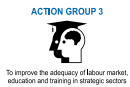


# DUAL SYSTEMS IN THE REGIONS OF THE ALPINE SPACE

*Final report*





This Report has been elaborated by **INAPP**, as part of an agreement with the **Autonomous Province of Trento**, which coordinates the **Action Group 3 of the EU strategy for the Alpine Region**. The “VET Systems and Services” Structure, coordinated by Anna D’Arcangelo, is responsible for managing the project.

**Sandra D’Agostino** and **Silvia Vaccaro**, both researchers at **INAPP**, carried out the research on the governance of the dual systems in the countries of the Alpine Area and are the authors of this Report.

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February 2019

# ***DUAL SYSTEMS IN THE REGIONS OF THE ALPINE SPACE***

***Final report***



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# PREFACE

In the framework of the *European Union Strategy for the Alpine Region* (Eusalp), the AlpGov project supports the implementation of the Action Plan adopted in July 2015 by the European Commission (COM 2015 366 final), and that - in September 2016 - was the subject of a European Parliament Resolution.

With reference to the objectives of Action Group 3 - i.e. improving the adequacy of labour market and education and training systems - , it was agreed to carry out a comparative study on dual education models in Alpine countries and regions, in order to come up with a set of recommendations and guidelines aiming to enhance the governance structures and mechanisms.

The Italian national institute for public policies analysis, INAPP (*Istituto Nazionale per l'Analisi delle Politiche Pubbliche*) - the research body of the Italian Ministry of labour and social policies – has elaborated this report which describes the various dual systems, looking into their distinctive features. Through a comparison focusing on some areas identified as priorities for a joint action, the study also puts forward some other topics which might be explored in the future with a view to strengthen the cooperation in the education and training field among the Alpine regions.

The dual systems in the Alpine Region show quite different features, which make it hard to identify common work approaches. On this ground, it was decided to proceed through an action-research process, which promoted the broadest involvement of the actors contributing to the functioning of the dual systems in Alpine countries and regions, thanks to the cooperation with the regional representatives in the Action Group 3 of the EUSALP – the European Union Strategy for the Alpine Region.

The report is divided into three parts: the first one details the methodology and working procedures implemented, starting from the definition of the research scope. The second part is focused on the analysis of the dual systems in the countries of the Alpine Space. Lastly, the third part compares the information acquired about the different dual systems with reference to the priority areas that have been the focus of the analysis; therefore, ten strategic objectives are identified, considered as recommendations addressed to institutions, schools and training providers, enterprises and apprentices, and representing the guidelines along which it is beneficial to act in order to enhance the dual systems.

# 1.

## THE RESEARCH PROJECT ON THE DUAL SYSTEMS IN THE ALPINE COUNTRIES

### 1.1 CONTEXT AND REFERENCE FRAMEWORK

The Alpine Region is one of the wealthiest, the most dynamic, innovative and economically competitive areas of Europe. The territories constituting this Region benefit from a more favourable labour market than in the rest of Europe, at least for what concerns overall employment and unemployment rates. By contrast, with reference to young people, the situation is more complex: in German-speaking countries and regions, much more favourable conditions are found when looking at education (early school leavers) and labour indicators, thanks also to the positive impact of the dual system; in France and Italy young people notoriously face more difficulties on placement, despite the best performance occurring in the Alpine areas of these two countries. Therefore, in the Alpine Region labour markets characterized by a shortfall in demand and others showing a shortfall in the supply live side by side.

A first brief benchmarking among the Alpine countries with reference to some labour and training indicators is presented below.

#### Main labour and training indicators in the Alpine countries - 2017

	Tasso di attività (15-74 anni)	Disoccupazione (15-74 anni)	Disoccupazione giovanile (15-24 anni)	Early School Leavers*	NEET (15-24 anni)
<b><u>AUSTRIA</u></b>	67,9%	5,5%	9,8%	7,4%	6,5%
<b><u>FRANCE</u></b>	62,1%	9,4%	22,4%	8,9%	11,5%
<b><u>GERMANY</u></b>	69,5%	3,8%	6,8%	10,1%	6,3%
<b><u>ITALY</u></b>	57,1%	11,2%	34,7%	14,0%	20,1%
<b><u>LIECHTENSTEIN**</u></b>	n.d.	1,4%	2,6 %	n.d.	n.d.
<b><u>SLOVENIA</u></b>	64,9%	6,6%	11,2%	4,3%	6,5%
<b><u>SWITZERLAND</u></b>	75,6%	4,8%	8,1%	4,5%	6,5%

\*Young people aged 18-24 out of school with no upper-secondary qualification.

