PROVINCIA AUTONOMA DI TRENTO

SWORD
School and Work Related Dual Learning

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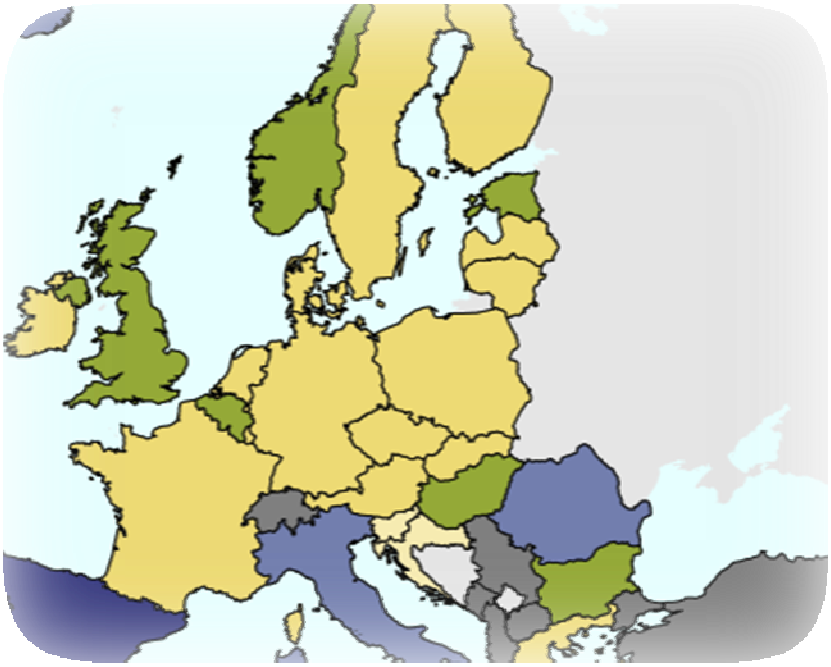

SWORD

School and WOrk-Related Dual learning

Intellectual Output 1:
A Comparative Analysis by Regions

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Disclaimer

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1. Introduction

Considering the financial crisis that has severely affected national and international economies since 2008, it is unthinkable that two sectors that are strategic for social and economic development – education/training and employment – can continue to reason as they have always done, as if this crisis never happened. As a consequence, a first level of problems and reflections emerges from the redefinition of the core institutional and organizational structures of these two "worlds", the world of education and training and the world of employment and production, which have become increasingly separated over the years, to the point of becoming alternatives, to a certain extent. In the last few decades, in fact, the population has aged, with workers that are becoming older and older, with scarce possibilities of being replaced, and an increasingly drastic drop in youth employment, accompanied by a rise in the school dropout rate. On the other hand, the market crisis has negatively affected the investment strategies of many businesses in various European countries, triggering chain reactions leading to their downgrading or closing down. In other words, in periods of great crisis all countries suffer a certain degree of economic contraction, although the extent of the contraction is directly proportional to the solidity of a system within which the level of qualification, and of skills in general, has always been a critical success factor for enterprises and job seekers alike.

The data provided by Cedefop, and other research centres investigating this phenomenon in one way or another, show how people with higher qualifications are more likely to find a job and (in some countries at least) to earn more than people with low or no qualifications at all.

Therefore, in consideration of the fact that, in times of economic crisis, underqualified people become more vulnerable and are pushed to the fringe of the job market, where they may remain for a longer period of time or even indefinitely, the major stakeholders involved – i.e. the institutions responsible for teaching skills (schools and vocational training establishments first and foremost) and the partners that will exploit those skills (enterprises) – should commit themselves to further improve their collaboration and engage in joint projects, with the aim of both ensuring the "early" employment of job seekers, without affecting their opportunity to learn, to the best of their abilities, the competences that are essential for their fellow citizens, and enhancing the quality of the enterprises' production, in a virtuous circle of continuous strengthening and improvement. Gregory Bateson is credited with saying that "the rate of learning must equal or exceed the rate of innovation/change", whereby learning is considered the most significant strategic lever for improving and deepening knowledge. No change can take place without new knowledge, which entails that learning should not be viewed as a task, but as an approach to life, lacking which life can become hard and marginalising, in some cases even changing the destiny of a community. Joseph Realin (2008) claims that over the centuries we have somehow been conditioned "to a classroom model that separates theory from practice, making learning impractical, irrelevant and boring (…); but what if we make our work site a perfectly acceptable location for learning?". This is the very solution proposed by an approach whereby learning is placed at the heart of work, known as Work-Based Learning (WBL).

1.1 SWORD, the Project

Based on these reflections, we have become convinced that the transition from school and training to work is a key element for achieving the integration of young people into production scenarios consistently with the needs of enterprises, especially small and medium enterprises, providing fuller professional skills for better tackling the changes and innovations under way. Skill gaps are a problem throughout Europe for young people leaving the school and training stage.

This is precisely what the SWORD project (the acronym of School and Work related Dual system) is all about.

The SWORD project is one of the strategic objectives of the 15th legislature of the Autonomous Province of Trento, the promoter of the project, and its aims, in a nutshell, are:

- to develop the school-training-work process in order to structurally narrowing the gap between school, higher training and research and work, by introducing students during their training to knowledge about the workplace and about work-based learning;
- to help young people find jobs within an economic environment that requires their training.

The SWORD project is therefore one of the possible levers for accomplishing this institutional responsibility, because it can offer:

- a comparative analysis of the dual model and the various types of school-to-work transition, both existing or expected in the various contexts involved by the project;
- an overview of the roles and responsibilities of the stakeholders involved (vocational training schools, enterprises, intermediate partners) and their possible evolution;
- a proposed innovative and viable model in terms of approaches, actions, paths, practices and tools;
- the launching of the model according to various types of approach suitable for the different contexts;
- a manual containing recommendations and guidelines for implementing the model, i.e. for creating the conditions and activating the services needed to the purpose of developing effective school-to-work transition paths in the different regional contexts.

SWORD, in fact, **focuses on the mechanisms governing the transition from (primarily) technical and vocational education and training paths to employment,** with a view to assisting the educational systems in directing their activities towards delivering an adequate response to the demand, by enterprises, for professionally qualified workers and to the regional development strategies and prospects.

The dual system is a key feature, at European level, of the transition from school to work: many countries, in fact, are committed to rethinking/reorganising their educational and training paths with a view to adapting the dual system to the local situation and, generally speaking, to value work-based learning, by more or less gradually introducing its core elements into the educational systems.

Therefore, the SWORD project aims to attentively examine the dual learning model, in order to:

- promote a “new and shared approach” to dual learning;
- support the partners who have already implemented the model in overcoming the existing criticalities;
- assist the partners desiring to adopt the model by offering them possible solutions to overcome or avoid the existing criticalities, as far as possible.

Lastly, the aim of the project is to identify, for the future, a transnational dual learning model for school-to-work transition capable of supporting EU-wide mobility processes.

1.2 The project Partners

Regarding the SWORD project partnership, innovative solutions are being developed by the Autonomous Provinces of Trento and Bolzano, the Region Friuli-Venezia Giulia (FVG) and the area of Gdansk, where TNOiK is taking part in the ongoing process of rethinking the local VET model. In particular, the Autonomous Province of Trento (PAT) is engaged in systematising the first activities regarding:

- training (with the introduction in its training programmes, on a permanent basis, of an apprenticeship scheme for professional qualifications and diplomas; the organisation of support measures for promoting employment; an integrated system of curriculum-based apprenticeships, summer traineeship programmes and guidance and training schemes);
- more in general, the identification of local specialist poles, combining training processes and production processes in smart specialisation sectors (mechatronics, agrifood, energy and environment, quality of life and the full range of ICT), within which to build proximity networks linking technical education, vocational education and training, advanced professional training, universities, research centres and enterprises involved.

The partners in the countries where dual learning is operational - Arbeit und Leben, Hamburg, as well as BFI Oberösterreich and, in Italy, the Autonomous Province of Bolzano - have long since launched, together with other local stakeholders, a reflection on the existing criticalities, in particular with regard to school-to-work transition, highlighting inter alia the drop in the number of young people choosing this path. Based on these needs and the attempts to build an overall approach to the "school/training-to-work" transition, the SWORD project's mission is to identify a shared transition model, focusing on improving the experiences regarding the interlacement between classroom education and workplace training, to develop professional skills suited to innovative workplace and research environments and applied according to the cultural and socio-economic traits of the partners.

Below is a brief presentation of the SWORD project Partners:

- "Dipartimento della Conoscenza" (Department of Knowledge): this is the body set up by the Autonomous Province of Trento dealing with education, university and research, and it is the lead partner of the project;
- "Arbeit und Leben Hamburg", an organisation managed by the German trade union federation and the Volkshochschulen, focusing on adult education and mobility;
- "Berufsförderungsinstitut Oberösterreich (BFI OOE)", an institution for developing vocational training in Upper Austria, which directs its activities to combining the new labour market needs with the training opportunities, with a special focus on disadvantaged young people;
- "Towarzystwo Naukowe Organizacji i kierownictwa (TNOiK)", a non-governmental and non-profit organisation that develops and promotes vocational training management to foster the country's economy;
- "Direzione Centrale Lavoro, Formazione, Istruzione, Pari Opportunità, Politiche giovanili e Ricerca" (General Department for Labour, Vocational Training, Education, Equal Opportunities, Youth Policies and Research) of the Autonomous Region of Friuli-Venezia Giulia, which directs the region's educational and labour system;
- "Intendenza Scolastica per le scuole in lingua Italiana" (Italian-language School Superintendency) of the Autonomous Province of Bolzano, which deals with the Italian-

language schools in the region.

2. The comparative analysis

After this overview of the underlying features of the SWORD project, the next step is a comparative analysis of the experiences acquired in this field by the partner countries and regions/provinces.

This has led to the production of the first report of the SWORD project - called Intellectual Output 1 - developed according to the objectives outlined and shared at project design stage.

The comparative analysis is a useful tool for defining the **"reference background" against which the subsequent stages of the project will be developed,** within which the actions for achieving an (even transnationally) applicable integrated approach to work-based learning will be modelled and tested.

The report is based on the comparative analysis of the documents (regional reports) developed by the project partners that describe, according to a common framework, the single VET systems and school-to-work transition processes, including any forms of duality and alternance deemed useful for further developing the project (see Chapter 3).

The analysis came up against the difficulty of obtaining comparable evidence due to the presence of differently organised educational systems and different legislative frameworks and regulations, that cannot be compared in full.

Each system we analysed has its own specific "coupling/mix" of some characteristic elements taken from the dual system which have been blended with the existing education and training system. This practice, which appears at first glance reductive - given the complexity of the consolidated dual system, is instead probably the only way to gradually implement the dual system in different local contexts (as pointed out by the conclusions of the work of Prof. Dr. Dieter Euler 2013[1]).

Despite the substantial differences between the country cases, our comparative analysis showed that:

- in countries where the dual model has not been developed yet, the education and training system has paid little attention to the school-to-work transition, or has not yet produced adequate results;
- SWORD starts from the consideration that even in countries with a well established dual system, there are critical issues concerning in particular in the relationship between the VET systems and processes regarding work-related interaction;
- one of the most critical issues in countries with an established dual system concerns the role of vocational training schools, in relation to the preparation and management of the school-to-work transition (e.g. transferable vocational education and relevant social skill development as part of an Individualized Education Plan);
- a further critical element is the involvement of schools and training bodies in the transition activities (to avoid the risk of losing the balance between educational purpose and the needs expressed by companies or their intermediary bodies;
- the training role of enterprises as well as their responsibility for in-company training, is a source of tension both in countries with a strong tradition of dual training as well as in countries where the introduction of the dual system is in a preparatory phase. The dual

[1] Prof. Dr. Dieter Euler, *Germany's dual vocational training system: a model for other countries*? A study commissioned by the Bertelsmann Stiftung, Bertelsmann Stiftung, Gütersloh, 2013

vocational training system requires the willingness of companies to host and train young people on a contractual basis: this is one of the "building blocks" of the entire model and perhaps also its most delicate corner stone. In many SWORD country reports we can clearly see that companies cooperate in apprenticeship schemes only if they perceive a clear economic advantage;

- in all systems we examined the integration of theory and practice and “on-site education” is considered the key for a transferable vocational education. It is increasingly common for school-based programs to include periods of practical training in companies or at sites that serve multiple companies (in accordance with the “dual principle” of combining theory and practice). From an educational point of view, the ultimate problem to solve concerns the way in which the integration of theory and practice can be realized within schools. The question is how to provide students with transferable vocational education and relevant social skills already in the school curriculum. This question probably explains the increasing relevance of Worked Based Learning – WBL. WBL is attracting more and more interest and is creating high expectations. This is why we decided to treat this topic separately in a dedicated chapter (see Chapter 4);
- many vocational training systems are "mixed systems" that include a certain percentages of dual training variables (training body vs. company) and school-based learning (e.g. schools vs. company);
- the dual system has good traditions even outside the borders of Germany. Since 1955 the dual system is one of the two channels of the vocational training system of the Autonomous Province of Bolzano, an instrument created by the post-war reconstruction and with youth employment parameters and acquired skills that are in line with the German ones;
- apprenticeship in Italy and Germany do present some similarities but are characterized by important differences: Germany knows only one kind of apprenticeship: an alternating learning situation vocational school / work - while in Italy there are currently three types for apprenticeship schemes: (a) apprenticeship for the qualification and the professional diploma, to acquire a vocational qualification diploma recognized at national level (adolescents of 16 and 18 years without a professional qualification), the upper secondary school diploma and the certification of upper technical specialization; (b) a professional apprenticeship to obtain a labour market qualification (recognized by collective agreement and enterprises) - the contract can be signed by employers of all productive sectors, including professional organizations and Trade Unions. People involved are between 18 and 29 years old; (c) apprenticeship for higher education and research, a contract addressed to people aged between 18 and 29 years with a degree who want acquire a diploma released by the education system, at secondary or tertiary level, or a doctorate degree;
- while in well established dual systems within a strong economy, companies tend to offer an apprenticeship only to students who have completed their schooling with excellent results, in countries like Italy apprenticeship is intended as a tool to fight school drop-out (a long-standing problem) aiming at a target group that is diametrically opposed to the German one.

3. Description of the regional contexts

In the following chapters there is a detailed presentation of the characteristic elements of the transition pathways from vocational school / training to work in the different regional contexts. This analysis is based on regional dossiers, edited by each partner.

This chapter provides a synoptic overview of the main elements that have resulted from the analysis. The aim was to find out what dual system elements have a potential for being transferred to different local contexts (in our case to the four geographical areas that are developing their own approach to the dual model: Autonomous Province of Bozen, Autonomous Province of Trento, Autonomous Province of FVG and Poland), as well as the critical factors and possible improvements that can elevate the quality of achievable results.

To better and more uniformly understand how the different dual approaches are structured in each region, we have highlighted the following:

- the legislative and institutional background (chapter 3.1);
- the socio-economic situation and the labour market (chapter 3.2);
- the connection between the dual system and professional schools: an overview by region (chapter 3.3);
- the monitoring and assessment system (chapter 3.4);
- the opportunities for inclusion (chapter 3.5);
- the role of the social partners (chapter 3.6);
- the competences of trainers and teachers (chapter 3.7);
- the limits, opportunities and challenges (chapter 3.8).

3.1 The institutional framework

Austria

In Austria, compulsory education lasts 9 years, from age 6 to 15 included. Compulsory schooling ends with the first year of upper secondary education. Vocational training plays an important role in the Austrian educational system, with a broad range of vocational training paths leading to different qualifications, including apprenticeship training. Generally speaking, upon completion of lower secondary education (Hauptschule), young people wishing to take up apprenticeship training may attend an introductory year at the Polytechnische Schule, after which they move on to the apprenticeship scheme. No special prior qualifications are required for apprenticeship training.

Apprenticeships are regulated by the Vocational Training Act (Berufsausbildungsgesetz or BAG), containing binding rules issued by the Ministry of Economy for workplace training. Only apprenticeships in agriculture and forestry are subject to specific rules laid down by the Vocational Training Act for agriculture and forestry (Land- und Forstwirtschaftliches Berufsausbildungsgesetz or LFBAG).

For each type of apprenticeship the law sets out a corresponding job profile; this is defined and structured, over the various years of apprenticeship, as a set of professional skills that the apprentice must receive through workplace training. For recently regulated apprenticeships, the law also provides, alongside the competences required for the relevant job profiles, a description – in the form of a short list – of the activities the apprentice should be able to perform.

Apprenticeships normally last between 2 and 4 years. To help young people choose the apprenticeship best suited to them (out of a total of no less than 204 profiles), the State offers special guidance and support:

- the Guidance Service offered by the Public Employment Service Austria (AMS), which deals with training placement activities, matching young people and the enterprises notifying their apprenticeship vacancies;
- the competent apprenticeship agencies of the Chambers of Commerce of the single provinces, which have an in-depth grasp of the local situation and needs and can provide preliminary information and guidance to apprenticeship seekers (www.bic.at);
- the Federal Chamber of Commerce which, in partnership with the AMS, has developed a service for online research of enterprises offering apprenticeships (www.ams.at/lehrstellen).

All vocational training paths lasting more than 2 years, besides delivering the concerned professional qualification, also qualify for tertiary education, either directly, by sitting a final exam, or indirectly, based on the grades received in extra exams. Apprenticeship certificates are equivalent to ISCED level 3B.

Besides workplace training, apprentices are also required to attend a part-time professional school providing the basic theoretical knowledge connected with the employment, as well as supporting and integrating the workplace training and broadening the apprentices' trivia.

Germany

In Germany compulsory education lasts 10 years. Young people interested in apprenticeship training do not require any special qualifications.

In Germany, the 16 Länder are responsible for all legislation relating to education and culture, so they have joined forces in a Standing Conference (KMK) to ensure a certain degree of uniformity and comparability at Federal level, especially with regard to school and higher education policies. Legislation, in fact, differs only slightly among the various Länder.

Vocational training, instead, is governed with the involvement and coordination of the Federal Government, the Governments of the Länder, the enterprises and the trade unions, all on an equal footing and according to the 'principle of consent'.

The legal basis for vocational training is the Consolidation Act on Vocational Training (Berufsbildungsgesetz BBiG) and the Trade and Crafts Code (Handwerksordnung HWO).

The Federal Government is responsible for workplace training, while the Länder are responsible for regulating vocational training in the schools and, therefore, are also responsible for professional schools.

Workplace training has led to the development of a third system, in between the market and the State, subject to joint control. Dual system governance is characterised by a strong partnership between the State and the trade unions.

The Federal Government is responsible for defining the contents of the State-recognised vocational training figures (in the dual system), except in the case of school-based training; it provides funding for special research projects, to ensure the continuous updating of vocational training.

The Federal Ministry of Education and Research (BMBF) is responsible for general policy issues in the field of vocational education and training, while the recognition of the single jobs requiring specific vocational training is the task of the Regional Ministries having competence in the respective employment sector.

In the vast majority of cases, the responsibility falls on the shoulders of the Federal Ministry of Economy and Technology (BMWi), but approval by the BMBF is always required.

Therefore, the BMBF's role is to manage and coordinate the vocational training policies, with respect to all of the single training paths related to the different job profiles. The key national institution for building consensus among the partners involved in vocational training is the Federal Institute for Vocational Education and Training (BIBB), which performs researches on workplace training and provides consulting services to the Federal Government and to trainers.

The work on the regulations concerning training and curricula is coordinated by all the partners involved. A key role is played by the enterprises and trade unions; the Chambers of Commerce provide consulting and monitoring services to the enterprises with regard to the training paths, the contracts and the overall organisation of exams; the social partners agree – without the involvement of the Federal Government – on the details of vocational training, especially with regard to the allowance paid to apprentices, within the framework of free collective bargaining.

There are about 330 recognised professional figures over all sectors, most of which are organised within the dual system framework, while only several of these are based on full-time schooling (healthcare sector).

Apprenticeships last between two and three and a half years, depending on the professional sector.

Intensive guidance is provided, from the ninth year of schooling:

- in schools, with the support of the representatives of the regional Employment Agencies;
- through agencies offering youth consulting services, such as the Jugendberufsagentur (youth vocational consulting agency) and the Berufsinformationszentrum (vocational information centre);
- through the Employment Centres, which provide information on professional jobs and apprenticeship vacancies;
- through the Chambers of Commerce, which provide a full range of information on training vacancies in the dual system, as well as consulting services;
- training vacancy ads in newspapers and on the Internet.

Italy

The Italian partners - the Region Friuli-Venezia Giulia and the Autonomous Provinces of Bolzano and Trento – refer to the same nationwide regulatory framework, which is presented below, while the local authorities have a certain degree of legal, institutional and enforcement autonomy.

The central government in Italy is exclusively responsible for laying down general rules on education and employment and determining the minimum standards to be guaranteed throughout the country.

The regions and autonomous provinces have concurrent legislative powers in the fields of education and employment (and therefore on apprenticeships, with regard to the employment relationships) and exclusive powers in the field of vocational education and training and apprenticeship training.

Under the Italian Constitution, schools have a degree of didactic, organisational and research/experimentation/development autonomy.

National law rules (Law 53/2003 and Legislative Decree 76/2005) establish the right/duty of all citizens to education and training for at least 12 years, or until the attainment of a 3-year professional qualification within the age of 18. This right/duty includes a compulsory education period of 10 years (from 6 to 16 years of age), consisting of 8 years of primary and lower secondary education and the first 2 years of upper secondary education (DM 139/2007). Upon completion of the first 8 years of primary and lower secondary education, the last 2 years of compulsory education (from 14 to 16 years of age) may be completed at either an upper secondary school run by the State (licei, i.e. upper secondary schools specializing in humanities, science etc., as well as technical and professional schools), or in vocational education and training paths organised by the regions (Law 133/2008).

The last compulsory education year (corresponding to the 10th year, at about 15 years of age) may also be completed in an apprenticeship programme (Law 183/2010 and Legislative Decree 167/2011 Consolidation Act on Apprenticeship).

Upon completion of compulsory education, each student (on his or her request) is issued a certificate of the basic skills attained throughout his or her compulsory school career.

Upon completion of the lower secondary school, young people may choose between either 5-year upper secondary paths (licei, technical and professional schools) subject to nationwide regulations, or (3 or 4-year) vocational education and training paths organised by the regional governments.

On 13 July 2015, a law was enacted reforming the national education and training system and providing for reorganisation of the existing law provisions, called “La Buona Scuola” (The Good School) (Law No. 107 dated 13 July 2015), which has innovated and improved the organisation and realisation

of educational and training paths, without, however, affecting the organisation of the curricula, which was reformed in 2010.

There are three different types of apprenticeships, regulated by Legislative Decree No. 167 dated 14 September, 2011 (known as the Consolidation Act on Apprenticeships):

- ***apprenticeships for attaining professional qualifications, opening up job opportunities for young people aged between 15 and 25 years*** under training contracts of no more than three years, or four in the case of the so-called "4-year regional diploma". The training curriculum (theory and practice), the specific qualifications awarded and the number of training hours are established by the Regions and Autonomous Provinces consistently with the minimum national standards (see the agreements signed by the State-Region conference). The minimum national training standard is 400 hours per year.
- ***apprenticeships for attaining professional skills or trade contracts, opening up job opportunities for young people aged between*** 18 and 29 years, or 17 in the case of persons holding a professional qualification, for acquiring technical-professional and specialist skills depending on the relevant professional profiles and lasting no more than three years as concerns the training part, or five in the case of the crafts specified in the relevant collective bargaining arrangements.
- ***apprenticeships for higher training and research,*** targeting students aged between 18 and 29 years, or 17 in the case of persons holding a professional qualification, for research activities or for obtaining a diploma or attending higher training paths.

Vocational training is, of course, part and parcel of an apprenticeship contract, which, together with the related training plan, must be signed by both the employer and the trainee.

Under the apprenticeship arrangements, the employer is obliged to both remunerate the trainee for his/her work and provide the necessary training for obtaining the professional (re)qualifications.

This type of contract contains a number of tax and other facilitations for the enterprises participating in the scheme.

Apprentices are paid for the number of hours of actual work and the hours of training as well.

