for national and international VET cooperation stakeholders • Implementation of an internal and external knowledge management system • Establishment, technical design and evaluation research of the bilateral vocational education and training cooperation agreements entered into by the Federal Ministry of Education and Research (BMBF). Definition, design and evaluation of network and cooperation projects. 	
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CONCLUSIONS

This report is a result of a European partnership from Spain, Portugal, Austria and Germany in the LLL project “**dualVET-Transfer of successful structures and guidance for implementing the dual VET system. Training company mentors**” (www.dualvet.eu). Germany and Austria represent countries with a long and successful tradition in the dual training system. Spain and Portugal with a school based VET system are very interested to transfer successful elements from a dual training system. The main goal is to reduce the high number of young unemployed people in these countries.

In this report we prepared a comparison of our four different National-VET systems. The idea was to collect and to analysis the best practices of Germany & Austria and compare it with the VET system in Spain and Portugal. For each country we have analysed five crucial elements for a dual training system:

1. Cooperation of government and industry
 - a. Role of the government/state/region
 - b. Role of training company
 - c. Role of vocational schools
 - d. Role of competent institution
 - e. Joint funding of vocational training
 - f. Social acceptance of VET
2. Learning within the work process
3. Acceptance of national standards
4. Qualified VET staff
5. Institutionalised research and consultancy

In a joint matrix, the current situation of all four-partner countries was compared to each other. The respective partners in a SWOT analysis also critically evaluated each of the five topics. Strengths, weaknesses, opportunities and threats were identified.

In a joint analysis of all results, it was clarified that the role of business (company) is crucial to the success of dual VET structures. The hands-on training of own young skilled workers in the company is a real chance for the successful integration of young graduates into the labour market. The labour market relevance of vocational education and the transition from education to employment are considerably strengthened by the active role of the company. Besides the necessary systemic and political conditions (role of government ; joint funding ; social acceptance ; ..) it is thus primarily important to sensitize the company for in-house training and to integrate well- educated training staff in the company..

Recommendations*:

**) Our important reference framework was the federal German „vocational training act“ (BBiG)*

A combination of learning within the real work situation in company and school-based learning is the best way of developing the professional, methodological and social competence required to achieve this. Active learning within the work process is considered to be the most effective and most efficient form of vocational education and training. Instead of engaging in mere theoretical exercises which are far removed from the realities of working life, trainees learn their occupations in authentic work situations with the support of their colleagues and other skilled workers. Making real work processes within companies the reference point for learning processes also allows a high degree of labour market relevance to be achieved within VET systems which are more school based. Participation in working life motivates trainees, improves learning outcomes and reduces drop-out numbers. This supports the social integration of young people.

“Initial training shall, through a systematic training programme, impart the vocational skills, knowledge and qualifications (vocational competence) necessary to engage in a form of skilled occupational activity in a changing working world. Initial training shall also enable trainees to acquire the necessary occupational experience.”(BBiG)

For these occupational experiences the role of training companies is essential.

Role of the Company

Vocational training shall be provided in companies engaged in economic activity in comparable institutions not engaged in economic activity, especially those of the public service in establishments of members of the independent professions, and in households (in-company training)

- in vocational schools (school-based vocational training); and
- in other vocational training facilities outside the system of school-based and in-company training

The learning locations specified in subsection shall collaborate in the provision of vocational training (cooperation among learning locations). [BBiG].

Training employers shall:

- Ensure that the vocational competence necessary for trainees to achieve the purpose of their initial training is imparted to them and provide such initial training systematically in accordance with a syllabus and a timetable and in a form appropriate to the aim in view so that the purpose of the training can be achieved within the specified period;
- Provide the initial training themselves or expressly entrust such training to an instructor;
- Furnish to trainees free of charge the materials, in particular tools and supplies necessary for their initial training.