\*\*The statistics for Liechtenstein are arranged by the National Statistical Office according to procedures not fully comparable to those adopted by other Countries; for details, see the country analysis.

Source: Eurostat and Statistical Office of Liechtenstein.



This report focuses on a sector of the training systems which is at the core to facilitate the employment of young people: the dual system. As a matter of fact, an extensive scientific literature has highlighted the relation between dual system and youth unemployment, showing the positive effect of the first one on the school-to-work transition and in allowing a rapid placement into the labour market.

However, Alpine dual systems show country-specific features; moreover, several tools and programmes related to the wide work-based learning category may coexist in one country. Therefore, the research starting point was the analysis of the different contexts, to identify those work-based learning tools and paths appearing the most similar. The selection has been based on the definition adopted by the Cedefop, the European Agency for vocational education and training, according to which the dual system or “apprenticeship” is characterised by the following features:

- it is part of the formal education and training system;
- the learning process is realised through an alternation between a workplace and an educational or training institution;
- at the end, apprentices acquire a qualification and receive a recognised certificate;
- in general, apprentices are considered as employees and are remunerated for their job;
- in general, it is based on a formal contract or agreement between the employer and the apprentice, but it may also be based on a contract with the education or training institute.

According to this definition, when speaking of “dual systems” or “apprenticeship models”, we refer to the following tools:

<b>AUSTRIA</b>	Lehre/ Lehrlingsausbildung / Duale Ausbildung/ Betriebliche Ausbildung
<b>FRANCE</b>	Contrat d'apprentissage
<b>GERMANY</b>	Duale Berufsausbildung/ berufliche Ausbildung
<b>ITALY</b>	Apprendistato per la qualifica e il diploma professionale, il diploma d'istruzione secondaria superiore e il certificato di specializzazione tecnica superiore / Apprendistato di I livello
<b>LIECHTENSTEIN</b>	Berufliche Grundbildung
<b>SLOVENIA</b>	Vajeništvo
<b>SWITZERLAND</b>	Betrieblich organisierte berufliche Grundbildung Apprentissage / Formation professionnelle initiale Formazione professionale di base / tirocinio / apprendistato

In all the countries in the Alpine Macro-region there is an apprenticeship whose features are consistent with the Cedefop's definition and which is integrated into the education and training system, with stronger or weaker links. In general, to access the dual system, young people need to have fulfilled the education obligation (equal, at least, to 9 years). Therefore, apprenticeship is one of the eligible options to fulfil the mandatory education and training period up to the age of 18, considered as a training path within upper-secondary education.

The starting point of each apprenticeship is a contract between the training company and the apprentice, which is improved through the identification of the institution in charge of delivering the off-the-job training. During the apprenticeship, young people receive a compensation, or a financial contribution, generally determined according to the collective agreements and increasing with respect to the competencies acquired. As a dual path, each country regulation requires the appointment of those people in charge of supporting the apprentices' on-the-job training, such as instructors, trainers or tutors.

At the end of their training, the apprentices acquire qualifications formally recognised at national level, mainly referenced to EQF<sup>1</sup> level 3. However, such positioning should not be meant as a limit: in recent years, initiatives driving the apprenticeship towards higher-level qualifications are thriving, both by matching the achievement of the final qualification with the A-level examination thus allowing (former) apprentices to access tertiary-education, and by designing apprenticeships awarding EQF level 5 to 8 qualifications.

## **1.2 RESEARCH METHODOLOGY**

In designing the research on the dual systems in Alpine regions and countries, consideration was given to the available literature, main comparative studies and analyses carried out by supranational bodies (EU, OECD, ILO, etc.) and promoted by some countries.