The rules governing apprenticeships have recently been amended by Legislative Decree No. 81 dated 15 June 2015, implementing Law No. 183 dated 10 December 2014 (known in Italy as the "Jobs Act2"), which has radically reformed the apprenticeship regulations.

The new apprenticeship arrangements also feature three different types, with substantial changes to the first and third type, i.e. the apprenticeships leading to formal qualifications. There now are:

- apprenticeships for attaining professional qualifications and diplomas, the upper secondary school diploma and the advanced technical specialisation certificate (art. 43 of Legislative Decree No. 81/2015);
- apprenticeships for attaining professional skills (art. 44 of Legislative Decree No. 81/2015);
- apprenticeships for higher training and research (art. 45 of Legislative Decree No. 81/2015).

[2] Law No. 183 dated 10 December 2014, delegating the Government to take due measures with respect to the reform of the social safety net schemes, the employment and proactive policy services, and to reorganise the rules concerning employment contracts as well as inspection activities and measures for the protection and reconciliation of care, life and work requirements", effective from 16 December 2014

The innovations concern the definition of apprenticeship, the nature of which is confirmed as an "open-ended contract aimed at training and employment", while the internal structure of the three types of apprenticeship has been deeply modified. The first type has been broadened in its scope and now allows to obtain not just a 3-year qualification or professional diploma within the framework of the regional vocational education and training paths, but also an upper secondary school diploma or advanced technical specialisation certificate. The broadening of the scope of this type of apprenticeship has determined the downsizing of the scope of the third type of apprenticeship, which concerns non-academic tertiary education (advanced technical diplomas granted by Higher Technical Schools), university training (bachelor, specialist and master degrees, research doctorates), research activities and internships for access to the regulated professions. There are few innovations regarding apprenticeships for professional skills, except for the abolition of the so-called "trade contracts" envisaged in the 2011 Consolidation Act.

Type 1 and 3 apprenticeships are aimed at "training"; they are structured in such a manner as to be organically integrated "in a dual training & work system" and, as such, represent the Italian version of the German model. In the case of type 1 and 3 apprenticeships, the training plan is compiled by the training institution, with the involvement of the enterprise. Furthermore, the general tasks of the national collective bargaining have been downsized: this is now responsible for the overall regulation of the system and no longer of the minimum duration, illegitimate dismissal and contract withdrawal, which are all defined within the regulation.

The regulation of the system still falls under the responsibility of the Regions and Autonomous Provinces. Changes have been made to the procedures through which type 1 and 3 apprenticeship contracts can be concluded, introducing the obligation, for the employer, to sign a specific protocol beforehand with the training establishment which the prospective apprentice is attending, and the individual training plan, which was already provided for under the previous regulations.

The maximum length of off-the-job training provided by the training establishments is defined, with regard to the various types of final qualifications granted in accordance with the type 1 and 3 apprenticeships. The internal workplace training is also defined differently, as the difference between the defined length of the learning path and the off-the-job training.

The remuneration structure for the type 1 apprenticeships is entirely overhauled, by subtracting from the apprentice's "wage" the total hours spent in off-the-job training. With regard to the internal workplace training, an amount equal to 10% of the remuneration due is recognised, unless otherwise provided by the relevant collective bargaining rules. This amounts to a significant reduction of costs, to which we must add the economic incentive measures provided by article 32 of the Decree for proactive policies (Legislative Decree No. 150 dated 24 September 2015).

The new regulation provides for definition of the apprenticeship training standards, which will be adopted with an ad hoc decree by the Ministry of Labour and Welfare, in agreement with the Ministry of Education, University and Research and the Ministry of Economy and Finance, subject to a prior agreement with the State-Region Conference, which was decided on 1 October 2015. This understanding, that will be followed by the adoption of the relevant decree, is particularly significant because it sets out the key traits of the dual system introduced by this reform.

Alongside apprenticeships, that to all intents and purposes constitute an employment relationship, there are other regulated forms of work-based learning that can also be linked to one another, namely school-work alternance and various types of workplace training.

School-work alternance is a teaching method that combines upper secondary school education and vocational education and training. It consists in alternating classroom work and periods of workplace training. The recipients of this method are students aged 15 or more who are willing to participate in this educational path. The recent educational reform law has extended to and made it compulsory for all students attending the last three years of upper secondary schools to take part in a school-work alternance scheme for at least 200 hours in the case of licei, and 400 hours in the case of technical schools.

Traineeship may be classified, together with apprenticeship, as the main work integration instrument for young people, a sort of bridge that closes the gap between schools and enterprises and includes curricular traineeships, summer traineeships and orientation traineeships.

Friuli-Venezia Giulia

The region Friuli-Venezia Giulia has set up 3-year vocational education and training paths (IeFP = VET): a first year is for orientation aimed at choosing a professional path, while the subsequent 2 years focus on attaining a professional qualification, after which the trainee may choose to either find a job straight away, continue the training path for a further year to attain a professional diploma, or continue in one of the 5-year nationwide paths mentioned above.

The training is provided by temporary groupings of vocational training centres, officially authorised by the Region on the basis of a public call for applications.

The 3-year training courses may also be provided by State professional schools.

Autonomous Province of Bolzano

In the Autonomous Province of Bolzano, vocational training is one of the primary competences recognised by the State to the Province and, therefore, this latter has the authority to regulate the matter. Instead, education and employment (and, consequently, apprenticeships) are secondary competences, which means that the Province may regulate the details, albeit within the general framework, and in accordance with the principles, laid down by the central government.

Upper secondary schools (licei, technical or professional schools) and vocational training are divided into three independent language-based systems: Italian, German and Ladin.

Upon completing the lower secondary education (the former middle school or scuola media), pupils may choose to enrol in either an upper secondary school, in a full-time vocational training path or in an apprenticeship scheme (in the latter case, the pupil must first attend 1 year of preliminary training at school, because apprenticeship training is not allowed below 15 years). Upon completion of this path, after sitting an exam, pupils are granted a 3-year qualification or a 4-year professional diploma.

The over 20 qualifications or diplomas, in a broad range of subjects, granted in the Autonomous Province of Bolzano are recognised at national and EU level.

Effective from the 2014/2015 school year, a further year has been introduced to prepare for the so-called “State exam”, awarded after the professional diploma.

Apprenticeships are based on a dual training model; this means that young people, in order to obtain a 3-year professional qualification, are required to attend both workplace training (in accordance with the workplace training framework put into place by the enterprise) and classroom training (in accordance with the relevant teaching programme).

Apprentices are required to personally apply for apprenticeship vacancies (with the assistance of the local authorities), after which the employer notifies the hiring to the provincial apprenticeship office and the latter then enrols the pupil in the respective professional school. Apprentices, therefore, cannot personally enrol in a professional school.

Under this apprenticeship model, training is provided only in the sectors and for the professional roles for which there is a demand, thus avoiding mismatches between training decisions by young people and the actual demand by enterprises.

Autonomous Province of Trento

The Autonomous Province of Trento (PAT) is a province enjoying a very broad autonomy (under a statute approved in 1948 and reformed in 1972), which further characterises it compared to ordinary Italian regions.

With regard to the national framework, which in all its measures refers to the special autonomous status of the provinces of Trento and Bolzano, the PAT has primary competence in all vocational training matters (including the training component of apprenticeships) and concurrent competence in education and employment matters.

As a result of its special status, the PAT has always greatly invested in:

- a vocational training system, since 1959 (first provincial law on vocational training), systematically innovating its paths, which were increased to 3 years in 1994 (nationwide in 2003), and introducing in 2003 (nationwide in 2010) a fourth year leading to obtainment of a professional diploma;
- a school system, the relevant implementation rules of which were issued in 1988, which has entailed provincial competence in school staff, nevertheless ensuring employee mobility outside the province as well;
- employment policies (see Provincial Law 19/1983),

acting in many cases as a forerunner with regard to reforms and orientations subsequently applied nationwide.

The decisions taken at provincial level with regard to the upper secondary school paths concern:

- the non-activation of the entire Vocational Education (IP = VE) offering, with the exception of the sectors and paths that could not find an outlet in Technical Education (IT = TE) and in Vocational Education and Training (VET=IeFP);
- the continuity, in the first 2 years of upper secondary school, with the underlying primary and lower secondary school paths, and the unitary nature of the whole upper secondary education cycle, in order to ensure the training equivalence of the various (educational and vocational training) paths within the compulsory education system.

The provincial vocational education and training (VET) paths are grouped into three sectors (agriculture and environment, manufacturing and crafts, services), 12 courses, 9 branches, 12 options leading to 24 professional qualifications and 21 professional diplomas, and are organised as follows:

- an initial 2-year period, followed by a third year for attaining the professional qualification, and by a fourth year for attaining the professional diploma;

- a 4-year period, comprising two 2-year periods, for special paths identified by the Provincial Government, upon completion of which a professional diploma is awarded (without the possibility of leaving the path on the third year).

The VET system of the Province of Trento also enables students who have attained a professional diploma to sit an ad hoc State vocational training exam after attending a special 1-year course.

The 1-year course for sitting the State exam (CAPES) is one of a range of other opportunities offered by the province for moving from vocational education and training to upper secondary education (preferably in a technical school, although this step can also be made to the licei) and for integrating upper secondary level education and training paths.

Assistance is provided in the transition from the initial vocational training institution to the various types of upper secondary schools, and represent an important example of permeability between the different types of upper secondary paths in the Trentino educational system.

As concerns apprenticeships based on the dual approach, the Autonomous Province of Trento has only recently started defining the model for attaining a professional qualification and diploma that will come up beside the full-time VET (vocational education and training) paths, and implemented it for the first time through the so-called “Garanzia giovani” project.

Poland

According to article 70 of the country’s Constitution, Poland recognises the right to education of each person and the public authorities guarantee universal and equal access to education for all citizens. The Constitution provides for free education in public schools and, since 1997, compulsory education has been extended to 18 years.

Under the Polish educational system, vocational training can be undertaken upon completion of lower secondary education and, following the 2012 reform, the following options are available:

- a basic 3-year vocational training, upon completion of which the student qualifies as an apprentice following an apprenticeship exam, or a professional diploma if the student sits qualification exams for a specific job, and which also entitles to continue training in an adult secondary school;
- a 4-year technical secondary school, upon completion of which the student is awarded a diploma qualifying him or her to practice a specific profession, following an exam, and to obtain a secondary school leaving certificate, after having sat a further exam;
- a post-secondary school for students who already have a secondary education, for a training period of no more than two and a half years;
- a special 3-year school preparing for work, for students with mental or physical disabilities.

From 2011, the professional profiles and relevant educational and training paths have been overhauled and it has been established if and which professional qualifications can be granted upon completion of a non-school-based education qualified as a vocational training course.

The new classification of the jobs taught at professional schools includes 200 professions and 252 qualifications within the said professions.

3.2 The socio-economic background and the labour market

Austria

In recent years, thanks to its economic and social development, Austria has become one of the countries with the highest development indicators. For decades the Austrian economy has been driven by the export sector.

Like in many other countries, the Austrian population is also ageing. The country has founded its development primarily on immigration. There are great differences in migration flows between the rural and urban areas, to the advantage of the latter. However, the figures should be carefully interpreted with regard to the levels and qualifications, because certain groups of immigrants are scarcely qualified, or hold qualifications received abroad that are not recognised, as a result of which they are often employed in scarcely qualified jobs.

In recent years, there has been a change in the migration flows, with a growing number of immigrants from other EU Member States alongside the traditional flows from the Balkans and Turkey.

The Austrian educational system is characterised by early differentiation and a broad range of high-quality educational and training paths, as well as by an increasing permeability of the educational and training systems, the purpose of which is to foster the personal growth of young people and improve the opportunities for acquiring the professional know-how to attain independence and pursue lifelong learning.

A consequence of this arrangement is that approx. 75% of all persons in employment have successfully completed a vocational training and/or higher education course.

Furthermore, besides providing recognised professional qualifications, all the vocational training programmes lasting more than 2 years provide the necessary qualifications for accessing tertiary education.

The drop in population has also entailed a drop in the number of young people enrolled in VET and the ongoing economic crisis has certainly not helped. The rate of enrolment in apprenticeships has remained relatively constant for a long time since the mid-90s, after which it dropped (in 2011, 42% of young people of all age groups had undertaken apprenticeship training, while in 2013 the figure had already dropped to 39.5%).

The average age in the first apprenticeship year is up slightly (in 2013 the average was 16.5 years). An analysis of the previous qualifications of apprentices in their first apprenticeship year shows that, in the 2012/13 school year, slightly over one third (35.2%) of the students attending the first part-time professional school classes (10th year of schooling) had previously attended preparatory professional schools, 16.7% had attended a professional school, 14.3% an ordinary secondary school and 10.7% an upper secondary school with professional orientation.

The proportion of female apprentices increased slightly until 1990 and has recently stabilised at about 34%. The choice is for a limited number of professions: 50%, in fact, train for the retail trade or as office assistants or hairdressers.

Among male apprentices, the three most popular courses account all together for only approx. 35% of total attendance.

While the number of enterprises accepting apprentices has remained relatively stable for a long time, at the end of the 90s the number started to drop, almost certainly as a result of the international economic and financial crisis, as well as the drop in the number of fifteen-year-olds.

A challenge for the future remains the integration of young people with an immigrant background into the initial training system; these are under-represented in both vocational education and training in general and in apprenticeships. Furthermore, a high number of immigrant youths drop out of school at an early age (from the 9th grade). The aim, therefore, must be to train skilled workers, but also to ensure that many youths at risk of dropping out are encouraged to remain within the training process.

Germany

In 2008, children and young people aged below 20 accounted for 19% of the population, people aged between 20 and 65 accounted for 61%, and over 65-year-olds accounted for 20%. By 2060, about one every three citizens (32%) will be aged at least 65 years and the number of seventy-year-olds will be double the number of newborns.

By 2030, the 17-to-25 age group will shrink by about one fifth and there will be changes in the decisions made by young people about their educational careers. This trend will lead to the attainment of higher educational qualifications compared to today and the higher education reforms will increase the attractiveness of an academic education, entailing increased competition between the dual paths and upper secondary education.

In 2011, the percentage of over-65-year-olds in Germany will be 5.34% higher than in the other European countries. In 2060, the forecasted figure for the EU-27's dependence on over-65-year-olds will be 52.55%. The forecast for Germany, in 2060, is 7.34% higher than the EU average.

The drop in the total number of people aged between 20 and 65 will produce a shift in the population towards a longer working life. Currently, 20% of people in working age belong to the 20-to-30 year age group, 49% belong to the intermediate 30-to-50 year age group, and 31% belong to the 50-to-65 year age group (Federal Statistics Office, 2009).

People with an immigration background show considerable differences in relation to education, compared to those without an immigration background. 15.3% of the former have no diplomas or other qualifications and 45.0% have no vocational training or training qualifications (the corresponding figures for people without an immigration background are 2.0% and 19.6%, respectively), although in all cases people still engaged in training programmes have not been taken into account (Federal Statistics Office, 2011).

Germany has substantially shifted from a manufacturing to a services economy. The services sector, in fact, is the largest of the German economy.

The employment rate in Germany is significantly higher than the EU average.

In 2010, the unemployment rate within this group was 7.1%, above the EU average of 6.9%, a year later it had dropped to 6.0%, as a result of which it is 0.9% below the EU average (6.9%). Youth unemployment in Germany, in 2011, dropped by 1.3% to 8.6%. Instead, youth unemployment in the EU has increased consistently.

A high proportion of people in Germany have upper secondary school diplomas (58.7% in 2011, compared to an EU average of 46.6%). One underlying reason is the long tradition of the dual system in vocational training. Regarding higher education, Germany is close to the EU average.

The percentage of people in the 15 to 64 age group with only a qualification certificate was constantly well below the EU average in recent years (13.7% in 2011, compared to the EU percentage of 26.6%).

The school dropout rate in Germany (11.5%) is below the EU average (13.5%) and is rather good, overall, considering that it has constantly dropped in recent years.

The same applies to the figures relating to school participation. The level of participation is decidedly high (58.7%), in the 25 to 64 age group, in upper secondary and post-secondary education in the non-tertiary sector. The same applies to the tertiary sector, where Germany is 0.8% above the EU average.

The number of training contracts recently concluded has failed to satisfy the available supply and many vacancies have remained such; this is tantamount to a 3.7% shrinkage in the number of contracts: actually, the total demand has stopped at 2.7%, while the supply of places was 3.5 %.

The problem is probably due to the greater demands by enterprises regarding entry qualifications; it often occurs, in fact, that increasing numbers of young people drop out of school before they complete the necessary skills.

One indicator of the problem is the proportion of young people entering the so-called “transition system”, i.e. the period of pre-vocational training. There are 257,626 young people entering transition programmes before vocational training.

Friuli-Venezia Giulia

The ageing population trend is expected to rise until 2020, when over-65-year-olds will account for no less than one quarter of the total population (from 23.96% to 25.06-26.30%) and over-80-year-olds will rise from 7.2% to 7.8-8.3%, despite growing numbers of foreign immigrants, which, in the period between 2008 and 2012, have increased by about one third (accounting for almost 9% of the total resident population).

The population growth and mass education in the post-war period have determined an overall rise in the educational level of the inhabitants of this region. In 2011/12, 93% of all teenagers had enrolled in an upper secondary school, with one third attending the licei and 18% a technical school. The risk of dropping out of lower secondary school is very scarce indeed and early school leavers account for about 13%, two percentage points below the national average.

After 2005, the level of both school participation and vocational training by unemployed persons has also increased; lifelong learning seems to be considered a valid strategy for the development of human resources, regardless of its immediate application by enterprises.

In 2012, the number of people in the 25-64 age group that had attended a study course or a training course in FVG was 7.5% of the total (compared to the national average of 6.6%).

Foreign students in Friuli-Venezia Giulia rose by 5.2% between 2010 and 2011. The proportion of this school population stands at 11.5%, compared to a national average constantly at 8.8%. In primary schools, the foreign students percentage is 12.3%, 11.9% in lower secondary schools and 9.1% in upper secondary schools.

In 2011, 7.7% of university students were foreigners. In 2012, approx. 12.9% of vocational trainees were foreigners, although their numbers are dropping (- 5.4%). The average age of foreign participants is 25.7 years, well below the national average, which stands at 35.5 years. Vocational training students belong to no less than 132 different nationalities, although the largest group (15.2%) consists of Romanians.

Friuli-Venezia Giulia, despite all the favourable conditions mentioned above, has been hard hit by the recent economic crisis, which has worsened the level of well-being and heightened social inequality. In particular, there has been a rise in the number of temporary employment contracts and in labour underutilisation, especially among young people; from 2008, moreover, permanent employment contracts have become a marginal feature.

Labour supply (for people aged 15 and more), after dropping in 2009, has picked up again somewhat, however without regaining the pre-2008 levels, despite a significant acceleration in 2012.

There are significant age-based employment gaps: the declining employment levels among young people, in the 24-to-34 age group in particular, has been partially set off by a sharp rise in employment in the 45-to-64 age group. Likewise, the economic activity rate has remained stable, due to a further increase among women, reaching 61% in 2012, while the male EAR in the period has dropped.

In 2014, employment dropped to 495,000, and the peak reached in 2007 now appears unattainable, with a growing gap among male workers. The employment rate in the 20-to-64 age group has dropped since 2011, reaching 67.3 in 2014.

Foreign workers account for 10% of the total, but the employment rate among foreigners has risen from 8% in 2008 to 17% in 2013.

Apprenticeships continue to be a marginal option and there has been an almost total decline of apprenticeships for professionalising skills.

Gender equality is supported and half the new contracts concluded in 2013 regarded young people aged 20 to 24 years, another 30% the 25-to-29 age group and less than 20% the younger age groups.

Italians account for the majority (82%), followed by workers from non-EU member countries (12%) and, lastly, by workers from EU member countries (6%). 13% of apprenticeships concern people with tertiary qualifications, while more than 40% concern workers with primary (11%) and lower secondary (30%) education.

Many contracts regarded the third sector, with 18% in the commercial segment; in the non-commercial segment, the highest percentage can be found in the catering and hotel industry; manufacturing absorbed one fifth of the total, with a considerable presence in the metalworking and agrifood segments.

Each enterprise used more than 4 apprenticeship contracts, with a lower number in agriculture and in the construction industry. Considering the total number of apprenticeships completed in 2013, but commenced in and after 2010, the average duration of the contracts was 8 months.

Autonomous Province of Bolzano

The Autonomous Province of Bolzano is located in northern Italy and borders with Austria. The province is predominantly mountainous, with 80% of the land area above 1200 m. 43% of the population is concentrated in the larger towns and cities, while 56.3% of the inhabitants live in rural areas.

The average age of the population is constantly increasing: 65.1% aged between 15 and 64 years, 18.7% has reached retirement age and under-15-year-olds account for only 16.2% of the population.

The population in South Tyrol belongs to three language groups: Italian (23.4%), German (62.3%) and Ladin (4.1%). Resident foreigners account for 8.8% of the population, with a lower average age compared to the locals, while over-65-year-olds account for only 4.5%.

At the end of November 2014, there were 58,041 registered companies, about 13,000 of which in the crafts sector, which number has remained unchanged compared to the previous year. The most representative segments are: agriculture, private services, retail, hotels and restaurants, construction and manufacturing.

Large enterprises (over 250 employees) account for only 0.1% of the total and employ 11.7% of all employees, while enterprises with less than 9 employees account for 92.8% of the total and employ

46.8% of total employees; enterprises with between 10 and 49 employees total 6,4%, those with between 50 and 249 employees 0.7%; medium-to-large enterprises (with over 50 employees) account for 0.8% of all enterprises and employ 26.6% of all employees.

Trade with neighbouring Austria (26% of total imports and 11% of total exports) and Germany (45% of total imports and 40% of total exports) plays an important role in local economy.

In 2014, the general unemployment rate was 4.2%, while the youth unemployment rate was 12.2%. There were about 11,000 job seekers.

The unemployment rate among 15-to-64 year olds is 73.4% (67% among women). 7.2% of workers are employed in agriculture, 21.4 in manufacturing and 71.4 in the services sector.

20% of workers are employed in the public sector.

Autonomous Province of Trento

The Province of Trento is located in north-eastern Italy and occupies about 2% of the country's area. It is predominantly mountainous, with 60% of the land area above 1000 m and only 20% below 600 m. Only 9% of the land is used for agricultural purposes and 18% is occupied by urban centres. Almost 50% of the population is concentrated in urban areas, which are gradually increasing in size, while depopulation is widespread in the mountains.

The population changes in recent years have highlighted phenomena such as the drop in fertility rates, increased immigration, an increase in average life expectancy and population ageing. The demographical situation, however, is less critical than in other regions thanks to above-average fertility rates.

In 2013, in Trentino, foreigners accounted for 9.5% of the entire population.

The labour market appears to be sound and dynamic: both the workforce and employment are on the rise, while unemployment and economic inactivity are dropping. However, some groups feature critical trends: youth unemployment, in fact, has exceeded 20% and the number of over-50-year-old males out of work is increasing.

In 2013, the employment rate among 20-to-64 year olds was 70.5% and the unemployment rate had reached 6.6%, slightly less than half the national average.

Despite the unfavourable economic situation and the uncertainties regarding the national and provincial finances, Trentino has suffered less than other regions as a result of the difficult situation. These positive trends are undoubtedly also due to the expansionist measures introduced by the local authorities. The production system is characterised by very high quality segments and niches and a good rate of innovation; the employment level and labour market participation rate are both good.

The recession has hit almost all the main production sectors, with the construction sector posting the worst results (-5.8%), while manufacturing in general and the services sector also feature a negative sign (-3 and -1%, respectively). On the contrary, the agricultural sector, in 2013, recorded a significantly positive growth (+5%). The weaknesses of the Trentino system are a slow production dynamics and a limited economic growth in the medium-to-long term, plus the limited internationalisation of the Trentino production system, a considerable dependency of private enterprises on contracts with the public sector and, last but not least, the presence of scarcely dynamic small-to-medium enterprises and the limited number of people employed in technology-intensive production sectors and knowledge-intensive services.