Suitability of Training Premises

- a) Trainees may only be engaged and given initial training if
 1. The nature and equipment of the training premises are suitable for initial training; and
 2. The ratio between the number of trainees and the number of training places or the number of skilled staff employed is appropriate.
- b) Training premises where the necessary vocational skills, knowledge and qualifications cannot be imparted in their entirety shall be deemed to be suitable if these can be imparted through initial training measures taking place outside the training premises.

- c) The competent body shall satisfy itself that training premises are suitable and that persons have the necessary personal and technical qualifications.[BBiG]
- d) After the conclusion of an initial training contract, companies shall without delay, and in any event before the commencement of initial training, set down the essential stipulations of the contract pursuant to the second sentence in writing. The contract document shall at least specify:
 1. The nature, syllabus, timetable and purpose of the initial training, and in particular the form of occupational activity for which initial training is to be provided;
 2. The commencement and the duration of initial training,
 3. Any initial training measures taking place outside the training premises;
 4. The length of the normal daily hours of initial training;
 5. The length of the probationary period;
 6. The payment of an allowance and the rate to be applied;
 7. The amount of holiday leave;
 8. The conditions under which the initial training contract may be terminated;

Trainees shall only be entrusted with tasks that serve the purpose of their initial training and are commensurate with their physical abilities. The companies ensure that trainees are encouraged to develop their personality and that they are protected from physical or moral danger. Fulfilment of corporate conditions – the company needs to be equipped and managed in a way that allows the company to impart the apprentice all the knowledge and skills included in the legally defined apprentice occupational profile (as mentioned above, if a single company can't impart all aspects of a occupational profile it can train apprentices within the framework of a training alliance). In addition, a sufficient number of professionally and pedagogically qualified trainers must be available in the company.

The training at the company is governed by training regulations that set out uniform, nation-wide standards for training content, the training timetable, and examinations. The nation-wide standards and the nationally recognized qualifications act as a quality benchmark for employers and serve as a basis for recruitment. Inter-company occupational standards and uniform examination standards guarantee the quality of qualifications.

Fulfilment of legal conditions – the company has to entitle to carry out the activities in which the apprentice is to be trained according to the Trade, Commerce and Industry Regulation Act. This helps employees to find a new job more quickly. Comparable training qualifications and certificates form the basis for employability, mobility and social acceptance and foster lifelong learning

The concept of work as a way of acquiring the skills and training required to introduce a new dimension to the criteria of work organization that provides a different view in the way of structuring the training in the company, still centralized in the school organization.

The company must contribute to promote the importance of vocational training in the labour market and help to improve its image. It is necessary to transmit to the students who choose this option that this kind of studies is practical and consistent. Companies should identify improvements when they link training centres to real labour market conditions and then achieve a better match between the skills taught and practice

Companies must evaluate their students in the right way, through a placement tutor and following the internship program that has been coordinated with the school tutor.

If a company can't provide training for the all aspects described in a defined job profile, training companies have the possibility to use complementary practical training in a training alliance (apprentices receive company-based training in two or more different companies in order to fully covering all aspects of an apprenticeship occupation). Good relationship between companies and educational centres are essential.

Training employers shall pay trainees an appropriate allowance. It shall be so assessed in accordance with the trainees' age that it increases at least once a year as the initial training progresses. The costs of the dual vocational training system are borne proportionately by the government (vocational school) and the business community. The financial involvement of the business community makes it possible to keep government expenditure for vocational training at a relatively low level. Training employers shall pay trainees an appropriate allowance. It shall be so assessed in accordance with the trainees' age that it increases at least once a year as the initial training progresses.

Obligations of Trainees - Conduct During Initial Training

Trainees shall make every effort to acquire the vocational competence necessary for them to achieve the purpose of their initial training. They shall in particular be obligated to

- a) Carefully perform the tasks entrusted to them as part of their initial training;
- b) Take part in initial training measures for which they have been granted time off under;
- c) Follow the instructions given to them within the framework of their initial training by training employers, instructors or any other persons entitled to give them such instructions;
- d) Have regard for the rules of behaviour to be observed on the training premises;
- e) Use tools, machinery and other equipment with due care;
- f) Not reveal any business or trade secrets.