This desk research stage has pointed out similarities and differences of the various dual systems, suggesting the possibility to focus on some areas which - in the view of identifying ten common strategic objectives, to enhance the apprenticeship systems and the cooperation among Alpine countries - are considered as priorities. The identified areas, being at the core of the main challenges for the training systems in Europe, are the following:

- governance of systems;
- attractiveness of dual systems;
- quality of the training;
- innovation, i.e. the impact of the transformations in production systems and processes on labour markets and, though, on training systems.

Moreover, in view of the supranational dimension of the Alpine Space, a priority action has been identified, which can be the topic for building a stronger cooperation among the Alpine Regions, i.e. the transnational mobility of apprentices. Such a topic is under political debate in many countries. Also, it is currently a part of the European agenda in the view of defining programmes and initiatives for the next programming period.

With regard to the mentioned priority areas and actions, the topics and the initiatives at the core of the ongoing debate in the different countries have been identified. Thus, an action-research process has been implemented, taking advantage of the cooperation of the members of the Action Group 3 and promoting the activation of a network of local experts. Expert from national and regional institutions, from the education and training system, as well as from the broad labour sector (social partners and other bodies supporting the labour market functioning) have been involved for answering to a semi-structured questionnaire prepared by INAPP. The questionnaire has been developed with the purpose to identify strengths and weaknesses of the various dual systems, as well as to explore those main issues and actions being under debate or implementation with respect to the priority areas and the transnational mobility of apprentices. Moreover, the experts contributed by reporting examples of ongoing actions; the different response rate from the various territories of the Macro-Region and the variable level of details in the experts' feedback are the rationale behind the uneven information about the ongoing practices.

All the information and documents collected have been processed by INAPP, first of all to identify the 10 Recommendations to enhance the governance of dual systems in the Regions of the Alpine Space, presented at the "2nd Forum on Dual Education in the Alpine Region" (<https://www.alpine-region.eu/events/2nd-forum-dual-education-alpine-region>) held in Telfs, Austria, in November 2018; thereafter, this Final Report has been drawn up, with a specific description of the dual systems in the various countries and the comparative analysis of the different priority areas.

<sup>1</sup> The European Qualifications Framework is a tool introduced by the Recommendation of the European Parliament and of the Council of 23 April 2008. It consists of a grid divided into 8 levels, each one describing more or less complex learning outcomes (ie a combination of knowledge, skills and competences). It starts from a minimum complexity level (level 1) up to a maximum (level 8). The grid is a common reference tool for all the countries that adhere to the Recommendation, used for referencing all the qualifications issued in a country and making them readable and comparable at national and international level. Further information on the EQF and the levels descriptors at: <https://ec.europa.eu/ploteus/content/descriptors-page>

## 2.

# ***DUAL SYSTEM IN THE COUNTRIES OF THE ALPINE SPACE***

## **2.1 AUSTRIA**



Key indicators (2017):

Area: 83,879 km<sup>2</sup>

Population: 8,772,865 ab.

Activity rate (aged 15-74): 67,9%

Unemployment rate (aged 15-74): 5,5%

Youth unemployment rate (aged 15-24): 9,8%

Young people aged 18-24 out of school with  
no upper-secondary qualification: 7,4%

NEET, aged: 6,5%

New-entrant apprentices: 33,721

Total apprentices: 106,613

## **Relevance of the dual system for youth training and employment**

Austria is the fourth country in Europe with the lowest youth unemployment rate reported in 2017 (9.8%). One of the reasons for this result, in addition to the low overall unemployment rate, is the strength and the consolidation of its dual system.

Almost all the young people acquire an upper-secondary qualification through a full-time education or a vocational training, so that the percentage of early school leavers is very low. At the completion of compulsory schooling, about 40% of the young people opt for an apprenticeship, thanks to the cooperation of the enterprises: almost 30,000 companies host young people in dual education paths. These figures show the relevance of the apprenticeship in the area of the Austrian education and training system.

### **APPRENTICESHIP IN AUSTRIA IN 2017**

At the end of 2017, there were 10,613 apprentices in Austria, around 300 less than the previous year (106,950) and around 25,000 less than in 2009 (131,676).

The most attractive trades in apprenticeship are those in the “retail sales” and “mechanical technology” sectors. The sectors that offer the greatest employment opportunities for apprentices are services and construction (14% and 12% respectively). More than two thirds of apprentices (65%) are trained in companies with less than 250 employees (18% in companies with less than 10 employees).