Overall, Trentino is an economically prosperous area, with a good welfare system and high-quality environmental resources, biodiversity and cultural heritage.

Regarding training, there are significant investments in research and development, with some scientific research centres of excellence and a renowned university.

School attendance levels are good (the rate of participation in upper secondary education amounts to 98.7%), as is also the quality of secondary education (in the national and PISA surveys, Trentino consistently overachieves, in terms of performance and fairness, compared to the national average), and of university education (63.1 of upper secondary students go on to university), although since 2004 there has been a gradual decline in university enrolment rates. The proportion of NEETs (young people not in employment, education or training) is lower than in the rest of the country, amounting to 11%.

About 24% of lower secondary school (middle school) leavers now choose to go on to vocational education and training (VET). 56% of qualified students are willing to continue their training by enrolling in the fourth year of VET and about 10% are willing to continue to an upper secondary school path.

Since 2004 there has been a progressive drop in the continuation of studies up to University level.

Poland

Given the specificities of the various regions in Poland, the Polish partner has chosen to report the socio-demographic figures for the region of Pomerania, which is one of the country's three Baltic regions and occupies 6% of the country's land area.

The population in this region is mostly concentrated in the urban areas and more than half are females.

The economic potential of the region is based predominantly on traditional manufacturing sectors, such as shipbuilding, refineries, food processing, engineering, furniture-making and tourism.

Shipbuilding, represented by ship repair and building yards and by the companies of the relevant supply chain, still plays an important role in the region, followed by the oil refining sector.

The food processing industry too has an important place in Pomerania's economy, in particular fish processing, which produces the highest income, totalling about 28% of the value of all sales in the sector.

But new sectors are also developing: IT, electronics and biotechnologies, as well as business process outsourcing (BPO) and shared services centres (SSC). Currently, about 14,500 people are employed in more than 40 centres of this kind and the number of jobs will continue to rise in these sectors, due to the growing presence of foreign companies. The demand for foreign language skills, including the less common languages, is increasing precisely because of the growth in this sector.

The employment figures shown here are those relating to 2013 and 2014.

Between 2013 and 2014 there was a drop in unemployment, from 14.6% in March 2013 to 13.4% in March 2014; 51.2% were men and a later survey, carried out at the end of 2014, reported a slightly higher percentage for women (53.6%), compared to men, who stood at 46.4%.

The largest group of unemployed was the 25-to-34 age group (27.7%), down by 1.1% compared to the previous year. On the other hand, the proportion of unemployed aged between 45 and 54 increased by 0.1%, standing at 18.7%. At the end of March 2014, the largest group of unemployed was again the 25-to-34 age group (28.2%), up by 0.5% from December.

At the end of 2013, the number of enterprises registered with REGON had risen by 2.5% compared to the previous year, dropping by 0.8% in the public sector and increasing by 2.7% in the private sector, compared to December 2012.

43% of workers were employed in manufacturing (41.3%); compared to the previous year, there was a drop in the electrical, gas, steam and hot water sectors (29.8%) and an increase in activities relating to culture, entertainment and leisure activities (6.8%), accommodation and catering (6.7%).

3.3 The connection between the dual system and professional schools: an overview by region

Austria

In the Austrian educational system, the final year of compulsory education corresponds to the first year of upper secondary school, by when students will already have made a choice as to their educational career, having decided to attend either the first year of an academic secondary school (AHS-Oberstufe) or a 1-year pre-professional school (the Polytechnische Schule, leading to apprenticeship training) or any of the vocational training paths leading to different levels of qualification.

The vocational training system comprises the following types of schools:

- Professional schools (Berufsbildende Mittlere Schulen or BMSs);
- Upper professional schools (Berufsbildende Höhere Schulen or BHSs);
- General healthcare and nursing schools (from the 11th year onwards);
- Dual professional schools (apprenticeship, Lehre, Lehrlingsausbildung – from the 10th year), following the 1-year pre-professional school.

The diversity of paths shows the important role played by VET in Austria, where it is considered a highly attractive option.

To be eligible for an apprenticeship a student must have successfully completed the 9-year compulsory education, after which the choice is between no less than 200 different types of legally recognised occupations.

The apprenticeship diploma is a full professional qualification. Depending on the occupation, training can last between 2 and 4 years, although the usual length is 3 years.

Apprenticeship training is provided at the workplace, for about 80% of the time, and in part-time professional schools for the rest of the time.

Workplace training is regulated by the Federal Ministry of Economy, Families and Youth (Bundesministerium für Wirtschaft, Familie und Jugend, BMWFJ).

The curriculum of part-time professional schools is designed - in accordance with the training regulations regarding the respective apprenticeship occupation - by the Federal Ministry of Education, Arts and Culture (Bundesministerium für Unterricht, Kunst und Kultur, BMUKK).

The social partners are responsible for defining the workplace curriculum or the competence profile for each apprenticeship occupation.

Workplace training is widely financed by companies, offering young people an apprenticeship wage, in accordance with collective agreements. Public funding is also available for the companies providing the training. The specifically qualified IVET trainer is responsible for planning and providing the training.

At the workplace the apprentices are involved in the production or in the service delivering process, and attain the necessary skills required for real-life workplaces.

Part-time professional schools supplement and support workplace training by providing the necessary theoretical knowledge related to the specific occupation and broadening the general knowledge of the apprentices. The federal provinces provide funding to the professional schools (teaching staff, maintenance), but the Federal Government reimburses 50% of the teacher costs to the provinces.

Teachers at part-time professional schools must have a related university degree or have completed a vocational training programme, with more than three years of practice.

Upon completing the apprenticeship, each apprentice can sit a final apprenticeship exam (Lehrabschlussprüfung, LAP), the aim of which is to determine whether the apprentice is capable of satisfactorily carrying out the activities related to the occupation. The final exam comprises a practical and a theoretical part. The theoretical part, however, can be skipped if the apprentice is able to demonstrate that he or she has successfully completed the final year of a part-time professional school.

The different levels of governance

The success and further development of the dual system are guaranteed by the partnership between a number of institutions and foundations, at various levels.

At federal level:

- Federal Ministry of Economy, Families and Youth (BMWFJ)
- Federal Advisory Committee for Apprenticeships (BBAB)
- Federal Ministry of Education, Arts and Culture (BMUKK)

At provincial level:

- Apprenticeship Offices
- Federal Provinces
- Provincial Governors
- Regional Apprenticeship Councils
- Regional School Inspectors

At local level:

- training enterprises
- part-time professional schools

Requirements for apprenticeship training

According to the Trade Commerce and Industry Regulation Act (Gewerbeordnung), a company that wishes to train an apprentice must meet certain requirements and must own a qualification that is subject to approval by the social partners.

The qualification procedure consists in an application to the competent Office of the Federal Chamber of Commerce, which then assesses its eligibility, in collaboration with the apprenticeship office of the province in which the company providing the training is based. If the company is found to be eligible, it receives a "declaration" certifying that it is qualified to accept trainees.

The company must then be trained to provide the apprentice with the knowledge and skills included in the relevant occupational profile. The companies that are unable to adequately provide the complete training set out in the profile may train apprentices by networking with other companies.

The company must also have a sufficient number of qualified trainers (with specific professional and teaching skills) and the necessary technical equipment and training facilities. The training can also be provided by a partnership between several companies managing a joint training centre, and the workplace training must account for 80% of the total training period.

Following an amendment of the Vocational Training Act (BAG) in January 2006, it is now possible to carry out the apprenticeship training according to a modular programme, so as to improve the attractiveness of the training.
In "modular" apprenticeships, three modules have been introduced: basic, principal and special.

Learning process standards

The apprenticeship certificate is a formal qualification regulated by law and is classified as ISCED level 3B, corresponding to the eighth level of the Austrian National Qualifications Framework (NQF). It is defined as the reference qualification for level 4.
The training process standard includes:

- pre-requisites and qualifications of the companies and company positions providing the training;
- the presence of training regulations and a reference curriculum;
- follow-up measures.

The legal rules are defined in the Vocational Training Act (Berufsausbildungsgesetz or BAG). For each individual apprenticeship occupation, the Ministry of economy issues a training regulation, which is binding on the companies that provide the training.

The training content for each apprenticeship occupation is set out in the specific regulations (for workplace training) and in the curricula (for classroom training). The company curriculum (Berufsbild, a type of curriculum for workplace training) is adopted within the framework of the training regulations by the Federal Ministry of economy, Families and Youth (BMWFJ). New company curricula are often adapted or introduced by the companies themselves, or by the social partners. The Federal Advisory Committee for Apprenticeship (Bundesberufsausbildungsbeirat, BABB) also makes proposals or prepares expert opinions on the reform proposals. The enterprise curricula, and therefore the guidelines for qualification requirements, are actually developed by subcommittees of the Federal Advisory Committee (BABB) or by the research institutes of the social partners, i.e. the Austrian Institute for Research on Qualifications and Training in Economy (IBW), for employers, and the Austrian Institute for Research on Vocational Training (ÖIBF), for employees. The framework curricula for professional schools are structured in a similar manner to those of full-time professional schools. In the field of apprenticeships, the framework curricula are defined along the lines of the training carried out in the workplace.

In the majority of cases, individual companies are not directly involved in the development of the training regulations and of the part-time professional school curricula.

The part-time professional school curricula correspond to the training regulations.

The tools and processes supporting the analysis of the qualification requirements are primarily funded by the Austrian Public Employment Service (AMS) and the most important include:

- studies on the necessary competences;
- the AMS-QB Qualification Barometer of the Austrian Public Employment Service;
- the AMS's research network;
- the AMS's Standing Committee on new skills.

The training/apprenticeship process

Training takes place within two different contexts: companies and part-time professional schools. The training lasts between 2 and 4 years, mostly 3. The length of apprenticeships is reduced for apprentices who have already completed workplace training periods related with the specific occupation at other companies and for those who have attained any applicable school qualifications.

The first step consists in the conclusion of an apprenticeship contract between the company providing the training and the apprentice; this must then be sent to the competent apprenticeship office for registration as soon as possible, at the latest within three weeks after the start of the training. The apprenticeship office verifies the contract details and the adequacy of the training provided by the company and moreover it assigns credits for the training periods connected with the scope of the apprenticeship. The registration of the apprenticeship contract is a pre-requisite for subsequent admission to the final apprenticeship examination.

The training is represented by a practical and pro-practical learning path consisting in active production work, with the use of technologies that enable the trainees to become acquainted with the state of the art.

Professional schools provide general and theoretical skills, plus a further practical programme carried out in the classroom which accounts for a total of 20% of the theoretical learning.

The costs of workplace training are incurred by the company providing the training.

Classroom training (in part-time professional schools) is financed by the public sector. This means that much of the cost of vocational training is supported by the participating companies. Apprentice remuneration accounts for most of the cost of apprenticeship training. The amount of this remuneration is defined for each individual occupation within the framework of the collective bargaining contracts. Where there is no applicable collective bargaining contract, the parties must agree on remuneration in the individual apprenticeship contracts. The remuneration increases with each year of apprenticeship until, in the last year, it amounts to approximately 80% of the average wage of a corresponding skilled worker.

The state co-funds a portion of the costs of the workplace training part of the dual training. In the first two years of the apprenticeship, both employer and apprentice are exempted from paying health insurance contributions, even though the apprentices continue to be fully insured. No contributions for accident at work insurance are due for the entire training period, although the insurance cover remains unchanged. There are a large number of options for subsidising apprenticeship training. The costs to provide equipment, such as machinery, instruments and teaching materials, are incurred by the federal provinces. The Federal Government, and the relevant provincial government, equally share the costs for the teaching staff.

Upon completion of the apprenticeship programme, the apprentices are awarded a full high level professional qualification.

Germany

Under the German educational system, upon completion of compulsory education and without additional access requirements, a young person may decide to either undertake vocational training, to attain a professional qualification for skilled jobs, or access upper education.

Vocational training may be provided by either a full-time professional school or within the framework of the dual system. Full-time professional schools have the highest influx of students; most of them are aged fifteen when they start professional school. In certain circumstances, attendance of a full-time professional school can be recognised instead of the first year of a dual system school.

Full-time professional schools (Berufsfachschulen) are regulated by the laws in force in the respective Länder, except in the case of the healthcare professions, which are regulated at Federal level. Training can include placement in a company and covers a period of two or three years, depending on the type of occupation. The final qualification is issued upon the successful completion of an exam, which is supervised by the education authorities and governed by the training regulations applying to the relevant job profile.

The primary objective of the training path is to enable young people to acquire a comprehensive set of professional skills with which to fulfil their duties as employees in an efficient, effective, and innovative manner, as both individuals and members of a team. Attainment of this set of skills must be demonstrated by means of exams defined by law (Consolidation Act on Vocational Training).

Classroom training in the professional school integrates workplace training, which is obviously more process-oriented and based on the specific requirements of the company itself.

Technical upper secondary schools (Fachoberschulen) and professional upper secondary schools (Berufsoberschulen) normally start from vocational training provided according to the dual system, from consolidated professional knowledge, and lead to the academic standards required for access to tertiary education. The Fachoberschulen cover the 11th and 12th years and require a middle school leaving certificate (Mittlerer Schulabschluss) or equivalent qualification. Students are mostly aged 19 or 20. The first year includes practical workplace training and theoretical lessons, while the second year covers general and specialist lessons.

There are many points at which transition may occur between education at school and dual vocational training, as well as between vocational training and tertiary education. Secondary professional schools (Berufliche Gymnasien / Fachgymnasien) provide specialist training in a number of different fields, in addition to the general education provided by secondary schools. Some commercial and technical secondary schools also offer the possibility of attaining not just any qualification, but an academic qualification. The courses leading to dual system qualifications last from three to four years. They usually qualify for the university entrance examination.

Socially disadvantaged young people, with learning difficulties or disabilities, and young people with an immigrant background and a poor command of German, have different opportunities for preliminary training (Berufsausbildungsvorbereitung).

1-year preliminary training programme (Berufsvorbereitungsjahr - BVJ): the BVJ is a 1-year training programme, generally provided by full-time schools and designed to prepare young people for vocational training.

1-year basic vocational training programme (Berufsgrundbildungsjahr - BGJ): basic vocational training can be completed as either a 1-year programme at a full-time professional school, or in a cooperative form at a company and a school. The successful completion of the BGJ may be recognised as the first year of vocational training in the training occupations assigned to the relevant occupation.

The dual training system in Germany appears as a successful system for organising the transition from school to work, especially with regard to the way in which it links learning, work and companies.

The “dual” system name comes from the different partners and different learning venues involved in the vocational education and training system.

Apprenticeship training is provided by two different learning providers: the training workplace (for 70% of the time) and the professional school (for 30% of the time).

The legal basis of individual apprenticeship training is the contract between the apprentice and the company providing the training, while schools may be considered as service providers to the companies. Workplace training is regulated by the training regulations (general training programmes). The workplace training manager prepares an individual training plan for each apprentice.

The different levels of governance

The success and further development of the dual system are guaranteed by the partnership between a number of institutions and foundations, at various levels.

At Federal level

- Federal Ministry of Education and Research
- Federal Ministry of Economy and Technology
- Federal Institute for Vocational Education and Training (BIBB)
- Central Committee for VET at the BIBB
- Trade unions, employer organisations, professional schools
- Standing Conference of the Ministers for Education and Culture of the various Länder.

In particular, the Federal Ministry of Economy and Technology, consulting with the other Ministries:

- issues the Vocational Training Act;
- is competent for the recognised job profiles;
- is competent for the framework curricula and the classroom training;
- organises the Standing Conference of the Ministries of Education and Culture.

At regional level

The Chambers of Commerce and Handicraft are responsible for:

- assessing the new companies desiring to provide training
- quality-auditing the registered companies providing the training
- examining and registering the apprenticeship contracts
- organising the intermediate and final apprenticeship exams
- providing consulting services for apprenticeship and for the companies providing training
- the drafting of the regulations for the IVET and CVET that will subsequently be developed by the Regional Advisory Committees

The Ministers of Education and Culture of the Länder are responsible for all matters relating to the professional schools.

The Regional Committees for VET provide consulting services in respect of all matters relating to the apprenticeships.

The Regional Authorities for VET implement the federal framework curricula for vocational training and supervise the professional schools with regard to their technical and educational aspects.

Moreover, there is the further specific contribution of the:

- School Inspectors
- Companies providing the training
- Authorised trainers
- Professional schools
- Apprentices.

Requirements for apprenticeship training

In order to be deemed eligible to provide apprenticeship training, the companies providing the training must possess all the skills in which the apprentices must be trained; they must show that they employ at least one person with the appropriate teaching skills or a specific qualification as a trainer; they must demonstrate the suitability of all the processes, machinery and resources according to the requirements set out in the apprenticeship training regulations. The competent authorities responsible for verifying these prerequisites are the Chambers of Commerce and the Chambers of Handicraft for the various professional occupations.

The companies that do not meet all the requirements have two options:

- either to contact the training institutions offering inter-company training schemes designed to support workplace training; or
- establish consistent training facilities.

The latter may be based on one of four traditional models:

1. “leader company with partner company” model (Leitbetrieb mit Partnerbetrieben);
2. “training on appointment” model (Auftragsausbildung;)
3. “training consortium” model (Ausbildungskonsortium);
4. “training association” model.

- After concluding the contract, the company is required to enrol the apprentice in the relevant professional school.

Learning process standards

In Austria, the apprenticeship certificate is an officially regulated qualification, classified as ISCED level 3B, while it is classified as level 4 in the 8-level German qualification system. Since 2014, the level is specified on the apprenticeship certificate.

The learning process standards are guaranteed by:

- verifying the prerequisites of the training enterprises;
- involving all the stakeholders in a consultation and revision process;
- issuing ad hoc regulations for the apprenticeship profiles.

Professional schools define their annual teaching programmes based on the framework curricula and the curricula developed by the governments of the Länder.

The proposals relating to the parameters of the job profiles may emerge in different manners:

- from the preliminary meetings between the social partners (employers and trade unions);
- from the outcome of the research projects or from the opinions of the consultants, as outlined by the Federal Institute for Vocational Education and Training (BIBB);

- from the instructions issued by the competent ministry.

The parameters are defined by the social partners when the need emerges to create a new job profile or redefine an existing profile.

The parameters of the training regulations are defined during a meeting with the competent Ministry (generally, the Federal Ministry of Economy and Technology).

The training regulation for the given the job profile (definition of the initial workplace VT) and the corresponding framework curriculum for the professional schools are drawn up and coordinated.

The BIBB requests the stakeholder organisations (employers and unions) to appoint representatives for the workplace training which, acting as experts for the Federal Government, work jointly with the BIBB to define new training regulations or overhaul the existing ones.

Training regulations feature two sections, one setting out the relevant provisions and one (an appendix) containing the general training plan. The programme and timeframe are specified in the general training plan, while the provisions cover aspects such as the designation, vocational profile and examination requirements for the job profile figure examined.

The experts appointed by the Länder define a draft curriculum for training at part-time professional schools. On completion of the drafting stage, the two groups of experts meet to discuss the two drafts and to align their respective contents and calendars. After the coordination stage, the final drafts of the training regulations are forwarded to the BIBB Committee for its observations. The declaration by the latter on the approval of the draft regulations constitutes a simultaneous recommendation for the federal government to "enact" the specific training regulation as forwarded.

For each job profile, the designated experts prepare a EUROPASS Certificate Supplement, which will accompany the final certificate.

The purpose of the EUROPASS certificate is to document all the qualifications that have been acquired over a lifetime.

The Coordinating Committees of the Länder for the training regulations and the Framework Curricula (KoA) finally approve the new training regulations and the new framework curriculum that has been coordinated with them. The competent Ministry and the Federal Ministry of Education and Research issue the training regulations, which are then published in the Federal Gazette.

The training/apprenticeship process

The apprenticeship training process begins when companies report the number of their training vacancies to the competent Labour Chamber and Labour Agency.

Students interested in an apprenticeship must apply directly to the company. The companies then select the candidates and conclude the contracts, enrolling the apprentices in the VT schools.

The contract is the legal basis for the apprenticeship within the dual system and must be made in writing. All contract-related matters are managed by the authorised training manager.

The contract must then be registered as soon as possible and, in any event, no later than three weeks after the start of training, with the competent Chamber managing the contracts. The Chamber assesses both the date of the contract and the eligibility of the company to train the apprentices; it registers the contracts and is responsible for organizing the intermediate and final exam.

At this point the training begins: it takes place at the company providing the training and at the professional school and lasts for a period of between 2 and 3 ½ years, depending on the professional

profile, the qualifications and the skills the apprentice has acquired before starting the apprenticeship path. Workplace training accounts for 70% of the apprenticeship path while classroom work amounts to 30%.

Every employer involved is required to provide the training in a systematic way, according to a defined timetable and programme, and suitably to the purpose of the training itself. The training manager or authorised trainer develops the individual training plans for the apprentices.

The different sectors / departments of the company are responsible for the training in their specific areas and the apprentice must write a report for each sector / department in which he or she was trained.

The support materials for these tasks are available from the BIBB and the Chambers.

Each apprentice must sit an intermediate exam during the training period. Upon passing the exam, he or she will receive a certificate issued by the competent Chamber.

Passing the final exam is one of the conditions required for admission to the Master's exam and for many other additional training exams, to prove the apprentice's aptitude for training in a number of trade and industry fields, and in many cases it forms the basis for the application for collectively agreed benefits at the workplace.

Regarding the apprenticeship costs, these are incurred by the companies providing the training, while the professional schools are financed by the Länder and the local authorities.

Apprentice remuneration accounts for the bulk of the apprenticeship training costs. The amount is fixed for each apprenticeship occupation in accordance with the collective bargaining agreements. Company agreements on apprenticeship remuneration are also possible.

If none of the above mentioned agreements are available, it is necessary to conclude individual agreements for each contract. The remuneration differs between the different professional figures of the apprenticeship and increases with each apprenticeship year.

These costs must be considered in relation to the contribution of the apprentices to the company's financial results. Apprenticeship costs are deductible from corporate profits. This means that the State indirectly co-finances the costs of each apprenticeship.

In Germany, the return on the apprenticeship costs is approximately 76%.

Classroom training is currently provided by 44 professional schools, although a transition process is under way to reduce the number of vocational training centres.

A characteristic specific for the city of Hamburg is the concentration on one or just a few professional figures within each professional school.

About 50% of the apprentices in handicraft occupations have a secondary school diploma.

The proportion of apprentices training as industrial white collars that are in possession of an upper secondary school diploma is about 90%. The framework of occupations in the IT sector and other significant technical occupations offers similar results.

Friuli-Venezia Giulia

The connection between vocational training and the dual system in Friuli-Venezia Giulia consists in apprenticeships for qualification and professional diploma, and in internships.

Apprenticeships and internships, although legally different – the former is an employment contract – are two types of orientation and training which facilitate entry into labour by alternating continuous training and work.

Internships promote direct contact between a person seeking work and private employers and government agencies for the on-the-job acquisition of knowledge and professional skills, thus facilitating guidance, integration or reintegration into employment.

The internships can be:

- *"non-curricular internships",* i.e. proactive policy measures aimed at supporting the career choices of young people and accompanying them in the transition from school to work, and at facilitating the integration or re-integration of unemployed people;
- *"curricular internships",* which are part of the formal learning process within the curricula of universities, schools or vocational training centres operating under agreements with the Region;
- *"summer traineeships"* for secondary school, vocational education and training and university students, which can take place in-between teaching activities;
- "*integration and reintegration internships*", i.e. measures for facilitating the integration or reintegration into employment of non-employed persons (unemployed, unemployed under mobility arrangements, etc.).

Internships are not employment contracts and participation in an internship scheme does not entail the loss of entitlement to unemployment benefits.

In order to make it easier for trainees to participate in the vocational education and training path, each one is granted a gross monthly allowance of not less than € 300.00, for no more than 20 hours a week, which can be proportionally increased to € 500.00 per month, gross, for no more than 40 hours a week.

The different levels of governance

In Friuli, regional vocational training is governed jointly by:

- the regional government;
- the temporary grouping of companies (Italian: ATI) gathering vocational training centres;
- the trade associations;
- the companies involved.