At the end of the initial training relationship, training employers (Company) shall provide trainees with a written certificate. If training employers have not provided the initial training themselves, the certificate shall be signed by the instructor as well. The certificate must contain particulars of the nature, duration and purpose of the initial training as well as the vocational skills, knowledge and qualifications acquired by the trainees. If trainees request, it shall also include particulars of their conduct and performance. The competent body shall supervise the provision of initial training and shall provide support in the form of advice to the persons involved in vocational training. To this end it shall appoint training advisers.

Role of Qualified VET staff

Trainees may only be engaged by training employers who have the necessary personal qualifications and professional/technical competences. Trainees may only be trained by persons who have the necessary personal and technical qualifications.

Training employers who do not have the necessary technical qualifications or do not provide the initial training themselves may only engage trainees if they appoint instructors with the necessary personal and technical qualifications to directly impart the essential initial training content in a responsible manner on the training premises. (vocational training act).

Professional competences also include vocational education and training qualifications. These include, for example, knowledge of the relevant legal provisions on the professional training relationship, the planning of vocational training and opportunities to promote learning processes and also pedagogical skills.

Under the responsibility of the instructor, persons may also participate in the provision of initial training who is not themselves instructors but, notwithstanding special prerequisites, possess the vocational skills, knowledge and qualifications as well as the personal qualifications necessary to impart subject matter covered by initial training.

Personal Qualifications

Persons shall in particular be deemed to not have the necessary personal qualifications if they:

- a. Are not allowed to employ children and young persons or,
- b. Have been guilty of repeated or serious contraventions of a vocational training act / national standards or of the provisions and regulations issued on the basis of the law

Technical Qualifications:

- i. Persons shall be deemed to have the necessary technical qualifications if they possess the vocational and skills, knowledge and qualifications as well as the teaching skills, knowledge and qualifications required to give initial training in the occupation and processes concerned;
- ii. Persons shall be deemed to possess the necessary vocational skills, knowledge and qualifications if they:
 - a) have passed the final examination in a technical field corresponding to the training occupation;
 - b) have passed a recognized examination at a training facility or before an examination authority or a final examination;
 - c) have passed a final examination at a higher education institution in a technical field corresponding to the training occupation and have been employed in a practical capacity for an appropriate period in their own occupation.

Recommended Soft Skills regarding the personal qualifications (the more the better) are:

- *Managerial and organisational skills;*
- *Teaching ability;*
- *Cognitive skills and problem solving ability;*
- *Application of laws, regulations and guidelines in VET;*
- *Ability to cooperate;*
- *Ability to work with young people;*
- *Balanced personality;*
- *Carefulness;*
- *Courage;*
- *Empathy;*
- *Enthusiasm;*
- *Flexibility;*
- *Friendliness, honesty and loyalty;*
- *Open-mindedness;*
- *Readiness to help;*
- *Reliability;*
- *Safety awareness;*
- *Self-confidence;*
- *Sense of responsibility;*
- *Authoritarian;*
- *Tolerance of emotional stress;*
- *Tolerance of frustration;*

- *Willingness to accept personal responsibility;*
- *Good social and communication skills;*
- *Apply relevant communication techniques;*
- *Communicate effectively with young people;*
- *Client support;*
- *Effective questioning;*
- *Listening and oral comprehension;*
- *Presentation techniques;*
- *Rhetorical skills;*
- *Team-working skills.*

The vocational education and training qualifications must be proved by a certificate or any other evidence according to the “ordinance on trainer aptitude” (AEVO). The AEVO applies to trainers working in commercial enterprises, in agriculture, in housekeeping, in mining and in the public service, but not for the liberal professions. A competent body shall satisfy itself that training premises are suitable and that persons have the necessary personal and technical qualifications.

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dualvet

Transfer of successful structures and guidance for implementing
the dual VET system. Training company trainers