A governance peculiarity specifically characterizing Friuli is the presence of a temporary grouping of companies that gathers into a single body all the training facilities operating in the region.

This results in uniform procedures as well as the acquisition, storage, analysis and monitoring of the data relating to the entire training system and allows the region to liaise with a single contact, thus avoiding the problems arising from the possible fragmentation represented by a large number of training providers.

Requirements for apprenticeship training

The 3 and 4-year paths allow to complete the training path and to obtain a professional qualification or diploma corresponding to ISCED level 3.

Learning process standards

The learning process standards are defined in Friuli by the presence of various core elements:

- a comprehensive and systematic assessment process, called 'authentic evaluation', throughout the whole training path, based on a strong teaching foundation;
- a thorough final qualification/diploma exam, consisting of a number of tests;
- a Regional Database of the VET offer, related to national Figures and Regional Profiles, which serves as a basis for designing and assessing the training paths.

The latter provides:

1) the training standards, which are a key element for designing the training paths and define the learning objectives associated with each Profile. They consist in competences, skills and knowledge as established in the national and European standards;

2) the professional standards, which represent the evaluation benchmark and define the expected outcomes recognised by the local labour market in association with each Profile. They are structured in key services.

The training/apprenticeship process

The IeFP (VET) path begins with the enrolment of the lower secondary school graduates, aged between 14 and 18, in one of the courses provided by the vocational training schools.
In the second and third years of their training, the trainees take part in a school/work alternance scheme at local enterprises, under an arrangement between the school and the enterprise.
If a company wishes to welcome or become acquainted with a trainee in view of his or her future employment, it must contact the nearest training facility providing the course of interest and agree the relevant conditions and procedures with such training facility.
In June 2012, the "Regional Regulation" was introduced, regulating the management of the training activities for apprentices employed under the contract for attainment of a Professional Qualification or Diploma.
When taking on these apprentices, reference must be made to the standard nationwide professional Figures and Profiles and the on-the-job and off-the-job training programmes must conform to the relevant standards set out in the Guidelines issued by the Region.
Before taking on an apprentice, the interested company must contact the temporary grouping of companies authorised by the regional authorities to provide training for this type of apprentices, to make the necessary checks and request support in preparing the Individual Training Plan provided for under the collective bargaining rules, and the detailed training Programme foreseen by the Regional Regulation.
The full-time VET paths in Friuli consist of a first year, intended to provide orientation in the professional area chosen at the time of enrolment, followed by a 2-year period for the attainment of a professional qualification within the figure/profile selected at the end of the first orientation year, leading to either direct job placement or to a further year of study aimed at attaining a professional diploma.
Each year features:

- basic upskilling; in particular, the competences at the end of the third year are based on and further develop the skills and knowledge relating to the cultural axes characterising

compulsory education. The competences of the fourth year are based on those attained at the end of the third year and focus on professional characterisation in relation to the technical and professional competences. The basic competences also include Catholic religious education and the physical and motor activities under article 18 of Legislative Decree No. 226 dated 17 October 2005;

- technical and professional upskilling through the acquisition of conceptual tools and application procedures suited to tackling the typical workplace situations characterising the specific chosen production process or service;
- learning recovery and development workshops ("Larsa"), which are a useful instrument for fostering tailored learning processes;
- a part concerning the internship, aimed at mutually integrating the classroom and laboratory activities with the workplace training carried out at the company;
- the year's end and final exams.

The regional VET training programme is organised in such a way as to offer pupils the opportunity to pass from one training system to another, as far as possible. In order to facilitate the passage of trainees from the regional vocational education and training system to the upper secondary education system based on programmed, shared and transparent modalities and procedures, the single facilities authorised to provide VET paths may enter into ad hoc agreements with upper secondary education establishments and, in particular, with those belonging to the technical and professional education system.

Autonomous Province of Bolzano

Apprenticeship training is the predominant vocational training model in South Tyrol, inspired by the training systems in force in German-speaking countries, where the cornerstone of the 3-year professional qualification schemes is to provide on-the-job training under a corporate training framework and classroom training under a specific educational programme.

In apprenticeships, 80% of the training is provided at the workplace and 20% at a professional school.

Apprenticeships are supervised by the Provincial Department of Education and Vocational Training for German-speaking citizens.

The Department of Education and Vocational Training for Italian-speaking citizens obviously deals with the apprenticeship training of Italian-speaking residents.

Alongside the dual training system in force in South Tyrol there are also internships and workplace traineeships both within the 5-year educational paths and within the vocational training paths for obtaining a professional qualification or diploma (3 or 4 years, respectively).

In vocational training, the laboratory and workplace training component has increased over the years and now plays a very important role.

Internships have different lengths, are provided by public institutions and private companies depending on the type of orientation, and have guidance, training or job integration functions.

Internships in upper secondary schools are organised and managed by the schools, with a variable length; they are not remunerated but do come with an insurance cover and are supervised by a teacher, or by a tutor at the companies/public bodies.

The school itself contacts the available companies/public bodies and the training venue is chosen based on the type of studies and/or on the pupil's preferences.

Summer training and guidance traineeships target upper secondary school or full-time vocational training school students aged 15 or more, or university students (or even university graduates, provided that no more than 1 year has passed since graduation).

They are regulated by a framework agreement between the Autonomous Province of Bolzano and the trade associations and unions and are not organized as an employment relationship, although trainees must be insured against accidents and civil liability. They last at least 2 weeks and no more than 3 months (or 6 in the case of university students or graduates).

The provincial government does not provide contributions, either to the trainees or to the companies, however the agreement between trainees and companies may provide for a "monthly work grant".

Then there are other projects aimed at narrowing the gap between education/training and employment, such as workplace simulation, job planning, etc.

The different levels of governance

The provincial government, after consulting with the social partners, decides the training rules for each apprenticeship profession.

Requirements for apprenticeship training

Two requirements are needed to become an apprentice: passing the state exam at the end of the lower secondary school and attending the first year of upper secondary school; apprenticeships, in fact, are carried out between 15 and 25 years of age.

The only vocational training access requirement is having successfully completed the lower secondary school.

Learning process standards

The apprenticeship standards are defined in the training regulations laid down by the provincial government for each apprenticeship profession, including a description of the professional profile, the attainable qualification and the length of the apprenticeship.

The company training framework sets out the skills and knowledge that must be conveyed by the enterprise to the apprentice.

The teaching curriculum contains the objectives, contents and length of the formal education provided by the professional school or, as the case may be, by the other training facilities.

The training/apprenticeship process

The apprenticeship process begins with the search, by the aspiring apprentice, of any interesting apprenticeship vacancies at local companies; this research is facilitated by a number of tools, including online tools, such as the website of the Province or of the Trade Associations.

Once a vacancy has been found, the apprentice and company enter into a contract, which is then notified by the company to the Provincial Apprenticeship Office.

The latter then enrols the apprentice in the respective professional school, where, over a period of 3 years, he or she will attend 1,000 hours of classroom training and, for the 4th year of the professional diploma, a further 160 hours.
Classroom training, depending on the professional profile, is provided:

- in multi-weekly "blocks" (e.g. 3 blocks of 3 or 4 weeks per year);
- a day a week, with several 1-week seminars.

This apprenticeship formula offers training only in the sectors and for the professional profiles for which the companies themselves require labour (to avoid any mismatch between the training choices by young people and the labour demand by companies).

School attendance is compulsory, even in the case of apprentices aged more than 16.

Workplace training is regulated by a contract between employer and apprentice, which can be terminated for serious reasons by either party, providing for a trial period governed by the applicable industry agreements, with a wage based on that of a skilled worker, and with working time restrictions linked to the apprentice's age.

Apprenticeships for professional qualifications and diplomas end with a final exam consisting of a practical and theoretical test, conducted before a board comprising the school director, a teacher, an employer and a qualified worker in the professional profile.

Autonomous Province of Trento

The provincial vocational education and training paths are characterised by a close correlation with the needs expressed by the provincial economic and production context. The provincial economic context and the employers' associations and trade unions acknowledge and promote the Trentino VET system. They participate and actively collaborate in the construction of the provincial database of professional figures for the professional qualification and diploma and in the definition of the training contribution by the company.

The VET operates to ensure adequate levels of "relevance" with the qualifications required by the labour market, to maintain the necessary and unavoidable focus on the educational and cultural dimension, which is absolutely necessary for trainers of young people aged between 14 and 18.

The VET paths value all the methods and instruments capable of fostering a positive school-to-work transition, or practical laboratory training, training in simulated enterprises, curricular internships, organised school/work alternance and summer traineeships.

In particular, curricular traineeships are provided in integrated form with various purposes in the third year (internship of at least 120 hours out of 1066 total course hours) and in the fourth year, when there is an actual alternance between classroom and workplace training (from a minimum of 35% to a maximum of 50% of the 1066 hours of course) and aims to attain competences associated with a technical professional diploma, where enterprises directly participate in providing the training path.

The further development of work-based learning and school-to-work transition models has become a legislature objective for the 2013-2018 period and originated the first school/work policy Guidelines, approved by the provincial government on 30 May 2014.

These Guidelines define the first orientations for introducing, alongside the consolidated vocational education and training paths provided by the training institutions, a new equally stable and structured

offer of so-called “dual” apprenticeship paths by the same training institutions, using the resources of the Garanzia Giovani (Youth Guarantee) project for their pilot phase.

This new proposal primarily targets young people aged between 15 and 25 who drop out of training before attaining the final qualification, or who are more hands on, but who would find it hard to find a job without a qualification.

Apprenticeships for a diploma or qualification add on to, and do not replace, full-time training paths. It’s a new apprenticeship model compared to those designed to date in Trentino.

The different levels of governance

The parties involved in the process, at various levels, are:

- the Province, through its education department, which defines the organisation, specialisations, guidelines and resources;
- the Province, through its departments dealing with labour (various employment agencies, such as Servizio Lavoro, Agenzia del lavoro and others), which manage and handle the employment policy actions and interventions, collaborating with the education department to foster the school-to-work transition measures upon completion of the education and training paths;
- the Social Partners, institutionally represented in the provincial employment committee (Commissione Provinciale per l’Impiego), which represent the forum for agreeing and consulting on the governance guidelines and choices, and the provincial committee for vocational training (Comitato Provinciale per la Programmazione della Formazione Professionale), which validates the training offer;
- the employers’ associations and the enterprises that actively participate in surveying the labour needs and in developing, implementing and assessing the training processes;
- the training institutions, which implement the paths and account for the outcomes of the training actions.

Requirements for apprenticeship training

In order to access the apprenticeship programmes, a prospective apprentice needs to have completed his or her lower secondary school education and attended the first year of an upper secondary school (i.e. from 15 years of age onwards); no further pre-requisites are foreseen.

Learning process standards

The learning process standards, in respect of both full-time VET paths and apprenticeship paths (the guidelines of which have been adopted by the Provincial Government on 2 February 2015), refer to:

- the Educational, Cultural and Professional Profile of the student upon completion of the third and fourth year (as per the provincial regulation);
- the provincial Database of professional reference figures for qualification or diploma, harmonised with the national database;
- the Provincial Study Plans for 3- and 4-year paths or the 4th year of VET;
- the orientation guidelines referring to the learning outcomes foreseen by the provincial study Plans, aimed at supporting the training institutions in the development of the School Study Plans;
- the School Study Plan.

The paths last 3 years for attaining a professional qualification, or 4 years for attaining a professional diploma. Training consists of 460 hours per year, based on the provincial study plans for VET paths, and is broken down as follows:

- 200 hours for basic upskilling (languages, mathematics, science, technology, history, social and economic studies);
- 260 hours for technical/professional upskilling, of which 100 hours of workplace training.

This arrangement will be overhauled consistently with the new provisions introduced by the recent national reform of apprenticeship.

The length of the training may be reduced based on the number of (cultural and professional) credits recognised in connection with previous educational, training and working paths, resulting in a reduction of the school or workplace training period. The assessment of the credits is made by the training school in which the apprentice enrols.

The length of apprenticeship training for young people already holding a professional qualification and wishing to attain a professional diploma is 460 hours per year, organised as mentioned above.

The skills acquired, based on the outcomes of the apprenticeship training path (at the workplace and at school) are also recognised in view of a continuation of the studies or adult education programmes. The path design is modular and flexible, based on training units defined by competences/skills/knowledge and general contents.

The training/apprenticeship process

Training facilities are fully responsible for the entire training process and partner with companies to implement individual training projects organised by contents, timeframes, calendar and procedures.
In particular, training facilities:

- independently liaise with the companies desiring to take on apprentices;
- work in partnership with companies to define the individual training plans, which are then signed by both of them and by the apprentice;
- guarantees consistency of the individual training plan with the professional profile of the relevant professional qualification/diploma and with the corresponding provincial study plan;
- is responsible for recognising and assigning any prior training/work credits;
- implements the apprenticeship paths within its VET offer or as part of a network with other facilities;
- promotes the apprenticeship paths for attaining professional qualifications/diplomas;
- provides guidance to its students according to their characteristics and aspirations and analyses the requests received from the labour market;
- in the programming of the school training activities, it takes into account the company organisation and its sector of reference;
- upon completion of the path, it documents, even for assessment purposes, the operational competences and skills built up by the apprentices in the various contexts, with the systematic collaboration of the company in all training stages.

An important role is played by the tutoring activities during the training process. Each apprentice is assigned a tutor, by both the school and the company.

The school tutor provides individual mentoring, shadowing, assistance and guidance during the learning process, throughout the length of the training, to ensure that it is properly provided, with the possibility to adopt suitable learning strategies and methods based on the dual path, with the training provided by both the company and the school.

The tutoring activities by the training facility aim to:

- promote the success of the student-apprentice training;
- ensure a constant link with the workplace tutor and the workplace environment;
- monitor the apprentice's development, at school and at the workplace, based on his or her individual training plan;
- ensure the integration between classroom learning and workplace training, in collaboration with the workplace tutor;
- acquire all the assessment elements.

Tutoring at the workplace is provided by the workplace tutor, who must be adequately trained and skilled and who is appointed by the company to mentor the apprentice at the workplace and assess the competences and skills attained by the apprentice at work, according to the criteria agreed with the school tutor.

The workplace tutor must foster the apprentice's integration in the workplace environment and the transfer of the necessary skills needed for the job; he/she shadows and assists the apprentice during the workplace training, ensuring integration with the classroom work. The workplace tutor may avail himself/herself of the training measures granted by the document concerning labour policy provisions.

Poland

Poland has no specific laws governing apprenticeship training, and the sector is still developing and undergoing changes. Many variations are being made, mainly along the following lines:

- Development of cooperation between individual school institutions and the enterprises;
- Implementation of a juridical foundation governing relations between schools and enterprises, that allows to set up the necessary programmes for financing practical workplace training;
- Institution of a National Fund for Vocational Training and Lifelong Learning.

In Poland, work-based learning is placed within the context of vocational training according to four different models:

- apprenticeship, via which young people aged 16 to 18 spend most of their time in acquiring skills within the companies (that are mainly craft enterprises), based on a contract signed by the company and the apprentice. Classroom learning occurs twice a week (general and professional theory). This model is accessible after completing basic professional schools (about 61% of these students are apprentices/young workers);
- alternance training, via which vocational training occurs both in school and at the workplace. The school director signs a contract with the company for the performance of the traineeship, while the students do not sign a contract personally and they do not receive any remuneration. In this case, practical activity cannot be less than 50% (in technical upper secondary and "post-

secondary non-tertiary" schools) or less than 60% (in basic professional schools) of the time dedicated to vocational training;
- on-the-job training, mandatory for all technical and post-secondary occupations, having all of the features of a job;
- practical work integrated into the basic school programmes, as laboratory and workshop activities performed in contexts that are as close as possible to reality.

More specifically, apprenticeship must meet the following two requisites: the student must have completed the lower secondary school level and must be not over 16 years of age.

The young apprentice may have one of two different legal statuses:

- be at the same time a young worker and a student in a professional school; in this case, the Labour Code and the education system law are applied as necessary;
- more simply, be a young worker learning the theoretical aspects in a non-scholastic training programme; in this case, only the Labour Code is applied. This status is less common, concerning only 9% of young workers.

Since 2012, a new curriculum has been added to the vocational training system that defines in detail the common learning and teaching objectives, as well as the results expected for all occupations, and those specific for each occupation.

In secondary level technical schools, dual training is not envisaged by the law currently in force, that instead imposes that general education account for 62% of all education, while the remaining 38% is taken up by theoretical and practical vocational training. The individual scholastic institutions are starting to introduce forms of apprenticeship that, according to the occupation, ranges from 2 to 8 weeks within the entire educational cycle.

The different levels of governance

The Polish training system is strongly centralised. The policies regarding the secondary school level are formulated by the Ministry of National Education, in collaboration with the Ministry of Culture and Arts, the Ministry of Agriculture, the Ministry of the Environment and the Ministry of Justice.

The Polish professional system is regulated at three levels: national (Ministries), partially regional (school superintendency, mainly as regards pedagogical supervision) and district authorities.

The social partners (Chambers of Crafts, Trade Associations) are allowed to provide opinions on changes to be made in vocational training.

Since 2012, changes have been made in order to further develop cooperation between schools and enterprises.

The school government authorities that organise practical training activities outside the school cover all of the relating direct and indirect expenses, reimbursing the expenditure by external bodies.

Requirements for apprenticeship training

The prerequisite for apprenticeship training is the completion of the basic secondary school level and an age under 16 years.

Learning process standards

The learning process standards are defined via various elements: a system of external examinations for qualification, the pedagogical supervision system and the curricular framework of vocational training.
As regards qualification exams, they consist in a theoretical and a practical part that are the same in the whole country. They are carried out externally by a dedicated organism, the Central Examination Board, that reports to the Ministry of Education.
The new basic curriculum for vocational training, developed by the National VET Support Centre and implemented in 2012, includes the learning and teaching objectives and the outcomes expected in terms of knowledge, professional skills, personal and social skills required for the occupations or qualifications identified within the professions.
The expected outcomes include both the knowledge common to all types of occupation and that specific for each area.
The curriculum defines the conditions necessary for training, such as, for example, teaching props and equipment and the minimum number of vocational training hours.
There has also been the definition of a set of national standards for professional skills in 2012-2013, developed by the Centre for the Development of Human Resources, under the supervision of the Ministry of Labour and of Social Policies. This has led to the implementation of the qualifications for 253 occupations already developed in the last few years, with a body of another 300 qualifications functional to labour market demand.
The standard of professional skills includes a set of competences, knowledge and social abilities typical of specific occupations, in accordance with labour market demand.

The training/apprenticeship process

The practical training activity is defined within an order of the Ministry of Public Education of 2010 (2010, No. 244, item 1626). The order contains the conditions and modalities by which practical training is performed in school laboratories, in classrooms, in lifelong education institutions, at workplaces and in individual farms.
The practical activities are organised so as to allow acquisition of the professional skills required for carrying out a specific profession. The training curriculum defines the field of application of the competences and knowledge acquired by the students in the lessons and practical traineeships, the number of hours spent in class and in the traineeship.
The agreement concerning the performance of training at the company's premises is signed between the school director and the company, and specifies every aspect of the activities that will be carried out by the student or group of students within the company, the rights and obligations of the signing parties and the subdivision of costs.
The school:

- superintends the implementation of the practical training programme;
- collaborates with the body that takes in the students;
- takes out accident insurance coverage for the students;
- approves the instructors in charge of practical training and the traineeship supervisors;
- refunds the students' expenses for transfer to the workplace where the traineeship is being carried out;
- ensures the coverage of all the risks students attending practical vocational training outside school premises may incur;

The Bodies that grant the students or young workers access to practical professional training:

- provide all that is necessary for the performance of the activities (tools, footwear, clothes, personal protection equipment, individual workstations, etc.);
- ensure free meals and beverages and access to sanitary facilities and common rooms;
- appoint teachers, practical vocational education instructors and apprenticeship managers, and supervises practical professional training;
- in the event of an accident occurring during the activity, oversee the necessary documentation;
- cooperate with the school or the employer;
- inform the school or employer about any violation of labour regulations by the student or young worker.

Practical education costs are entirely charged to the central education system.

The financial resources are allotted to refunding the following employers' expenses:

- compensation paid to practical vocational training instructors;
- training allowance paid to practical vocational training teachers;
- costs for clothes, footwear and personal protection equipment needed for carrying out the work and the training.

3.4 The monitoring and assessment system

Austria

The final apprenticeship exam consists in a practical and a theoretical part.

The end-of-apprenticeship exam establishes whether the candidate has acquired the ability and skills required for the corresponding apprenticeship occupation and whether he/she is capable of adequately performing in person the specific activities of the occupation.

Germany

At the end of the path, the students receive a certification by the school. In addition to this they sit a final exam that aims at verifying whether the candidate has acquired the professional skills required by the corresponding occupation and whether he/she is capable of adequately performing the specific activities of the occupation.

The final apprenticeship exam consists of the following elements:

- Theoretical exam;
- Report on a task pertaining to the teaching subject matter performed in the company providing the training;
- Presentation of the report and final exam.

Friuli-Venezia Giulia

All knowledge acquired within the regional education and vocational training offering is the subject of a final certificate stating the competence levels acquired.

The regional EVET Index collects the description of the national job profiles – aimed at obtaining either the qualification or the professional diploma – grouped into 7 professional areas and organised in regional Profiles. Each profile corresponds to a professional qualification or diploma obtained at the completion of a three-year or four-year path.

The Index defines:

- the training standards, organised in competences, skills and know-how, as established by national and European standards;
- the professional standards that are the basis for the assessment and definition of the expected outcomes recognised by the local labour market associated to each profile. They are organised in performances and key components.

Student assessment is developed along the following lines:

- an assessment of the training, i.e. of the know-how and skills acquired during the training process and to allow the activation of recovery, in-depth analysis and motivational support processes;
- a summative assessment, to verify the student's capacity to apply the acquired competences to a real or simulated work scenario;
- an assessment of the student's individual path, via the evidence of the stages of his/her learning process;
- the company's assessment of the traineeship.

An exam is given at the end of each year, which at the end of third and the fourth years leads to a regional qualification certificate or to the professional diploma.

The final qualification and diploma exams include a situational test, an individual test and a multidisciplinary interview.

Autonomous Province of Bolzano

The Three-year Qualification or the Four-year Diploma are obtained by passing a final exam that is accessed as a result of the positive evaluation of the student's vocational training path and, where envisaged, of formal training attended at learning locations outside the school.

Apprentices can sit the final exam only if they have completed the apprenticeship period or that they complete it within the month set for the exam.

The final exam is of theoretical/practical type.

The exam programmes are approved by the Provincial Council subject to the opinion of the social partners; the social partners are represented within the panels judging the candidates.

Autonomous Province of Trento

The assessment system envisaged for apprentices regards both the competences and knowledge acquired along the training path and the exam sat for achieving the professional qualification or diploma.

Assessment of learning outcomes, based on classroom and workplace evaluations, is the responsibility of the Training Institution the apprentice is enrolled with. During the training course, the apprentice is systematically assessed with regard to the competences/skills/knowledge acquired during classroom lessons and workplace training in the enterprise. As regards training at the Training Institution, the person in charge of assessment is the teacher of the Training Unit. As regards workplace training, it is the company tutor who is in charge of assessment and who shares the assessment proposal with the teacher of the school implementing the apprenticeship.

The tools and procedures for assessment are those used for the Vocational Education and Training paths (personal datasheet, portfolio, company register, diary) adjusted to the apprentice's training course.

The apprentice is admitted to the exam via the same procedures envisaged for the students of the full-time Vocational Education and Training path.

The assessment score required for admission to the exam is expressed in points: minimum 30 and maximum 55 points out of 100.

Once admitted, the apprentice sits the same final exam envisaged for full-time students. The point of the exam is to evaluate whether the student has achieved the level of vocational competences, skills and knowledge envisaged in the profile, which corresponds to the professional figure resulting from the VET paths. Specific examination sessions may also be set up for apprenticeship paths.

The qualification exam consists of:

- a practical test (maximum 30 points out of 100)
- an oral exam (maximum 15 points out of 100)

The diploma exam (maximum overall score: 45/100) envisages:

- a written-graphic test regarding a case study to which multi-subject theoretical questions are connected (maximum score: 22 points);
- a foreign language test (maximum score: 8 points) that stands as credit when the student has a language certification at least equivalent to level B1;
- an oral exam (maximum score: 15 points).

The exam is passed with a minimum score of 60/100.

Once he/she has passed the qualification or diploma exam, the apprentice is granted the operator qualification certificate and/or the professional technician diploma.

Should the apprentice not be admitted to or not pass the final exam within the terms envisaged in the individual training plan, the employer may continue the training within the professional apprenticeship programme until the apprentice does achieve the qualification and/or the diploma.

In any case, frequency of the apprenticeship for qualification is valid for the performance of the right/duty to education and training.

Poland

The procedures for organising and carrying out the exams are envisaged by the relevant orders of the Ministry of Public Education. The exams consist of a theoretical and a practical part. Both the theoretical and the practical parts are carried out in the form of tests. The practical part consists in the execution of a task.

The aim of the assessment is to establish which competences, as described in the new basic curriculum, the students have achieved, starting from the descriptors of the social/personal competences, skills and knowledge envisaged for each professional figure.

The definition of the entire examination process, i.e. the development of the tests and the achievement of common standards, is a complex issue. The identification of the tests and of the level of common standards should also envisage the involvement of employers or of their representatives who should participate in the process, in order to ensure the compatibility of the exam tasks with labour market needs. This cooperation, however, is poor. Moreover, examiners should also include employer representatives and employers should allow that the exams, designed to evaluate the acquisition of competences, be held at the workplace. The issue regarding a workplace location available for holding the exams is a more wide-reaching one.

The law regulations that have amended the vocational training system include provisions that allow the employers' representatives to act as examiners or as authors of the examination works, and allow for exams to be held at the workplace.

3.5 The opportunities for inclusion

Austria

In Austrian legislation, the 'IBA' (IVET- Integrative VET) is a flexible training model for disadvantaged people based on a work project conducted with the social partners aimed at qualifying and integrating these people into the world of employment.

The IBA is designed for persons:

- with special educational needs, linking with the curricula already attended in mandatory school;
- who did not achieve qualification at the end of the lower secondary school;
- with disabilities, as defined in the Regional Act about persons with disabilities (Landesbehindertengesetz);
- who are to be employed within specific orientation measures, or whose work placement at the end of another apprenticeship has failed due to reasons related to the person itself.

There are two possible IBA approaches: 1) extension of the apprenticeship period by one year or, in exceptional cases, two years, with part-time attendance in school, ending with a regular final exam; 2) acquisition of a partial qualification in one or more apprenticeship paths, for a period of two or three years, via a totally personalised path, that where possible is concluded with an individual exam.

Other inclusion facilitation measures are:

- *supra-company apprenticeship* (ÜBA), a training system that provides for attendance of an apprenticeship centre financed by the Public Employment Service (AMS) by those who have completed mandatory schooling but are not directly placed in a secondary school path or have failed to land an apprenticeship in a company;
- *extension* of the chance to sit the apprenticeship qualification exam to those who have not completed a formal apprenticeship but wish to obtain qualification, subject to being older than 18 years of age and to being able to demonstrate that they have acquired the competences requested for the apprenticeship profile in question.

In late December 2013, a total of 6,152 apprentices had been inserted in an integrative IVET programme, 411 more than in the previous year. Since the implementation, in 2003, of the Integrative VET (or IBA, in German), the number of young people has continued to increase. Overall, the vast majority of IBA apprentices (61%) of 2013 are training in enterprises. In 2013, about 76% of IBA apprentices are completing and integrative IVET in the form of an extension of the apprenticeship period, and about 24% in the form of a partial qualification.

The number of participants in supra-company training programmes commissioned by the Public Employment Service (AMS) in the academic year 2013-2014 amounted to 11,329. These include 9,183 participants in supra-company apprenticeships (ÜBA in German) based on article 30b of the Vocational Training Act (BAG), and 2,332 participants in an (inclusive) integrative IVET programme commissioned by the Austrian Public Employment Service (AMS).

Germany

The Federal Government promotes the integration of people with disabilities into the world of labour.

According to provisional data, an annual average of 47,264 persons with disabilities have been inserted in vocational training measures as part of employment promotion schemes with initial integration into an occupation and with a professional qualification (50,900 in 2010), as per the 2011 goal. Another 15,215 young people (2010) were inserted in pre-vocational training measures. An annual average of 20,446 persons (2010) were funded in 2011 to take part in admission procedures and in vocational training schemes in workshops designed for persons with disabilities (WfbM). These were people who, due to their disability, were not or not yet able to work in accordance with the demands of the labour market.

The TUFP and the Trade and Crafts Code establish that persons with disabilities have the right to be trained to become recognised professionals just as much as persons without disabilities. For people whose kind or degree of disability makes vocational training in a recognised occupation impossible, the relevant authorities must develop training regulations based on recognised professional profiles.

Based on these regulations, 11,203 training contracts were concluded in 2011 and 9,454 in 2013 (national data).

In June 2011, the Federal Government adopted a national action plan aimed at activating the UN convention regarding persons with disabilities, so as to further increase the involvement of people with disabilities into society.

Friuli-Venezia Giulia

Vocational training in Friuli-Venezia Giulia is oriented towards the integration of persons with special educational needs, socially disadvantaged people or people with negative training experience (drop-outs from training or from school, etc.).

In the event of special educational needs, training activities are carried out taking into consideration the specific learning disabilities (dyslexia, dysgraphia, dyscalculia, etc.).

As regards exams, compensatory or dispensatory procedures may be adopted, adjusting the exam to the young persons' specific competences/disabilities; in any case, the final qualification is achieved only if the candidate completes all of the exams, based on the verification of all of the profile/diploma standards. Should the candidate fail to obtain the final qualification, he/she is issued a certificate for the competences achieved at the end of the path.

The training system is organised in such a way as to allow for the realisation of modular courses and of personalised courses.

The aim of these courses is to:

- favour scholastic success;
- foster continuity in the learning process even after the end of the three years of the course;
- contrast dropping-out from school and facilitate studying in particular living conditions.

Modular and personalised courses can be of two kinds:

- extra-curricular integration pathways, to integrate the 3-year path with the achievement of additional competences, intended for those who want to merge into a 5-year technical or vocational education path, or to support educational success in reaching qualification in difficult circumstances;
- personalised pathways functional to the different learning styles and rhythms, intended for those who want to return to training after dropping out or for those who have completed

obligatory schooling without obtaining the final qualification and are older than 16 years of age. For the latter, the courses can be activated with the agreement of the Permanent Local Centres; if the young person is younger than 16, the agreement must be between the Region and the Regional Education Office.

These paths envisage an initial tutoring, functional to the construction of a path that takes into account the youth's style/condition of the young person involved and that defines the educational, cultural and professional goals he/she intends to achieve; following which, the path is designed in a modular manner in accordance with the VET offer.

At the end of the path, the young person obtains path qualification and, should he/she not have lower secondary school qualification, he/she can obtain the missing qualification during attendance of the training path, in agreement with the relevant facility.

Autonomous Province of Bolzano

The South Tyrolean training system envisages and promotes the inclusion of students with special educational needs within the schools. The internship and traineeship system also envisages special measures for ensuring the inclusion of students with some types of disability.

More specifically, as regards apprenticeship training, financial concessions are granted to companies willing to train apprentices with disabilities or living in socially disadvantaged conditions (no specific concessions are envisaged as regards the "gender gap" or the inclusion of apprentices of non-Italian nationality); the contributions are granted by the Provincial Authorities based on 6-month periods of apprenticeship.

For every apprentice with a disability, the company has a right to contributions, assigned when the disability causes a reduction in the apprentice's working capacities (2000 € for each 6-month period of apprenticeship).

Concessions are also envisaged for enterprises that train apprentices "assisted by a public assistance office", namely Social services, Juvenile court, Mental hygiene service, etc. (with a 2000 € contribution for the first two 6-month periods and 1000 € for every subsequent 6-month period).

In order to contrast the drop-out phenomenon, for example, the Vocational Training Area in Italian language organises information and orientation consulting activities for scholastically disadvantaged young people aged 14 to 18. In particular, the system also envisages the possibility of attending, within a specific project, corporate orientation and training internships lasting 2-3 months, under the guidance of a tutor.

Workplace traineeships are also envisaged for the orientation and training of socially disadvantaged people (former drug addicts, former alcoholics, former prison inmates, etc.): these are internships (128 in 2013) held at companies or in social cooperatives, monitored by a tutor and lasting a maximum of 500 hours.

Orientation and training internships are activated for the same purposes (in addition to specific consulting and information paths) for people undergoing occupational difficulties, that are supported in their search for a new job via the transmission of suitable tools (writing up a curriculum vitae, preparation of selection interviews, etc.) and via contacts with interested enterprises.

Autonomous Province of Trento

Since a dual system is not structurally in place yet, it is impossible to draw conclusions regarding the special educational needs in connection with apprenticeship. The following information regards the Guidelines approved in 2012 by the Provincial Council for provincial vocational education and training (VET) paths.

The Regulations of the Autonomous Province of Trento acknowledges the full right to education and training of students with special educational needs (BES), guaranteeing their integration and inclusion starting from kindergarten up to higher education.

As regards upper secondary school and vocational education and training, in the case of a simplified path in one or more disciplines for the achievement of the minimal objectives envisaged assessment refers to the classroom path; in the case of a differentiated path in the learning of one or more disciplines, an assessment opinion will be expressed that takes into account the initial knowledge and the path actually followed, and this must be explicitly mentioned in the corresponding assessment document. In the case of temporary partial or total exemption from learning one or more disciplines, the indication “exonerated” or “not envisaged in the PEI (Personalised Education Plan)” can be used in the assessment card, with the indication of the period.

It is possible to set up and create educational and vocational training projects for students holding the certificate envisaged by Law No. 104/1992 up until they have turned 20 years of age. In agreement with the Department of Knowledge, it is also possible to set up vocational education and training paths intended for workplace insertion for students up until they are 25 years old.

Within the context of upper secondary school and vocational education and training, several regulations must be observed as concerns legal validation of the qualification for students with certified disabilities: in upper secondary school, students with simplified PEI sit the same tests of the other students, or equivalent tests are envisaged with longer time allotted for test completion. The diploma is issued when the tests are passed.

Within the context of vocational education and training, the same tests as those envisaged for the other students are applied, possibly with longer completion times, but no equivalent tests. Passing these tests leads to qualification. As regards students with differentiated PEI, the degree of achievement of the expected results is assessed, via differentiated tests. In this case, specific skill certifications are issued, but not the qualification and/or diploma.

It is worth noticing that in upper secondary school and in vocational education and training, should a student with differentiated PEI achieve a level of preparation compatible with the essential level of the class attended, the student can be admitted to the regular path. At the time of yearly assessment, the class committee shall evaluate the outcomes and ratify admission to the next class level with full legal value. In this case, the assessment card shall not bear any reference to the PEI and at the end of the school path the student will be entitled to sit the qualification and State exams.

Poland

The education of pupils having special educational needs is an integral part of the Polish Education System. Special education is not imparted in separate classrooms but rather is integrated into the mainstream school paths (Ministry of National Education, 2010; 2012 amendments). Pupils can attend 3 different types of schools:

- mainstream schools (1-2 students with special educational needs in a class of maximum 30 pupils; the specialist activities are performed in counselling centres);
- integration schools (with a 1:4 ratio, with a maximum of 20 children and with the support of a special educator, according to the type of disability);
- special schools for serious and severe intellectual disabilities and for multiple disabilities.

Educators believe that the success of integration depends on personal factors, such as physical and/or emotional development levels, psychological resilience levels, cognitive ability and motivation.

The pupils attending special schools are assessed in the course of the year based on the same rules applied in mainstream schools. They therefore include descriptive evaluations and the assignment of marks. An exception regards students with serious disabilities who are given only a descriptive evaluation at all school levels.

The tests and exams (in primary and lower secondary schools, in qualification schools and in professional schools) are adjusted to the students' physical, language and writing skills; where necessary, the exam is conducted in a separate class, at home or at the hospital. Students with multiple disabilities may be qualified with exemption from sitting the exam or, in the event of seriously ill students, can be totally exempted.

All students with special educational needs, with the exception of those with serious intellectual disabilities, receive school certification that is identical to that of the other students. Those with serious disabilities receive a descriptive evaluation of their achievements.

Students qualified at professional schools receive a qualification certification for the specific occupation they have been trained for.

3.6 The role of the social partners

Austria

In Austria, the organisation of relations between the various social partners occurs at three different levels of complexity: the federal level, the regional and provincial level and the level of the schools and enterprises that provide training.

The federal level involves the Ministry of the Economy, Family and Youth (BMWFJ), the Ministry of Education, Arts and Culture and the Federal Advisory Board on Apprenticeship (BBAB).

The BMWFJ issues the regulations regarding practical training, while the Ministry of Education defines the curricular framework and partly funds professional schools.

The Federal BBAB, an organism that groups all the representatives of the social partners and the experts in the field, decides and regulates the new forms of apprenticeship.

At regional level, the economic offices of the Chambers of Commerce are the first instance authorities for IVET; they examine the requirements of the enterprises, implement apprenticeship exams and provide consulting services.

At this same level, the Regional Advisory Board on Apprenticeship (LBAB), consisting of the representatives of the social partners, collect the opinions of the experts.

The Regional School Inspectorate implements the federal objectives and carries out inspections in the schools.

The Provincial Government finances and equips part-time professional schools.

The enterprises allow the performance of the practical activities in the apprenticeship via authorised trainers.

Part-time professional schools provide general and theoretical training and additional practical training.

Germany

In Germany, the cooperation between the government and the social partners is a key element of the dual system standard. The entrepreneurs and the trade unions jointly formulate the standard occupational requisites. In the practice of vocational training, each cooperative action is based on consent, there are no regulations concerning initial or subsequent vocational training that can be issued against the declared will of one or two of the social partners involved. This means that the initiatives for the reform of vocational training either come from the social partners themselves or must have their approval.

The platform for this process envisages that the BIBB (Federal Institute for Vocational Education and Training) play the role of coordinator and moderator. Normally, the initiative for updating the content or structure of a professional figure or of developing an entirely new occupational profile comes from the industrialists' association, the entrepreneurial organisations, the trade unions of the Federal Institute for IFP.

After consultation with all the parties involved, the competent Federal Ministry decides in consultation with the governments of the Länder whether to proceed, since they are responsible for the regulations and the curricula of the part-time professional schools.

Quite often, the BIBB expresses an opinion as a consultant or, especially in the case of wide-ranging revisions, conducts a research project before the ministry adopts a decision.

Friuli-Venezia Giulia

In Friuli, the realisation of the various types of internship and apprenticeship sees the intervention of actors whose competences can be regulated, according to the type of training and users, at national, regional and provincial level.

At national level, the following go into action:

- The Ministry of Labour and of Social Policies, that promotes ministerial internship programmes and experimentation;
- The public and private Upper Secondary school institutions, starting from academic year 2014-2015;
- The High Technical Training institutions (Decree of the President of the Council of Ministers of 2008) with offices registered at regional level;
- Employment Integration Services for people with disabilities (with reference to Law No. 41/1996 and Law No. 104/1992).

Only as regards the traineeships envisaged for the acquisition of university degrees, the Universities and Higher Training Institutes for Arts and Music also go into action.

At regional level:

- the Regional Orientation Structures (Regional Law No. 10/1980)
- the Bodies credited with the Region;
- the Labour Service of the Provinces;
- the Social Cooperatives (art. 1, §1, letter b, Law No. 381/1991).

The region regulates the 3-year and 4-year VET vocational training paths and defines:

- The objectives and methods of the internship period;
- The rights and duties of the parties involved in the training project;
- The activities that are to be carried out during the internship period and the methods for implementing it;
- The competences that should be acquired with reference to the framework of professional profiles defined at regional level.

The region incurs the cost for regional vocational training activities and delegates to specific Temporary Groupings (ATI) the creation of the regional training offer, especially as regards the issues linked to safety and accident prevention and to the acquisition of key European competences via a single catalogue of traineeship activities. The technical vocational part, as envisaged in recent new agreements, shall be managed entirely by the enterprises.

The region offers companies the optional chance to request the ATI support to sustain the preparation of individual training plans and to prepare and monitor the assessment of the training activities carried out at the company.

The FVG region also supports companies that request it in better organising workplace training for the activities envisaged by the new apprenticeship, but solely as regards the parts relating to the so-called ‘transversal training’ that is to be carried out outside the company for a maximum of 120 hours over a 3-year period.

The support actions regard the following sectors:

- preparation of the Individual Training Plan;
- educational programming and planning of training units;
- preparation of data for the assessment of the learning and support outcomes and the assessment and recognition of learning.

Each company can decide to use this service (or not, because it is optional) by requesting it when communicating the decision to hire the apprentice.

In addition to the services provided and financed by the region, companies are offered catalogues that can help organise their activity so as to implement the technical vocational part of the apprentice's training.

Autonomous Province of Bolzano

The laws assign to the Autonomous Province of Bolzano primary competence with regard to vocational and secondary training in apprenticeship and in general education.

As regards the vocational training offer within mandatory education schemes, vocational training belongs to the public sector (provincial professional schools). As for the adult training and tertiary training sectors, the system is of a mixed public/private kind, financed with provincial, national and community funds as well as by private entities.

In South Tyrol there are many private training bodies and lifelong learning agencies and organisations.

The social partners participate in the training activities by offering training through their own trade associations and via the committees governing the use of specific inter-professional funds.

Autonomous Province of Trento

The Autonomous Province of Trento has been operating for a long time now via activities and interventions aimed at favouring and promoting the connection between school and vocational training and labour systems, by directly involving the entrepreneurial associations and the enterprises and by favouring dual learning models, such as school-work alternance schemes and various types of traineeship. The figures of reference for the provincial vocational education and training paths, moreover, feature close ties with the needs expressed by the province's economic and productive context and are systematically updated and implemented based on local development strategies and on the needs and specificities of work environments, involving the social partners.

As regards the activation of apprenticeships for the achievement of professional qualifications and diplomas, specific protocols of understanding have been signed with the social partners for the recognition of the role of the training institutions in preparing the apprentices' individual training schemes, in agreement with the employer, and for the implementation of apprenticeships under seasonal work contracts.

Poland

In Poland, the role played by the central government in defining the curricula and in articulating the training processes is of fundamental importance, as already explained above.

Notwithstanding this, the cooperation between schools and enterprises is increasingly involving the latter in a process of development of vocational training curricula, especially as regards their practical training aspects.

The cooperation of the enterprises should also include, inter alia, the participation in school life, the organisation of theme visits and support of the scholastic technological infrastructures required for teaching.

With a view to developing cooperation between the parties, cooperation should concern the following subjects:

- company organisations,
- professional associations,
- local government/school government authorities,
- higher professional training institutes,
- the individual companies.

The company organisations and the individual companies should cooperate with schools, especially, in order to:

- define the contents of the curricula and develop the practical curricula for the vocational paths;
- training students and trainers in vocational training (transfer of new technological skills);
- define the exams for the confirmation of professional qualifications;
- suggest amendments to laws regarding vocational training.

3.7 The competences of trainers and teachers

Austria

In Austria, three different groups of part-time professional school teachers are defined:

- teachers in general topics and teachers in business economy;
- teachers in theoretical topics connected to employment;
- teachers of practical topics connected to employment.

The prerequisite for admission to courses aimed at obtaining professional school teacher diplomas in groups I and II is represented by the secondary school leaving certificate and by a vocational training diploma that guarantees access to tertiary education (state exam and diploma exam = Reife- und Diplomprüfung) granted by a vocational secondary school, an upper secondary school leaving certificate (state exam = Reifeprüfung) or a certificate that grants access to higher education (HE) to skilled workers and to 3- or 4-year full-time professional school diploma holders (Berufsreifeprüfung) and to the relevant training. To access group III candidates must hold a master artisan certificate pertaining to the qualification or something equivalent to it (such as the Reifeprüfung, Berufsreifeprüfung or Studienberechtigungsprüfung, for example, i.e. a qualification restricted to higher training studies). In addition to personal ability, candidates must have at least three years of pertaining professional practice to be admitted to higher training programmes.

Company trainers authorised to teach in apprenticeship schemes can either train the apprentices themselves or delegate the training task to company employees skilled in the study topic.

As regards the work as trainer, a technical/professional training corresponding to the respective apprenticeship, on the one hand, and proof of the knowledge and skills connected to vocational training pedagogy and to the pertaining laws, on the other, are requested. Such skills are assessed by examining the trainer. An alternative to the exam is the attendance of the 40-hour IVET trainer course. A set of training courses or exams (e.g.: a master artisan exam, or an industrial master college qualification, are considered equivalent to the trainer exam.

Germany

In Germany, training is provided by:

- two types of teachers of the various professional schools: teachers that have attended university in technical/specialist areas or in general education, and foremen or technicians that teach practical skills;
- trainers, qualified company employees holding a certified qualification in initial and lifelong vocational training.

In addition to these figures, the professional staff for students with disabilities also includes psychologists, physicians and social workers.

There are various types of learning facilitators, such as the counsellors of the Chambers of Commerce that tackle all the issues connected to practical activities in the company, and the orientation counsellors of the Federal Employment Agency.

Autonomous Province of Bolzano

In the Bolzano province, the path towards becoming school teachers envisages the following stages:

- The teacher is hired for the first time with a temporary job contract based on a ranking made up according to qualifications that change based on subject matter;
- The ranking is updated every year;
- The teachers teaching technical and laboratory topics must have two years of company experience in that specific activity.

When the teacher is assigned for the first time, the school activates an assessment process divided into two parts:

- in the case of teachers with university degrees, the actual qualification for teaching is assessed after one year;
- in the case of technical and laboratory teachers, the qualification to teach is assessed after two years.

The assessment measures the person's actual skills at work, and the skills observed are:

- Technical and disciplinary skills
- Methodological and teaching skills
- Educational skills
- Communication and collaboration skills.

Once the teacher has obtained his/her qualification, he/she holds all of the requisites for obtaining a permanent job contract.

The requisites for becoming *corporate apprentice trainers*, i.e. apprentice trainers in a company, are of 2 types:

- professional access requirements;
- pedagogical-professional access requirements.

The potential trainer must hold at least one of the following professional requirements:

- the end of apprenticeship certificate, the relevant professional school leaving certificate and a subsequent professional experience of at least 18 months in the same profession of the apprenticeship;
- at least a 3-year professional qualification and subsequent experience of at least 24 months in the same profession of the apprenticeship;
- qualification as professional master in the same profession of the apprenticeship;
- diploma from a 5-year upper secondary school, an upper secondary technical institute or a university, relating to the specific profession and subsequent professional experience of at least 18 months in the same profession of the apprenticeship;
- at least 6 years of experience in the specific profession.

As regards the requisites for pedagogical-professional access, they must be recognised by the provincial authorities via one of the following courses/exams:

- basic course for apprentice trainers lasting 16 hours, provided by the provincial authorities;
- certification relating to the exam in professional pedagogy for the training of vocational teachers;
- certification relating to the (legally recognised) training course for apprentice trainers achieved in Italy or abroad;
- certificate of attendance at a course of at least 16 hours in personnel management.

As regards the requisites for corporate access:

- the trainer must be present on the apprentice's training place for at least 75% of the working time;
- the company must provide its own technical equipment and organization;
- the company must be registered with the trade companies' register under the activity corresponding to the occupation for which it is providing training;
- in the case of an occupation implying mandatory registration with a professional association, the owner of the company must be registered in that association.

The meeting of all these standard requirements must be certified by the company via self-certification, to be submitted by the company to the apprenticeship office of the Bolzano province prior to hiring the 1st apprentice.

Autonomous Province of Trento

The launching of new paths is based on the teachers and company experts already working in the VET system. Within the training institution, a training tutor is identified. Said figure must possess specific training and skills. In the enterprise, the company tutor is identified, appointed by the company to oversee the apprentice in his/her working activities and workplace training. This tutor must possess specific training and skills and, if necessary, can avail him/herself of the training opportunities foreseen by the employment policy measures.

In order to launch the dual system, joint training interventions are also envisaged for school and company trainers.

Poland

In Poland, practical education in schools is managed by teachers, while practical education at the workplace and in individual farms may also be followed by practical vocational training instructors.

Vocational training instructors must be in possession of:

- a degree granted by a secondary technical school;
- a diploma granted by a secondary professional school and the qualification as a skilled worker;
- an academic degree and at least three years of working experience in the profession.

3.8 Limits, Opportunities and challenges

Austria

The success of the vocational training system in Austria has generated low youth unemployment rates and international recognition of Austrian skilled workers.

The Law on Vocation Training of 2011 sustains vocational orientation, counselling, assistance and training support actions for young people as well as for companies, even in those sectors in which the number of companies providing training are low.

The joint objective of all the institutions involved in apprenticeship training is the development and maintenance of the attractiveness of VET, which in the last fifteen years has led to:

- the updating or ex novo creation of over two thirds of all apprenticeship paths (including in occupations with the highest apprenticeship percentages);
- the creation of nine modular apprenticeship schemes (20,000 apprentices training throughout Austria in 2012 alone);
- the increase in IVET apprentices (from 1,114 in 2004 to 5,507 in 2011) and the enrolment of a large number of young people in supra-company training (10,400 in the 2010-2011 period alone);
- free access to the State exam Berufsreifeprüfung (Berufsmatura) is a milestone of educational policy for improving the attractiveness of apprenticeship and increasing the permeability of Austria's education system (9,484 qualified in 2011 alone).

The subsidies for apprenticeship placements translate into a substantial reduction in costs for the companies and are therefore a clear sign of appreciation given by the companies providing training.

The institution of a Central Office for the final apprenticeship exam has guaranteed quality and uniform standards throughout Austria.

To date, the most important challenges concern:

- the drop in population, leading to a decline in the number of newly employed persons together with an increase in retirees; this is causing a strong deficiency in qualified work force, already perceived in the labour market. To contrast this tendency it is necessary to increase the number of qualified workers with immigrant background within the apprenticeship training (in the 2010-2011 period, the proportion of young people of non-German native tongue in schools preceding professional school level was still 24.6 %, while their presence in part-time professional schools dropped to 9.4 %);
- improved vocational consulting and orientation in the seventh, eighth and ninth years and introduction of adequate measures in the first years; a step in the right direction has been taken with the introduction of the mandatory 'vocational orientation' subject in the new secondary school system in Autumn 2012;
- training and acquisition of qualifications for adults; the achievement of this objective should involve the adaptation of the apprenticeship system to this specific target;
- the creation of a national framework of qualifications (NQF);
- the definition in terms of competence of the outcomes of learning and of the regulations concerning training and curricula;
- the reinforcement of vocational training at tertiary level.

Germany

The dual system in Germany benefits all of the stakeholders involved.

The *trainees* acquire the skills required to find a job and an adequate retribution. Unlike in full-time professional schools, trainees are entitled to indemnity during training and train in workplaces corresponding to the actual technological progress as regards equipment, machinery and company processes.

It is important that apprentices learn to identify with the company, the corporate culture and their occupation, all aspects that it is almost impossible to acquire in the classroom.

Once training for the occupation is completed, the qualified candidates gain access to various employment and training opportunities.

The *employers*, on the other hand, acquire highly professional employees capable of meeting the company's requirements without extra introductory time, as would instead be necessary when hiring external personnel. This means employers save on hiring and requalification costs.

The subjects qualified with the dual system improve both the productivity and the quality of the services and products. In the long term, training of apprentices leads to very high returns on the capital invested.

The dual system allows entrepreneurs to participate in the development of corporate standards and to define the content of workplace training themselves.

Last but not least, it should be noted that the dual system falls under the corporate social responsibility (CSR).

The *Government,* by investing in a sector that has positive outcomes for the social system and for the economy:

- meets the domestic market's demand for skilled workers with the help of entrepreneurs;
- has a good quality dual system capable of being updated in function of technological progress;
- has a tool for reinforcing the formalisation of the economy via the regulation of workplace training;
- socially and economically integrates the younger section of the population.

The main challenges for vocational training in Germany are related to the changes in the economic system and in population figures.

The 2008 Group Report for Education stresses the fact that the transition system has expanded for years and now supports the weight of preparing students with low qualification levels – especially young people with an immigrant background – for the VET.

In 2006, the "Vocational training Innovation Association" (Innovationskreis Berufliche Bildung, IKBB) and the "Lifelong Education and Training Innovation Association" (Innovationskreis Weiterbildung, IKWB) identified the main challenges to innovation of VET in Germany and therefore set down the political priorities for the VET.

These concern:

- the modernisation and transition towards a more flexible organization of the VET;
- improvement in the so-called "transition management";
- improvement in the permeability of and integration among the various sectors and among the educational subsystems;

- the growth in attractiveness of vocational training via permeability and interconnection with other educational areas, such as universities for example;
- the growth in training opportunities via initiatives designed to improve the regional training structures and to increase the participation of enterprises of immigrants in training activities;
- the optimisation and improvement of transition management by means of a further development of the actions aimed at promoting disadvantaged classes of people and at creating the tools for qualifying young adults who do not have diplomas or training certificates;
- a better European dimension via the use of the Europass tools that support the development of a National Qualifications Framework.

Challenges

Besides the advantages of the dual system, there are also a few challenges to be met.
The number of applicants not enrolled in the dual system is growing. In 2012, there were 15,600 non-enrolled applicants, 21,000 in 2013. On the other hand, the number of companies participating in alternance training has dropped from 24% in 2009 to 21.3% in 2013.
Due to globalisation and to the speed of change connected to technological innovation, the demand for workplace training is increasing. This challenge also regards the knowledge of foreign languages, project management, computer science skills and so on.
The situation is such that entrepreneurs find it difficult to find trainees competent enough for the dual system. The requirements in terms of skills, knowledge and predisposition required for access alternance training are increasing. The new slogan is “trainability”, intended as a preliminary condition to the dual system.
In 2009 there were 17,300 training vacancies, a number that rose to 33,500 in 2013. The number of contracts recently closed had fallen in 2013 by 3.7% compared to the same parameter in 2012.
The following issues must be addressed:

- improve the passage from the mandatory general education system to the dual system and to upper secondary education;
- further develop orientation and shadowing;
- prevent dropping out from the dual system;
- reduce the scarcity of qualified personnel.

Friuli-Venezia Giulia

In Friuli-Venezia Giulia, the dual system is not yet codified and established like it is in other countries. The two training models connected to work, apprenticeship and internship, although quite similar to a dual model, are not adequately linked to the curricula of the Education System and are often relegated to the vocational system. This is expressed in the system’s ability to perform an adequate action of general orientation and employment of young people.

The FVG Region is working to shorten the distance between the two models, boosting orientation actions using specific tools (such as the GOandLEARN catalogue), and via the promotion of these tools among operators and in schools.

Despite this, the limitation consisting in not yet having developed a good dual system and good dialogue between the education sector and the professional sector still remains. Apprenticeships and internships are tools that can be used after school and when about to enter the world of employment, and not tools that can promote the alternance between school and work, with the exception of the

VET curricular training internships that are only a small part of the Education System's offering, however.

Something is moving thanks to the new policies concerning international mobility that the region has started supporting via the target defined by the European Commission: students and teachers are involved in training and traineeships abroad via the key actions of the Erasmusplus Programme.

This does not change the fact that there still is no structural dual system for students.

Autonomous Province of Bolzano

The dual system has always been a strong point of the South Tyrolean education and training system.

In these last years the apprenticeship model is undergoing a crisis, due to causes of varied origin but that have all affected each other.

There has been a considerable drop in the number of students in these last 10 years, in both language groups (-27%). Today, the group with most students is the German group, with an unbalanced ratio of 1 : 9.

Apprentices in Italian schools usually have a higher average age than those in German schools, to the point that, even though this is an offer by which to finish the last year of mandatory school and complete the right/duty to education and training up to the age of 18, the percentage of minors among Italian apprentices amounts only to 13% (2013).

The fact that this type of training is more popular in the German-speaking group, despite the training offering being equal, is due to a set of historical, economic as well as socio-cultural factors.

As regards the former, it should be noted that the sectors most targeted by apprenticeship demand are crafts and tourism that, by tradition, are the sectors in which more German-speaking people work, but in addition to this there are also a whole set of socio-cultural reasons that offer interesting elements for thought.

Among Italian-speaking people, apprenticeship has a negative connotation. It is seen by families and by young people as a residual choice, often to be chosen as the last chance after attempting the path of the higher schools, the licei, in which still many families place their hopes for the social and economic success of their children, while apprenticeship is on a lower step. The families continue to abide by the old mind frame that holds that apprenticeship is a losing choice.

The impact of these choices on the training system (and on society) brings a set of problems to the system: an excessive attendance of the licei, without professional outcomes; a marked selection in the first years of upper secondary school (because most students begin by attempting a kind of school that is high up in the hierarchy) that generates public expenditure and struggling students; the presence in senior high schools of struggling or demotivated students, caused by their actually being better cut out for other more vocational paths, which makes it more difficult to organise teaching in the classes.

This is reinforced by the fact that for the moment direct continuation of the studies after the qualification or diploma exam is not permitted. To this regard, the legislator shall have to allow the construction of a path that, via the apprenticeship, leads to the state exam, in order to reinforce the idea of a training path that is as dignified as that performed entirely in school.

These issues are less common in the German area in which the company, the craftsman's workshop, the workplace in general are more readily perceived as places for learning. In this sense, it can be said that the German world continues, at least in part, to preserve and enhance the educational potential

that has characterised the apprenticeship model for centuries, acknowledging the enterprise as a place for learning not only professional skills but also behavioural models and mental attitudes.

There are differences in South Tyrol even as regards employers. For some craftsmen, the hiring of an apprentice represents the taking on of training co-responsibilities, while for others it doesn't. Many South Tyrolean entrepreneurs are tied down by strong traditions and by the identity of their specific craft: the so-called "trade committees" (Berufsbeiräte), for example, are still very important; moreover, a training path has been created that goes beyond the professional qualifications and diplomas and leads the student to become a "master craftsman" or "professional master".

Within this specific vision of the single professions stands the dual training model, which envisages that the companies themselves (at least partly) take care of the training of the future operators in the trade.

In addition to these more cultural aspects there are others more closely linked to the architecture of the training system.

Full-time vocational training courses are training schemes that sometimes compete with the apprenticeship for the professional qualification/diploma; on the other hand, professionalising apprenticeships, by offering employers more favourable contract conditions, often overlap apprenticeships for qualification and diploma and cause a drop in hiring.

Additionally, there seem to be obstacles in creating a closer training pact among all the actors involved, and this translates into various aspects: the variable quality of training in the enterprises; the difficulty, for small companies, to guarantee the entire programme of the corporate training framework; the increase in complexity of several profilesprofiles traditionally open to apprenticeship, regarding which there should be a rise in quality and in the type of offering.

There is also a fluctuation caused by the demand for jobs, by the need of safe and constant loans, and by the fact that companies are more and more frequently asking for short-term workers (in contrast with the training structure of dual apprenticeship).

This does not prejudice the fact that this system's success factors are visible on many fronts:

- the chance to learn both in the classroom and at the workplace, an exchange between channels that generates updating and innovation, leading towards higher technical training;
- harmonisation and joint creation between local body, schools, trade associations, companies and trade unions, which allows to share the responsibility of the training but also the social responsibility of growth and improvement;
- the condition of apprentice, i.e. a young one that learns and receives compensation under a well-defined contract, with more certain hopes of employment;
- facilitations for the companies, i.e. paying wages lower than those granted to an employee;
- the distribution of training costs between public and private institutions;
- a wider range of choices for young people, with a more balanced distribution of students in the secondary cycle and a contrasting action against dropping out;
- promotion of work even in small-sized suburban companies.

These are the reasons that make the dual system essential in South Tyrol and that determine the need for its structural consolidation and updating.

Autonomous Province of Trento

Since a completely functional dual system apprenticeship scheme is not yet in place, there are few data regarding the added value of apprenticeship training and so it is necessary to take into consideration the data relating to the current VET vocational and educational training paths.

The experience of Trentino differs from the general Italian one in terms of development of vocational training and of the weight it is attributed, and the data that are derived from it seem to be guiding Trentino towards the choice of a dual system.

Indeed, Trentino students who have completed upper secondary school, and especially those that have completed the VET, find jobs rather quickly.

An analysis conducted on young people aged from 18 to 22 who have acquired a VET or upper secondary school qualification or diploma in 2010 and in 2011 shows that the students with a VET diploma, followed by those with VET qualifications, show the longest 'employed times' (permanence in an employment status) - ten and seven months, respectively – compared to those with an upper secondary school diploma who stay employed for little more than one third of the eighteen months following their school leaving exam.

The consistency of this advantage varies not only in function of the education level but, within it, in function of the specialisation. Thus, in the case of students with VET qualification, those who have majored in industrial subjects show longer 'employed times'. The same stands for VET students with a diploma, closely followed by those who have completed the fourth year in social services.

Similarly, of the students who have completed the five years of the upper secondary school, those who have attended a technical or professional education have longer 'employed times'.

This means that the students who have completed a VET path not only enter the world of employment sooner, at least in the initial phases of their employment career, but also have, on average, a competitive advantage on those who have completed upper secondary school, even in terms of number of months spent in the employed status.

As regards the quality of the employment obtained, the probability of carrying out a qualified task is higher for VET and technical diploma holders.

The probability of finding qualified jobs of a manual kind is very high among those coming from VET, (almost) independently from the duration of the course of studies attended, and rather low among those coming from the upper secondary school cycle. The probability of carrying out non-manual qualified jobs, as well as a very low risk of finding themselves in manual and low-pay jobs, is concentrated solely on the educational diploma holders. In this case, the effect of the type of studies followed seems almost negligible.

Finally, it is reasonable to state that, in Trentino, upper secondary school final qualifications seem to protect from the danger of ending up with a low profile job.

VET still provides a better chance of finding a job. Despite the current economic crisis that obviously has also reduced the hiring of young people exiting from this system, the employment ratio 18 months after the final exam for these subjects amounts to 73%, of which 70% are coherently employed. In the same period of time, the employment ratio of young people with a 4-year diploma amounts to 85%, of which 76% are coherently employed.

These data can lead us only to theorise on which could be the strong points and the weaknesses of an implementation of the dual system. Below is a tentative summary.

Based on the experience of other nations, the most common expectation is that the implementation of a dual system for apprenticeship training for the achievement of the 3-year qualification and of the 4-year diploma can:

- help young people holding formal qualifications to access the labour market;
- contribute in reducing the number of drop-outs after the mandatory school cycle, thus expanding the young people's range of choices.

In particular, in Trentino the advantages would be felt on three fronts: young population, enterprises and the government.

As regards the young, the dual system could be the right occasion for:

- familiarising with the entrepreneurial world via a real employment relationship;
- learn transversal technical and operational skills in a context that is different from school and put to the test their actual capabilities and inclinations;
- facilitate and reduce the time for access to the labour market;
- gain income already during training;
- obtain a formal qualification identical to that of full-time path attendees, while working.

The enterprises could:

- train the young people according to their own needs;
- cut down on hiring costs;
- acquire new and updated skills (e.g.: computer science, languages, etc.) that are taught in school and that can benefit the company.

As regards the government, this transition could lead to:

- a reduction in vocational training costs charged to the national budget compared to a full-time course;
- prompt adjustment of the training offer based on market demand;
- active involvement of employer associations and trade unions.

The greatest disadvantages, instead, could be those linked mainly to the difficulty in finding companies to hire all the young people potentially interested in apprenticeships; over the medium term, the risk of a lower chance of vertical mobility and of progression in a professional career only with higher formal qualifications (from qualification to diploma to higher training and universities).

For the introduction of the dual system into the VET of Trentino to be successful, it is necessary to work on diversified fronts.

First of all, a cultural change must occur so as to dampen the contrast, as well as the stereotypes, that place the culture of labour and the culture of knowledge on two opposite fronts, the latter clearly excelling over the former. This aspect slows down the development of the attractiveness of VET in general and obviously of apprenticeship in particular.

A change of this kind would imply the adoption of measures for reinforcing the partnerships between training, enterprises and territory along the following lines:

- cooperation between trade unions, industrial associations and provincial authorities to ensure the feasibility of compliance with the quality standards in training and final exams;

- measures to encourage enterprises to take on the apprentice-student and take in charge their workplace training;
- commitment by the enterprises to support training, even in small-sized companies;
- verification of the other forms of facilitated hiring so as to avoid overlapping/placing out in apprenticeships for qualification;
- alignment of starting times of workplace training and classroom training;
- targeted promotion with companies and young people, and forms of orientation starting from the first year of VET;
- partnership between potential hiring companies and training institutions, where the latter are fundamental players in matching students with companies;
- definition of training contents, also for integration of workplace training with classroom training.

Poland

Poland is developing strategies and programmes for the modernisation not only of vocational training but of the entire education system. Difficulties, in fact, are found transversally in several sectors.

A first major issue concerns the relatively low percentage of students who have gained a diploma in all types of secondary school: considering the data for the year 2012, in the conclusive session of the study cycle, only 62.7% passed the post-secondary school exam, 67.6% the secondary technical school exam and 76.7% the basic professional school exam.

Another problem concerns the fact that the network of professional schools in Pomerania operates in a labour market that is strongly limited to local businesses. The resulting apprenticeship does not offer training opportunities for a market that is changing quickly, and the skills on which the companies are focusing are limited, without considering the need to be versatile, to seek new knowledge, to gain the characteristics of speed and efficiency in adapting that today are considered essential.

As regards the training paths, according to a survey conducted among employers, the changes in training regulations should include the addition of mandatory traineeships/internships, the increase in number of practical lessons compared to theoretical lessons, the adjustment of the superior study curricula to the needs of the local labour market, and finally, the modernisation of the training methods. As regards the skills, the employers express the need to develop the soft skills in degree holders and languages and entrepreneurial skills in young people.

Overall, the actions to be implemented regard:

- the boosting of cooperation between schools, higher education institutes, employment services and employers;
- the creation of a platform for the exchange of the results of any research and analyses conducted by research institutes, schools, labour market institutions and employers;
- the creation – together with employers – of spaces for the professional development of teachers involved in the supervision of professional education and apprenticeship as regards modern technologies and materials;
- the development and implementation of a model for cooperation between professional schools and employers;
- the appointment of programme committees for professional schools;
- the sensitization and social responsibilization of employers and companies concerning the quality of education;

- the increase in the number of student traineeship vacancies;
- the assignment of greater importance to specialised apprenticeship so as to increase the specialist skills of degree holders;
- the offer of training to companies too, so as to increase their competitiveness in a changing and highly globalised market.

4. What is the Work Based Learning (WBL)?

Analysis of the experience and of the results regarding the modalities of "duality" present in the various local, cultural and socio-economic contexts of the SWORD Partners indicates the need to reflect on the meaning and importance of work based learning and on the various approaches available for improving it, and not only in terms of personal experience.

Although work based learning (WBL) is not a new concept, it remains a viable solution for the new learning and personal fulfilment needs in terms of employment too. It consists of a set of training practices of an experiential type that together develop school-learnt disciplinary skills and professional skills in an integrated school-enterprise learning environment (Seagraves et al., 1996). It is, therefore, an active and dynamic form of learning that "slowly unfolds in the course of a lifetime" (Wilson, 1997). The necessary integration between school and enterprise is noteworthy: Naylor (1997) states that WBL is part of a **triple approach** for the transition from school to workplace that also includes school based learning and the activities connecting one environment with the other, underlining, therefore, that it is not only and exclusively a learning approach that uses the workplace as a means for the transfer of knowledge. This statement is key to comprehending how work based learning is a methodological kind of support that transforms practice (within a real work environment) into learning and that also stems from the knowledge that is consolidated thanks to the work done in school. This means that the working action, if conducted in a critical and aware manner, becomes a source of knowledge. This form of learning is described by many authors as being more effective in engaging students and in involving them in a process of reflection on the action that accelerates learning. There is a certain variety among the terms used in Europe to define work based learning (WBL) that often is correlated to specific organisation forms. CEDEFOP substantially recognises three macro-categories according to the experiences: **Apprenticeship, Alternance training** and **Work-based learning.** These terms are often used as synonyms, and they are roughly similar, but still hold differences that are worthy of mention. In other words, based on a description used as a standard by CEDEFOP:

Apprenticeship basically consists in a long-term training alternating periods at the workplace and in an educational institution or a vocational training centre, by which the apprentice is contractually linked to the employer and receives remuneration (wage or allowance). The employer assumes responsibility for providing the apprentice with training leading to a specific occupation. The ILO (International Labour Organization)'s definition of apprenticeship also underlines that training must be based on a predefined training plan, is conducted at the employer's business premises, leads to one of the qualifications institutionally recognised by competent authorities and is governed by a contract. After completing the programme, apprentices obtain a nationally recognised professional qualification.

Alternance training, is a generic term that includes all forms of education or training and traineeship/internship, combining periods in a school or training centre with periods at the workplace or in a centre set up to welcome internees or trainees (teaching companies, work activity simulation centres, etc.). The alternance between workplace training and school training can take place on a weekly, monthly or yearly basis. Depending on the country and rules for the application of this specific status, participants may be contractually linked to the employer and/or receive a remuneration, although this is not as binding as in the first case. In fact, the participants can be considered students without acquiring the specific status of 'apprentice'.

Work-based learning regards the acquisition of knowledge and skills by carrying out – and reflecting on – tasks and activities in a professional context, either at the workplace (e.g.: alternance training) or in a vocational training institution. (Source: ICF International Report on Dual Education).

In any case, each of the foregoing cases includes the component of career development that exposes the learners to a variety of employment situations in an environment set up to accompany them and assist them in taking both contextual decisions regarding the work they are performing (with accurate training and supervision) and career decisions for a future prospect (with job guidance or similar).

What elements determine the success of WBL?

A document of the European Commission focusing on the indications for practices and policy pointers for work based learning underlines how this form of training is an exemplary win-win situation, therefore beneficial to each stakeholder involved:

- the **students/workers** develop and improve abilities and professional practices, build and reinforce the skills required to operate in a workplace at the best, including transversal ones such as communication, teamwork and problem solving, learn how to make more informed career choices, improve self-confidence, develop a more conscious intrinsic motivation, and acquire better chances of entering the labour market;
- the **employer** acquires a supply of increasingly qualified workers, can address skill gaps through tailor-made training of the apprentice/student, which in turn has a positive effect on recruitment and retention as well as improving company productivity and performance;
- the **education and training system** improves VET programmes and obtains better learning outcomes, which has a positive effect on the professional development of teachers and trainers, and reinforces cooperation with enterprises;
- the **social system** benefits from the virtuous cycle by which an increasingly younger and skilled workforce responds better to labour market needs and improves its outcomes in terms of social inclusion and the offering of equal opportunities. (Source: Work-Based Learning in Europe; Practices and Policy Pointers; European Commission – Education and Training; 2013).

4.1 The impact of WBL

A number of international institutions and contexts deal with collecting information by means of targeted and statistical surveys, periodically collected by each country, which make available important databases, thanks to which it is possible to relate a range of inputs, outputs and outcomes in the various fields (demographics, education, VET, healthcare, labour force and labour market); to name but a few: Eurostat, Cedefop, ILO, OECD, the learning curve (Pearson database developed by *The Economist*), European Social Survey, European Expert Network on Economics of Education (EENEE). This enormous wealth of information is, of course, analysed, studied and monitored and, over the years, has produced a solid bibliographical reference base, which, although featuring a number of contradictions, nevertheless provides a broad-ranging and, indeed, far-reaching overview of the matter.

Based on a first review, it clearly emerges (with a certain degree of consensus) that:

- young people (15 – 24 years of age is the range taken into account by almost all the surveys in this field, and the first age group in the international databases, and it is used here because of its greater affinity with the consulted studies) with a primary or secondary school leaving certificate, or ESL (Early school leavers) preparing to enter the labour market, are a population at high risk of unemployment (Quintini et al. 2007, Righi e Sciulli 2012, Levels et al. 2014, Eurydice e CEDEFOP report 2014);

- compared to the other populations, they are much more exposed to massive turnover, resulting in an increased risk of unemployment in adulthood.

Although no direct relation has been found between gross per capita income, a country's productivity level and the unemployment rate in wealthier countries, in less wealthy countries and at times of economic crisis youth unemployment is a particularly sensitive issue, and strongly rising, compared to adult unemployment (Verick 2011). Between 2008 and 2010, in the EU27 the unemployment rate of 15-24 year-olds increased from 5% to 21%, while it rose by only 2 percentage points in the 25 – 74 age group, from 6 to approx. 8% (EENEE report and Eurostat 2012 Report).

Young adults show weak skills in job hunting and can offer little or no work experience to an employer.

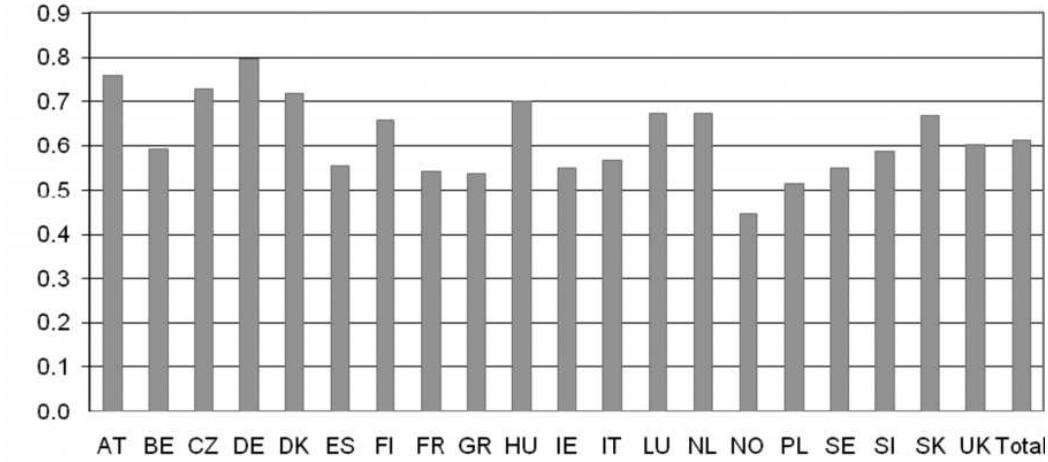
Although it seems that this fragility tends to diminish over the years, at present there is a higher risk of long-term unemployment for this age group and this has negative effects, even in the case of late employment, on the salary and, consequently, on one's working life (Gregg et al. 2005, European Social Survey 2014 data) and on social life in general (idleness, income support, welfare benefits, increased crime, alcohol, drug and gaming abuse, Bell et al. 2010).

Based on these premises, and on the measures put into place by the various countries to oppose unemployment and facilitate school-to-work transition, the various consulted studies show how the dual system is one of the possible solutions that can be implemented, together with others, in order to oppose youth unemployment and inactivity.

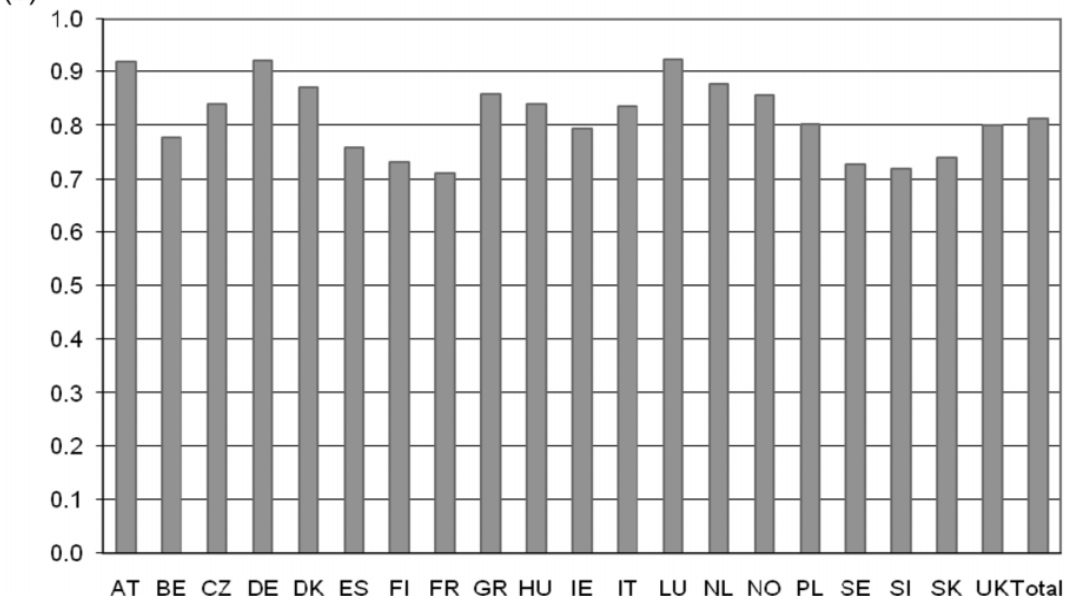
If we consider the relationship between the educational systems in the various countries and the likelihood that a young person with a secondary school or VT diploma has of starting work with a job matching his or her educational qualifications (Vertical Match or VM), or of finding a first job that is consistent with the skills (Horizontal Match or HM) learnt at school (same field or sector), we can observe how, in many European countries, there are frequent mismatches with regard to both VM and HM, and over 25% of all workers in the OECD area (OECD, 2011) are "overeducated" (i.e. they have higher qualifications than are required for their job). The debate regarding mismatching is heated and there are many differing opinions, although the latest studies (Green, 2013; Quintini, 2011) have confirmed its existence and the fact that it has inevitable long-term consequences on individual careers.

The following two diagrams show the school-work matching variations with regard to both HM (diagram a) and VM (diagram b):

(a)



(b)



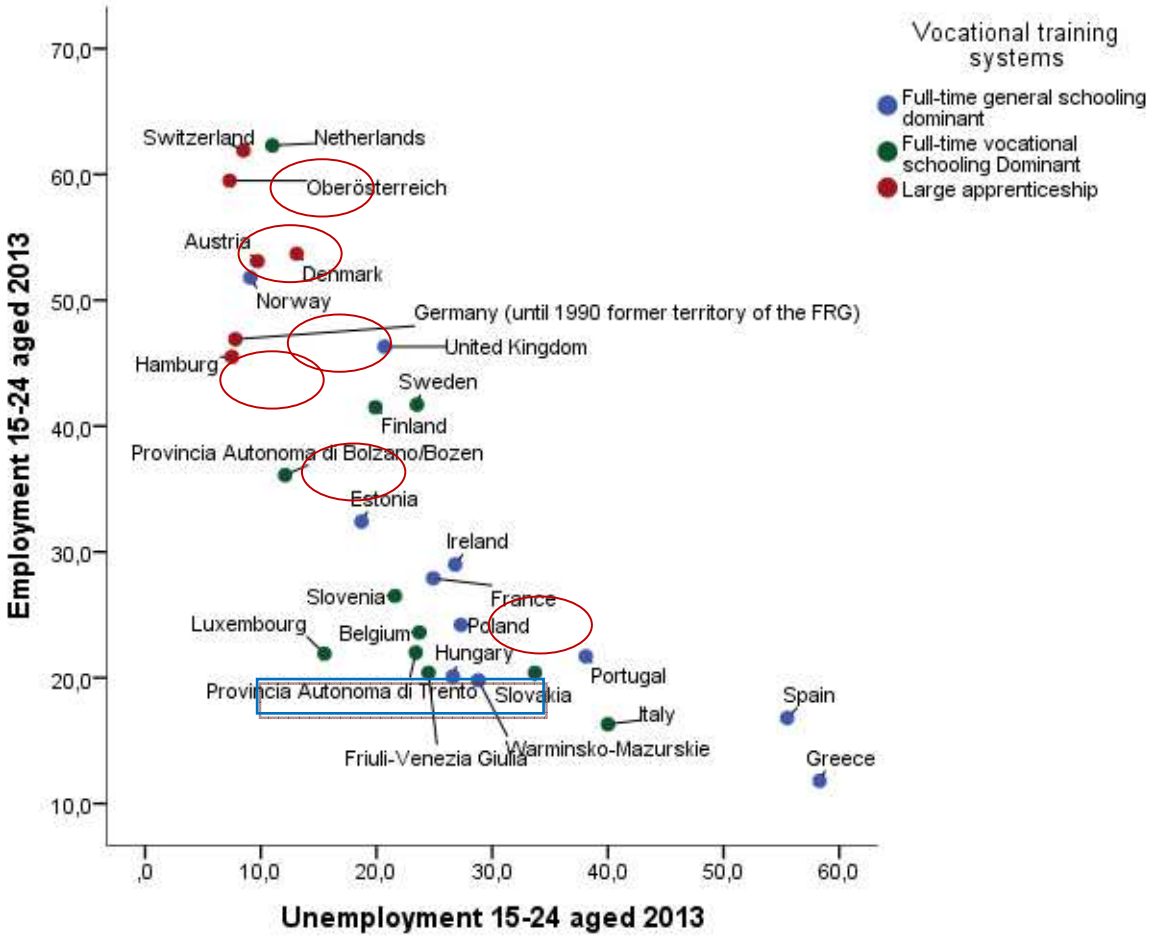
Source: Eurostat (2010)

It can be seen how, as concerns HM (diagram a), Norway has the lowest value and Germany the highest value. In the case of Germany, the value rises further to 96% for apprenticeship students (BIBB, Federal Institute for Vocational Education and Training, 2012). Immediately after Germany is Austria.

Although the values shown in diagram b tend to rise for all the countries examined, the proportion of VM remains clearly higher in the case of Germany and Austria, and Luxembourg as well, while France has the lowest value of the entire distribution.

The authors conclude by stating that the educational systems featuring a high degree of stratification and early career channelling are more likely to offer the possibility of finding a job that matches the level and qualifications attained. Stratification and channelling seem to reduce the uncertainty of the employer by offering a greater degree of clarity in the training paths and final competences; these aspects however, while facilitating a greater matching between training and work, seem to also reduce usability at local or national level, thus reducing *de facto* the possibility of mobility. These systems, Cavalli claims, tend to reproduce (or at least not disrupt) inequalities and to limit social mobility.

Many share the view that the intensity of youth unemployment is associated, in part, also to the training system: the higher the focus on a “school – work based” system, the lower the impact of unemployment in the age group considered here.



As shown in the diagram, there are considerable differences between the countries and regions in which a dual system is implemented and those in which such supportive systems do not exist. There are exceptions, of course, such as the Netherlands and Norway, which nevertheless seem to include a high percentage of dual system, although this is not entirely widespread. In the "full-time schools" systems, in which there is a marginal relationship of students with the world of labour, the impact of youth unemployment is much harder.

Another distinctive element of Germany and Denmark (the figures for Austria are not yet available) is the high probability, for young people, to find a permanent job, compared to Italy and Spain (Righi e Sciulli, 2012); moreover, we can also observe how young Danes employ about 24 months to complete the school-to-work transition and find a permanent job and German and Spanish youths need 31-33 months, where in Germany this time is employed (for over 65% of young people) in apprenticeship activities and in Spain in unemployment or temporary contracts. In Italy, last but not least, the low percentage of young people who enter a stable employment relationship employ 27 months, out of the 39 months spent in waiting on average, in unemployment, and only 5 months in temporary and occasional jobs (ibid.). Righi (2012) and Cavalli (2013) state that, although the likelihood of obtaining permanent employment is higher in Germany and Denmark, in these countries permanent employment can be found in the medium term, with regard to both the average waiting time for entering into an apprenticeship (the average age for entering an apprenticeship is 19 years) and the amount of time spent in temporary jobs, while in Italy and Spain the excessive use of temporary

contracts (following the labour market reform laws) does not achieve either the permanence or rooting of young people in the labour market.

The question as to whether the dual system is a success factor of the production system, or, on the contrary, whether it is the production system that drives the vocational training system towards success, a middle-of-the-road answer is generally given which contains, in itself, a large number of truths. What we see here is the strengthening of the idea that - in this field - the explanations are neither mono-causal nor unidirectional and deterministic. Many agree that, in any case, the dual system should foster (in order to effectively work) the conditions of an involvement of and undertaking of joint responsibility by the various stakeholders (training system, production system, institutions and interest groups), and not just require them as pre-conditions. These reasons lead to reconsider the set of variables that need to be reprocessed within each context, as models that work in a certain country may not function in other contexts.

Of course, there are scholars that highlight the criticalities of the dual system, which can in many instances be applied to the vocational training system too:

- qualifications tend to rapidly evolve in contemporary society;
- these systems are very often found to be ineffective with regard to the weaker VET population groups (for which, for example, Denmark has introduced customised forms of activation);
- they are very valid systems in the fields of crafts and industry, but there are no elements supporting the fact that they can be equally useful in the transition to a knowledge-based economy, which requires high “transversal” competences and flexible specialisations that dual training cannot guarantee;
- a certain reluctance - or even incapacity - can be observed, by enterprises, to forecast their human resources needs in the medium-to-long term, which discourages investments in training, especially in difficult periods, and in periods close to the same, where, generally speaking, no immediate recoveries are recorded;
- as concerns higher technical positions, even in the technical sector no career progression is reserved for internal personnel, as enterprises prefer to recruit workers with tertiary education (with the related risks of overeducation and overskilling);
- the excessive specialisation required in many sectors does not favour the mobility of workers from one sector to another, both because they may be forced out of the labour market in the case of economic upheavals or other turbulences and because it is generally hard to adapt to the fast-moving market changes (in Denmark, once again, the principle of *flexicurity* adopted there seems to work as a good antidote, while in Germany the decades-long partnership culture between enterprises and training has strengthened the conviction, within businesses, that they do not train workers only for themselves and their own needs, but potentially for the entire labour market);
- liberal economies do not benefit from dual systems (unlike cooperative economies). In these economies, there is a high risk of free riders, and training a worker practically means “handing over” that worker to the competition;
- in other terms, the valorisation and promotion of the capacity to enter the world of labour cannot be limited to a single approach focusing on the job dimension or on social integration policies (which aim to improve the “employability” granted by a certain system), but they entail the modelling of the entire social environment, to the purpose of enhancing the inclusiveness of the system as a whole (Bonvin, 2009) - "This rationale consents the development of a concept of employability as a collective responsibility" (Zimmermann, 2006).

4.2 The case of Austria and Germany, success and transferability

We have observed, thanks to the wealth of detail and information contained in the reports, that well-structured dual systems play an important role in the success of integration into the labour market. In Austria and in Germany, there is a high rate of participation by young people in forms of apprenticeship; on the contrary, the youth unemployment rate is lower than in the UE-27 countries and, generally speaking, the waiting times for entering the world of labour do not feature any particular criticalities. The vocational education and training system of both countries offers different paths for qualification, career advancement and, in recent years, has tried to implement and strengthen the links with tertiary education. If we compare the rates of attainment of an educational or other qualification of these countries with the rest of Europe, it can be seen that they are higher in Austria and Germany. The Austrians seem to be particularly focused on developing specific measures for including disadvantaged persons, so that everybody may have an opportunity to learn a trade. There are specific measures integrating customised guarantees and support with coaching instruments; supra-company apprenticeships are adopted for those who have problems in finding a traineeship opportunity.

As highlighted in a study by GHK Consulting Ltd and CERGE-EI (2012), these programmes are costly and entail the risk of reducing the propensity by enterprises to provide apprenticeship training. Therefore, it is important that these transition paths only imply the adoption of special measures in a limited manner. In the case of Austria, the dual paths managed through the supra-company organisations seem to be a suitable solution for the lack of places for apprentices and show a good possibility of transition to the labour market for young people upon completion of their training path. What remains to be understood, in the more disadvantaged cases (the lower queues), is the definition of more effective support measures.

Another strong point seems to be the guidance system, which is increasingly important for helping young people make informed and conscious decisions.

With regard to career counselling, first and foremost, the German example of an enhanced vocational orientation such as the “Berufseinstiegsbegleitung” (SGB III) can also provide a useful contribution for the further development of a specific and specialist vocational orientation in the other partner countries. There is the need, in fact, to broaden the vocational orientation strategies and consulting services and to study the effectiveness of their outcomes. Coaching is a recent Austrian programme of considerable importance for the purposes of our project, having a number of similarities with the German experience of “Berufseinstiegsbegleitung”, and therefore deserves to be further investigated, especially with regard to its implementation, the professional skills involved, their training and the costs that these paths require.

4.3 Final remarks on WBL

While we can confirm that the European context is favourable to WBL because of the important role VET and education play in the transition towards a smart, sustainable and inclusive growth, on the other hand, our analysis suggests that it is difficult to “photograph" the exact nature of WBL at the level of single partner country because of the continued evolution both within policies and practices. This is partly due to the fact that WBL is closely related to various strategic elements (institutional, organizational solutions, specific trainer training, corporate culture, etc.), which are still far from being interconnected (especially in those regions where WBL is yet not consolidated). Any combination or

interaction of the above-mentioned strategic elements, carried out in a multidisciplinary and multidimensional perspective, generates a distinct and more or less functional experience and approach to WBL.

This is why we can find a well-defined framework with a detailed level of description in each field of application in Germany and Austria. Whereas the framework is less defined in the Province of Bolzano and Trento or has still to be defined in the other partner regions where WBL is not yet part of the system. Even where WBL is a consolidated practice, there are some issues, which require further analysis and clarification such as:

- WBL applied in the context **of higher education**,
- the incidence of **costs** and / or financing of WBL.

A critical element for the analysis and benchmarking consists of the ambiguity of some key terms and the methodological complexity of the argument. We can summarize by saying that there is considerable variety in the legislative and regulatory frameworks regarding the development and implementation of WBL. Again we can find more complex legislative frameworks with more specific measures, which represent a clear point of reference for actors who are entitled to take part. If we compare our study with others studies, we can affirm that WBL is more widespread in countries where the legal framework acknowledges a certain degree of autonomy to higher education and vocational training bodies to develop and accredit training programs in relation to clear standards of achievement related to objectives and skills/competence centrally defined in liaison with other key stakeholders.

For organizations in the "start up phase" as our partners from the Autonomous Province of Trento, the Autonomous Province Friuli-Venezia Giulia and Poland, it is necessary to **further clarify the role of the unions, industry and chambers of commerce.**

Despite the conceptual differences in understanding WBL that emerges from the SWORD analysis and from similar studies carried out at European level (see the various studies on the subject), it becomes evident that in particular apprenticeship remains critical key element of the process (among the most critical factors we have to mention the **poor availability of companies to take part in apprenticeship schemes**), reducing **in this way the opportunities to make apprenticeship more successful.**

In addition, in order to get a clearer picture of the scale and scope of the outputs of WBL, the data collected by SWORD in regard to the different types of integrating young people in the labour market (for example, the nature of contracts, duration), we can see a high employability in Austria and Germany of students trained in the dual way. However the employability depends on an initial selection process that picks out excellent school leavers and "simply" leaves behind the weaker students who remain in school because they are not able to access the dual training system. The situation is completely the opposite in Trentino, Alto Adige where WBL is used in Italian-language schools, (but also the Friuli and Poland). Here WBL is specifically used to address weaker students and school drop-out. WBL used with this target-group can hardly guarantee the same levels of excellence as in Austria and Germany.

This is a critical aspect that emerges clearly from our SWORD benchmarking process and has to do with different "traditions" in the conceptualization of apprenticeship. The dual form of apprenticeship in northern Europe is a "strong" apprenticeship that strives for excellence, the professional apprenticeships in Italy at present, is conceptually "the last chance" to help young people who are weak at school in get into a (weak) labour market.

What varies in WBL models is the role of the external organization (e.g. employer or intermediary labour market organizations) and the student in the **planning process of learning activities** and the definition of standards of competence that are in line with the specifications of a given "job" and reflect exact company requirements. In Italy the design of curriculum and validation of skills has been conventionally in the hands of Vocational Training Bodies. The direct cooperation with companies and intermediary bodies clashes against the "conventional" ways of curriculum development. However in Germany, Austria, the Autonomous Province of Bolzano and Trento we can find regulations that support and favour cooperation partnerships between schools and enterprises for curriculum development activities. In the literature we can find other countries **using voluntary forms of collaboration** within which institutions often face considerable challenges to involve employers in the development of training programs (an example in this case is given by Poland and Autonomous Province of Trento).

A crucial first step in improving the flexibility of the institutions (both Vocational Training Bodies and Schools) could be the development of the **concept of "part-time" students** with a different status from "full-time" students (as required by the new Italian national regulations). Nevertheless in both cases, the part-time students (who work half-time) and full-time students should be able to achieve the same competence level. Furthermore flexibility is related to the ability to recognize what are the priorities within the learning process. Austria and Germany have made a great progress in this regard. The second project period will to go more into this.

The development of WBL remains a challenge for the traditional - school based - models of VET. The Austrian and German Sword report clearly show that the implementation of the WBL is always associated with the quality assurance of education and skills required in the qualification and related standards. However, there is nothing like a unique model for the external quality assurance, even at European level we can find a variety of quality assurance as well as of WBL approaches.

The first common challenge the SWORD consortium has to face is the development of a shared model of open decision-making in which school increase their autonomy and together with other actors of the dual system jointly define - in a precise and detailed way - the priority learning needs that are also pertinent, smart, sustainable and inclusive. Final conclusions:

- The strength of the German-Austrian model is the result of the linkage of four key conditions: 1) all institutional actors involved have the same importance (which increases also social acceptance of the dual system); 2) the responsibility of the employer to contribute to occupation; 3) the shared responsibility of competence certification; 4) a strong labour market regulation for every professional field.
- The percentage of companies that contribute to WBL based training is a key indicator: the SWORD partner report confirm previous CEDEFOP study analysis, Austria, Germany together with Sweden and Finland are the countries with the highest numbers of enterprises that offer some kind of training whereas Italy, Poland together with Greece and Bulgaria are countries with the lowest contribution to training from the company side. In the Autonomous Province of Bozen and in Friuli-Venezia Giulia the contribution rises whereas in the Autonomous Province of Trento the involvement of companies remains a factor to be developed. Nevertheless due to the current changes in the Italian VET system WBL is getting more and more integrated into the system. An open question not only for SWORD refers to the cost that occurs for training companies. To increase the acceptance of WBL among companies it is necessary to further evidence that WBL is a different form of investment already used in other

European countries although also the most “virtuous” countries have to register falling numbers.

5. Conclusions – which model can we implement?

The comparative analysis is the tool used by SWORD to define a general "knowledge framework" according to which the consortium has to model the successive pilot phases. The pilots are meant to follow an integrated approach, which enhances the ways of learning in the employment context including also transnational elements.

In Italy[3] and elsewhere there are signs of growing interest in the German dual system, considered by many as a way to treat the "problems" of the labour market (especially youth unemployment, but also the appropriateness of the preparation of the working force).

Sword is looking for ways to improve the transition between school and employment and its partners are increasingly turning their sights on the dual vocational training system.

The comparative analysis made in the context of the SWORD project reflects the different stages and approaches through which the dual system is put into practices currently. Once the collective, socio-economic, institutional, regulatory and cultural characteristics of the different regional and national contexts emerged from the comparative analysis (including the dominant pedagogical principles), the SWORD partners had to question themselves how to export the core of the dual system (work-based learning) and its articulated infrastructure in such a multifaceted and often profoundly different scenario.

The SWORD partners found a promising starting point in the work of Prof. Dr. Dieter Euler who, in a study recently commissioned by the *Bertelsmann Stiftung*[4], has mapped out a viable model for all countries wishing to implement the dual system German elsewhere.

The very extensive research carried out on these issues by Dieter Euler have convinced him that the "German" dual system "is suitable as model but not as a blue print". In his opinion the idea of completely copying the theoretical and practical references of this model is a sort of wishful thinking, as well as a methodological error. Instead he suggests to make a selection of those mechanisms considered strategic and at the same time compatible with the existing education and training framework conditions of the country we are analysing[5].

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[3] The reform bill entitled "la buona scuola/the good school prepared by the Italian Government under its Premier Matteo Renzi wants to "invigorate the Italian Educational System" introducing the apprenticeship as an opportunity students are given to become more tech-savvy and more in touch with the reality surrounding them. Furthermore traineeships are to become compulsory for students in the last three years of upper secondary education (at least 400 hours for students in vocational education and 200 hours for students in general education). They can take place either in the private sector or in the public administration. EUR 100 million per year from 2016.

[4] Prof. Dr. Dieter Euler, *Germany's dual vocational training system: a model for other countries*? A study commissioned by the Bertelsmann Stiftung, Bertelsmann Stiftung, Gütersloh, 2013

[5] ("…The receipt for a successful and sustainable reform is to "select the features that best fit its own goals, structures and culture, adapting them as necessary." (…) Thus, the objective should be to prudently import adapted elements of another country's system, but not an exact copy of it". (…) A closer look shows that importing a system, or parts of it, involves more than mere duplication. It is a process of selecting and adapting certain components to suit the objectives and conditions of the potential importing country. In the case of a vocational training system, a country seeking to reform its existing system does not simply replace it with that of Germany or any other country."

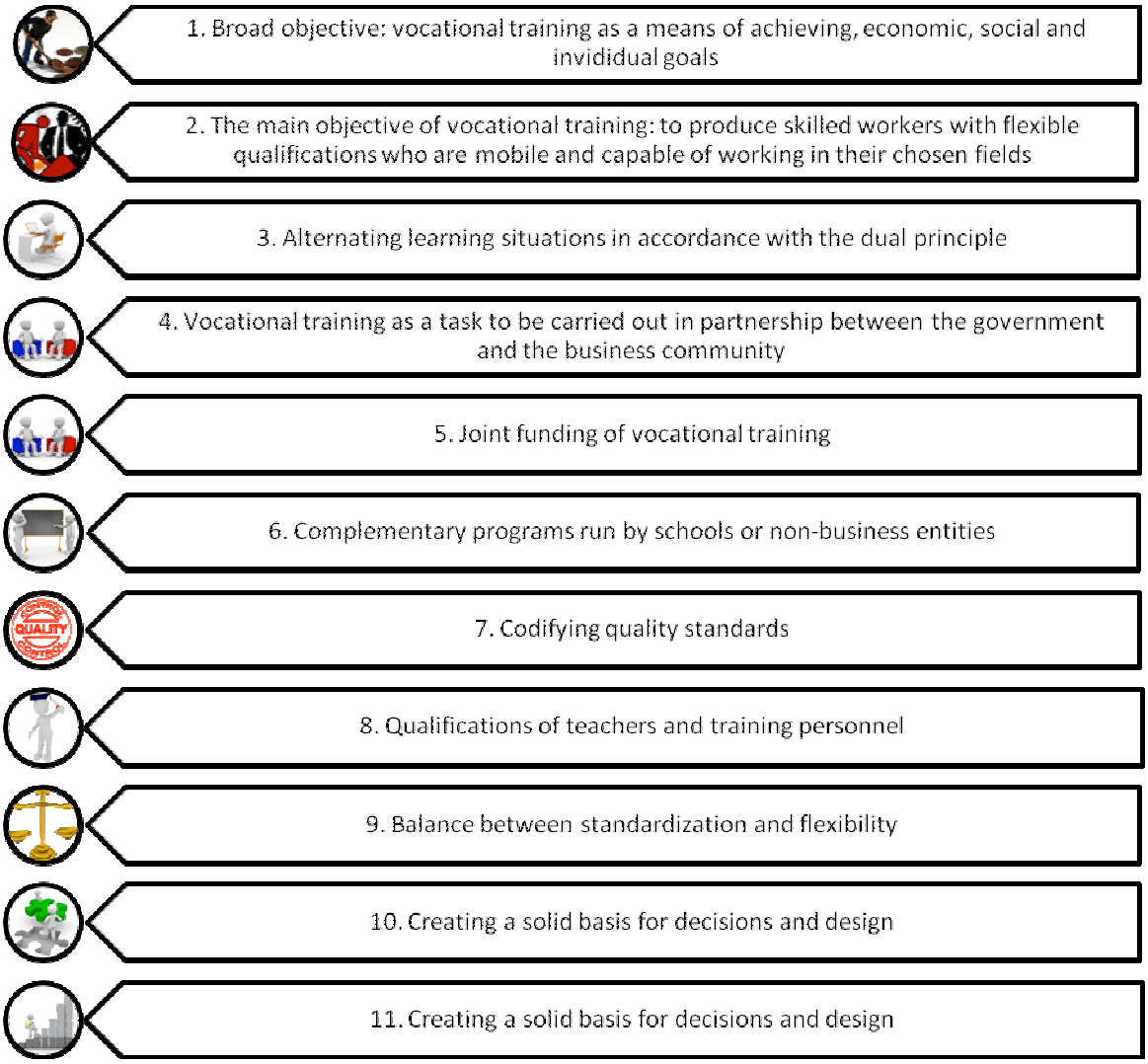
For this purpose Dieter Euler breaks down the dual vocational training system in eleven “essential elements” presented on the next page and identified through careful analysis of the most recent scientific literature and regulatory sources available on the subject.

In principle each of these essential elements can then become the basis for a transfer project, provided that the selected element fits well into the education system in force in that country at that time.

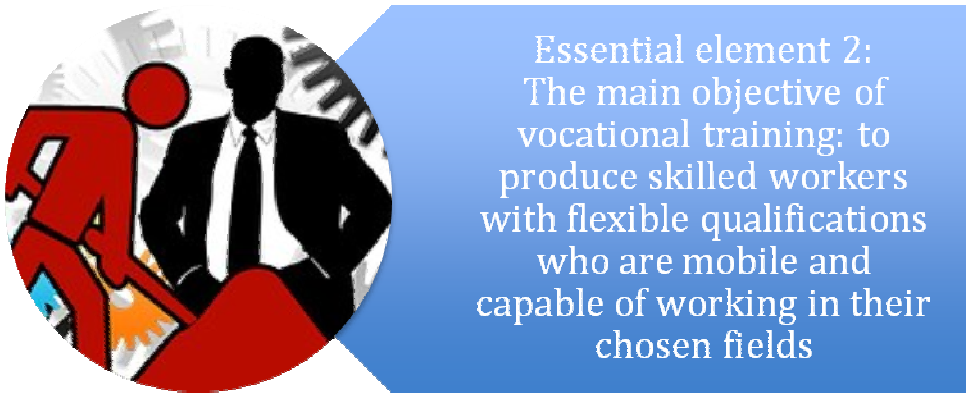
In the framework of the SWORD project, the partner are particularly interested in three of the eleven elements. This is why the pilot phase will focus on testing the implementation of some elements of the dual model within the vocational training systems of the regions / provinces of the consortium partners. In particular the selected essential elements are as follows:

2) The main objective of vocational training: to produce skilled workers with flexible qualifications who are mobile and capable of working in their chosen fields
3) Alternating learning situations in accordance with the dual principle
4) Vocational training as a task to be carried out in partnership between the government and the business community

The exact implications of the elements in the pilots is presented after the scheme.



The eleven essential elements of the German dual system identified by Dieter Euler. Illustrations: pixabay



Essential element 2:

"Training is designed to meet the practical needs of the labour market; Occupational skills enable individuals to work in their chosen fields; Skills are applicable to a wide range of settings within the field, which allows individuals to be flexibly employed in a variety of businesses; Skill profile makes trained workers more mobile; In some cases skills are developed in a fixed process, without separate steps or interruptions; Skill development may in some cases be combined with aspects of career and occupational development; A responsible agency (usually the chamber of commerce or crafts) administers a centralized examination to assess trainees' skills, adhering to the principle that the teacher and the examiner should not be one and the same" (Euler, 2013)

• Benefit of the essential element 2:

"Benefits: skills enhance workers'; flexibility and mobility, reduce the danger of social marginalization and raise educational levels in a non-academic context" (Euler, 2013)

• Approaches to exporting the system in modified form:

"The focus is on the goals that have priority at the time, rather than on the entire range of objectives; Dual training programs should be introduced first in business sectors or industries where conditions are favourable" (Euler, 2013)

• Aims of the SWORD PILOT testing:

Some SWORD pilots activities will strive to test various forms of school-to-work transition pathways (training, study visits, project work, internships, etc.) and improve the readiness for work of students by strengthening transferable skills (social skills, cognitive skill, etc). Upon their entry into professional life, students should have a good basic school preparation and quite a knowing on what constitutes a good social behaviour and they should be aware of their personal qualities.

Essential element **3:**

"Dual principle" refers to the integration of theory and practice, thinking and acting, systematic and case-based learning; The business setting is essential for learning, since it is the only place where learning can occur under real-life conditions; How well the dual principle is implemented depends on how well the learning site is utilized and cooperation at that site" (Euler, 2013)

• Benefit of the essential element 3:

"With the dual approach, occupational skills are developed that are relevant to the labour market but not narrowly focused on the requirements of individual businesses" (Euler, 2013)

• Approaches to exporting the system in modified form:

"The dual principle can be implemented using various combinations of locations, with varying amounts of time spent at each; In different ways and to differing degrees, periods of practical training in the company setting can be integrated into an alternating training system" (Euler, 2013)

• Aims of the SWORD PILOT testing:

A) Dual Training and alternating learning (school-work-school experience) co-ordinated jointly by a team including schools, institutions and the employers that work "side by side" in the planning and implementation process. The current cooperation mode of these players is a structural weakness that the pilot tests of the SWORD wants to improve. The aim is also to shorten the distance, lamented by many, between schools and businesses, especially small and medium-sized. Despite the difficult economic environment, companies continue to have difficulty in find suitable candidates for some professions, because the skills learned at school are not useful because they are not defined with the companies. Here the SWORD pilots will test forms of co-design of school-to-work transition programmes.

B) The rapid change in the education and training systems creates disorientation among students and their families. At the same time the constant evolution has not left enough time to the system to reorganize internally. The school-work transition needs new ways of career counselling to be conducted before the end of the school, so as to better convey the benefits of the dual system and the characteristics of different professional profiles to the students. They have to experience the "world of business" already during the career guidance at school.

Essential element 4:

"Close cooperation between government and business (e.g. in formulating occupational profiles, administering examinations, finding training positions); Cooperation may take a variety of forms, ranging from codified co-determination, to the "consensus principle," to informal agreements. " (Euler, 2013)

• Benefit of the essential element 4:

"The relevant parties become active participants who are involved in implementing guidelines and agreements, which promotes social acceptance of vocational training". (Euler, 2013)

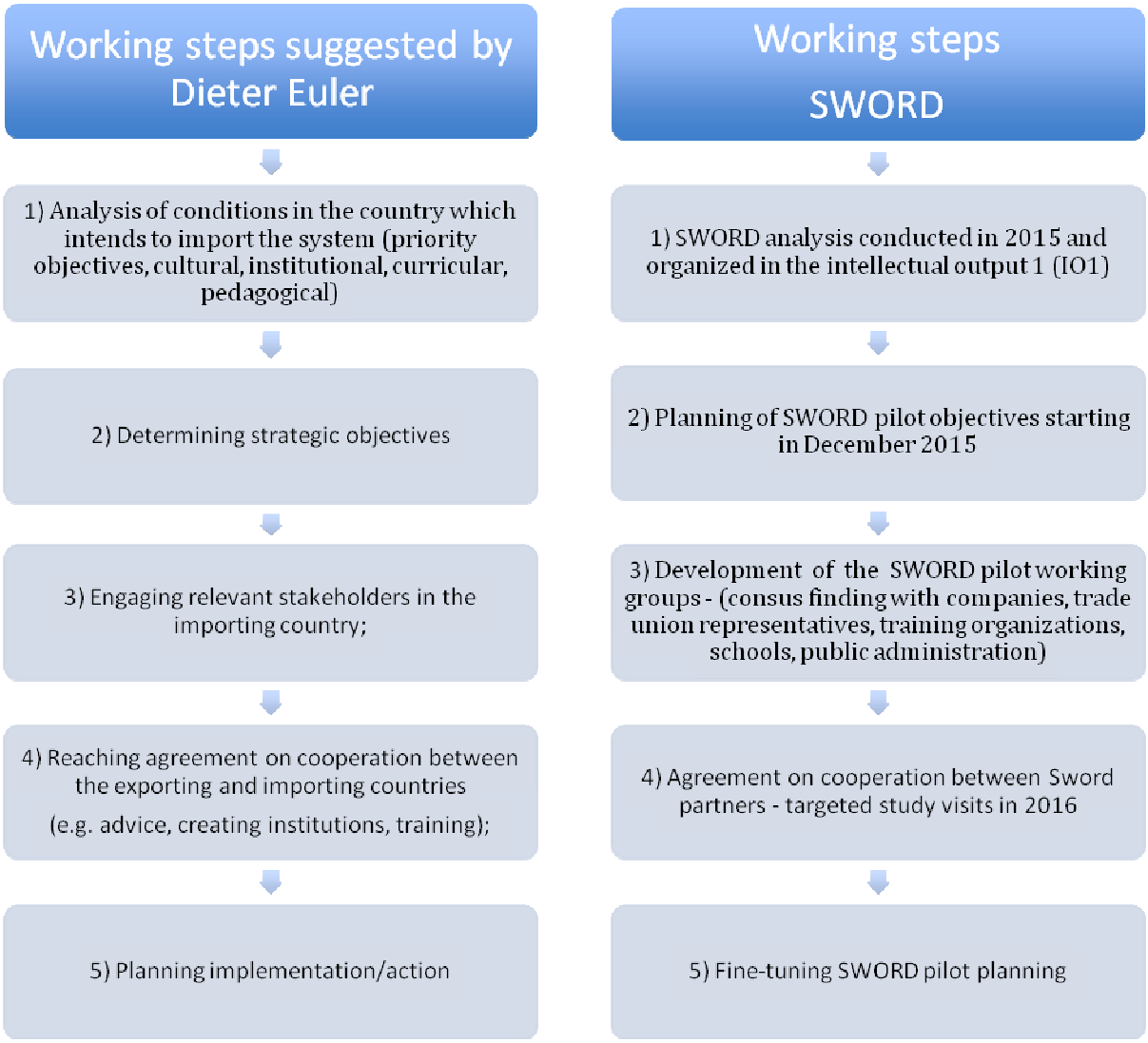
• Approaches to exporting the system in modified form:

"Other models are possible, in addition to Germany's social partnership approach, with graduated levels of responsibility (e.g. information, hearings, consultation, advice); Participation structures may vary in their division of work and responsibilities (e.g. instead of exporting a specific professional association, its responsibilities may be assigned to existing institutions in the respective country); As appropriate, existing avenues for participation may be utilized (at the national, regional, local and institutional levels)" (Euler, 2013)

• Aims of the SWORD PILOT testing:

Special attention will be paid to the set-up of methods and instruments that improve and enhance the involvement of companies in dual learning initiatives bridging the gap between school and the productive world. The topics are related to company scouting, financing training and internship (the governance of the system) and to the joint curriculum design.

In all pilots the transfer and process of exporting must follow a number of working steps suggested by Dieter Euler and illustrated below. The preparation of the current analysis (Intellectual Output 1) is already an integrated part of this process.


Working steps suggested by Dieter Euler
1) Analysis of conditions in the country which intends to import the system (priority objectives, cultural, institutional, curricular, pedagogical)
2) Determining strategic objectives
3) Engaging relevant stakeholders in the importing country;
4) Reaching agreement on cooperation between the exporting and importing countries
(e.g. advice, creating institutions, training);
5) Planning implementation/action
Working steps
SWORD
1) SWORD analysis conducted in 2015 and organized in the intellectual output 1 (IO1)
2) Planning of SWORD pilot objectives starting in December 2015
3) Development of the SWORD pilot working groups - (consus finding with companies, trade union representatives, training organizations, schools, public administration)
4) Agreement on cooperation between Sword partners - targeted study visits in 2016
5) Fine-tuning SWORD pilot planning

References

AA.VV. (2012), *NEETs Young people not in employment, education or training: Characteristics, costs and policy responses in Europe*, European Foundation for the Improvement of Living and Working Conditions, Publications Office of the European Union, Luxembourg. Available at http://www.eurofound.europa.eu/it/publications/report/2012/labour-market-social-policies/neets-young-people-not-in-employment-education-or-training-characteristics-costs-and-policy

AA.VV. (2014), *Youth unemployment in the EU: a scarred generation?*, European Union Internal Market. Available at http://www.parliament.uk/documents/lords-committees/eu-sub-com-b/Youth%20Unemployment/Youth-unemployment-evidence-volume.pdf

AA.VV. (2013) *Work-based learning: benefits and obstacles a literature review for policy makers and social partners in etf partner countries*, European Training Foundation. Available at http://www.etf.europa.eu/webatt.nsf/0/576199725ED683BBC1257BE8005DCF99/$file/Work-based%20learning_Literature%20review.pdf

Bell, D. and Blanchflower, D. (2010), *Youth unemployment: déjà vu?* Dartmouth College Working Paper.

Bonvin, J.M. (2009), Ensuring *capability for work: outline of a capability-oriented labour market policy*, in Schneider, K. and Otto, H-U. From employability towards capability, Luxembourg: Inter-Actions, pp. 55-69.

Breen R (2005), Explaining *cross-national variation in youth unemployment: Market and institutional Factors*, European Sociological Review 21(2): 125–134.

Cavalli A. (2013), *Il sistema «duale». Un modello da imitare?* in "il Mulino" n. 5/13, Società editrice il Mulino, Bologna.

CEDEFOP (2010), *Learning outcomes approaches in VET curricula, a comparative analysis of nine European countries*, Publications Office of the European Union, Luxembourg. Available at http://www.cedefop.europa.eu/en/publications-and-resources/publications/5506

CEDEFOP (2011), *The Impact of Vocational Education and Training on Company Performance*, Publications Office of the European Union, Luxembourg. Available at http://www.cedefop.europa.eu/en/publications-and-resources/publications/5519

CEDEFOP (2013), *Benefits of Vocational Education and Training in Europe for People, Organisations and Countries*, Publications Office of the European Union, Luxembourg. Available at http://www.cedefop.europa.eu/en/publications-and-resources/publications/4121

D'Agostino S. (2012), *Modelli di apprendistato in Europa*, Isfol, i libri del Fondo Sociale Europeo Nr. 171, Soveria Mannelli: Rubbettino. Available at http://sbnlo2.cilea.it/bw5ne2/opac.aspx?WEB=ISFL&IDS=19039

Directorate – General for internal Policies (2014), *Dual Education: A Bridge over Troubled Waters?*, European Union. http://www.europarl.europa.eu/RegData/etudes/BRIE/2014/529082/IPOL_BRI(2014)529082_EN.pdf

Dorfler Land Van de Werfhorst HG (2009), *Employers' demand for qualifications and skills: Increased merit selection in Austria*, 1985–2005. European Societies 11(5): 697–721.

Eurydice and Cedefop (2014) *Tackling Early Leaving from Education and Training in Europe: Strategies, Policies and Measures*, European Commission, Education, Audiovisual and Culture Executive Agency, 2014. Available at http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/175en.pdf

Eurostat (2010) European *Labor Force Survey 2009 Ad Hoc Module on the Entry of Young People into the Labor Market*, Luxembourg: Eurostat. Available at http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/EU_labour_force_survey_-_ad_hoc_modules

Eurostat (2012), European *Labor Force Survey 2009 Ad Hoc Module on the Entry of young People into the Labor Market Evaluation Report*, Luxembourg: Eurostat. Available at http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_unemployment_lfs/documents/Evaluation%20report%20AHM%202009.pdf

European Social Survey (2014), *Documentation Report.* http://www.europeansocialsurvey.org/docs/round7/survey/ESS7_data_documentation_report_e01_1.pdf

Gregg, P., E. Washbrook, C. Propper and S. Burges (2005), *The Effects of a Mother's Return to Work Decision on Child Development in the United Kingdom*, The Economic Journal, Vol. 115, pp. F48–F80.

Green F. , Felstead A. (2013), *Underutilization, Overqualification and Skills Mismatch*. Glasgow: Skills in Focus, Skills Development Scotland.

Jorgensen J. R. (2014), *Youth guarantee and policy reform in VET in Denmark*, Workshop, Ministry of Education. Available at http://www.lavoro.gov.it/SemestreEuropeo/Documents/W%201%20Jorgensen.pdf

Levels M; van der Velden R., Di Stasio V. (2014), *From school to fitting work: How education-to-job matching of European school leavers is related to educational system characteristics*, Acta Sociologica, Vol. 57(4) 341–361.

Quintini, G. (2011), *Right for the Job: Over-qualified or Under-skilled?, OECD* Social, Employment and Migration Working Papers, No. 120.

Righi A., Sciulli D. (2008) Durata dei processi di transizione scuola-lavoro: un confronto europeo, paper for XXIII Convegno Nazionale di Economia del Lavoro.

European Commission (2013) Work-Based Learning in Europe, Practices and Policy Pointers; European Commission – Education and Training; 2013, available at http://ec.europa.eu/education/policy/vocational-policy/doc/alliance/work-based-learning-in-europe_en.pdf

Muehlemann S. and S.C. Wolter (2013), Return on Investments of apprenticeship systems for enterprises: Evidence from Cost and Benefits analysis, EENEE Analytical reports no.16, Available at http://www.eenee.de/dms/EENEE/Analytical_Reports/EENEE_AR16.pdf

Naylor, M. (1997). *Work-based learning.* Columbus, OH: ERIC Clearinghouse on Adult Career and Vocational Education.

Seagraves, L., Osborne, M., Neal, P., Dockerell, R., Hartshorn, C., & Boyd, A. (1996), *Learning in smaller companies final report*, Stirling: Educational Policy and Development University of Stirling.

Wilson, W. J. (1997), *When work disappears: The world of the new urban poor*, New York: Alfred Knopf.

Zimmermann, B. (2006), *Pragmatism and the capability approach: Challenges in social theory and empirical research*, European Journal of Social Theory, 9, 467-484.

Web references

Apprenticeships in work-based learning:
http://www.cedefop.europa.eu/en/events-and-projects/projects/apprenticeships-work-based-learning

Building a European Virtual Environment for work based learning
http://www.openeducationeuropa.eu/

CEDEFOP, European Centre for the development of Vocational Training
http://www.cedefop.europa.eu/

Education Reform Initiative of southern eastern Europe
http://www.erisee.org/node/downloads/library_serbia/transition_from_education.pdf

European Social Survey
http://nesstar.ess.nsd.uib.no/webview/

European Community Household Panel Study
http://epunet.essex.ac.uk/echp.php

European employment strategy:
http://ec.europa.eu/social/main.jsp?catId=101&langId=en

International labour organization - Europe
http://www.ilo.org/Search4/search.do?searchLanguage=en&searchWhat=europe

Network "Work-based Learning and Apprenticeships"
http://www.net-wbl.eu/

Overview of work based learning in Europe:
http://www.wblic.org.uk/wblhe/files/WBLIC_Overview_of_WBL_in_Europe.pdf

Quality assuring - work-based learning
http://www.erasmusplus.it/file/2015/07/18_EQAVET_Quality-assuring_WBL.pdf

Towards a European quality framework for apprenticeships and work-based learning
https://www.etuc.org/publications/towards-european-quality-framework-apprenticeships-and-work-based-learning#.VeRYDLnovTN

The dual training system: Integration of young people into the labour market:
http://ec.europa.eu/social/main.jsp?langId=en&catId=1070&newsId=1948&furtherNews=yes

Work-based learning in Europe – Renewing Traditions – background information:

http://www.bibb.de/dokumente/pdf/stbpr_veranstaltung_2013_12_04_workbased_learning_in__europe_hintergrundpapier_en.pdf

Work-based Learning and Lifelong Guidance Policies ELGPN Concept
http://www.elgpn.eu/publications/browse-by-language/english/elgpn-concept-note-no.-5-work-based-learning-and-lifelong-guidance-policies/

Work-Based Learning AN EMPLOYER'S GUIDE:
http://changetheequation.org/sites/default/files/Guide%20to%20Work-based%20Learning.pdf