Usually about three quarters of the apprentices (75%) complete the training course and pass the final exam, while the remaining 25% leave the training course or complete it, but fail to pass the final exam. The drop-out rate is greatly reduced in larger companies (with 20 or more apprentices) and is lower among the apprentices of Austrian nationality (15%) and

higher among the apprentices of Turkish nationality (34%).

A long-term analysis shows that the number of apprentices has been declining since the end of the 1990s, mainly due to demographic trends and the greater interest expressed by families in more general training courses. The number of training companies has also been declining for about twenty years, touching the new minimum in 2017 of 27,792 companies.

A positive element to underline is that in 2017, for the second consecutive year, the number of new apprenticeship contracts is increasing (+3,1% on 2016), as well as the share of 15-year-olds who opt for apprenticeship (from 38,2% in 2016 to 39,5% in 2017). However, this quota varies greatly from one region to another. While in Lower Austria, for example, only about 28% of 15-year-olds started apprenticeship training in 2016, this share was around 50% in Vorarlberg (Dornmayr, Nowak, 2017).

## **Apprenticeship beneficiaries and achievable qualifications**

At the completion of 9 years at school, all the young people have the possibility to access the apprenticeship, with no further requirements regarding a specific qualification. Since 2017, the compulsory education and training period up to the age of 18 is into force (*Ausbildungspflicht*); therefore all the young people must be engaged in an education or training path, including the dual one. The main feature of the Austrian dual system is that it operates alongside a full-time VET system, equally strong in terms of students. Such two sectors - which are about the same scale - constitute the pillars of the VET System (IBW, 2016).

Generally, the access to the apprenticeship is provided through a placement office of the Austrian Public Employment Service (*Arbeitsmarktservice* - AMS). The AMS - in cooperation with the Federal Economic Chamber (*Wirtschaftskammer Österreich* - WKÖ), - has also developed an IT platform to search for vacancies. Moreover, the Economic Chambers have developed a digital careers platform that provides advice and information about jobs, career paths and vocational training courses. In addition to the AMS, also the Regional Apprenticeship Offices (*Lehrlingsstellen*), the Economic Chamber and the Chamber of Labour (*Arbeiterkammern* - AK) carry out information and guidance activities.

The length of the apprenticeship is between 2 and 4 years, according to the trade (*Lehrberuf*). For those who have already completed an apprenticeship or who have already achieved an upper secondary education diploma, the length of the apprenticeship can be reduced by one year, in agreement with the company. The final qualification achievable through an apprenticeship is a formal certificate regulated by law, corresponding to the level 3 of the International Standard Classification of Education (ISCED<sup>2</sup> 2011).

For each achievable qualification, the Ministry for Digital and Economic Affairs (*Bundesministerium für Digitalisierung und Wirtschaftsstandort* - BMDW) sets out the Training Regulation (*Ausbildungsordnung*) and the Examination Regulation (*Prüfungsordnung*), which describe the job profile - also in terms of work activities -, identify the required skills and the training arrangements, the learning outcomes and the procedures for the examinations. Moreover, they establish the length of the apprenticeship period. Specifically, the Regulations focus on the on-the-job training, but they also constitute a reference for the definition of curricula for the vocational schools. In November 2018 there are 203 apprenticeship trades, most of which (163) has a length of three years<sup>3</sup>.

Processes for modernising or introducing new trades are often launched, generally at the initiative of Social Partners. The proposal is thus approved by the Federal Advisory Board on Apprenticeship (*Bundes-Berufsausbildungsbeirat* - BBAB), which might entrust the two research institutes of the social partners IBW (*Institut für Bildungsforschung der Wirtschaft*) and ÖIBF (*Österreichisches Institut für Berufsbildungsforschung*) - with the task to define the operational proposal. Anyway, during the drafting of the Regulation, specific researches and investigations are conducted, also by looking at existing qualifications taken from the international panorama.

Consequently, the proposal is referred back to the BBAB, for a further debate among institutional actors and Social Partners which, eventually, can lead to the adoption of the Training Regulation by the Ministry of Economy. Alongside, the Ministry for Education adopts the curriculum

proposal for the vocational schools.

## **The governance of the dual system**

As a Federal Parliamentary Republic, Austria is constituted by 9 Länder (Regions), which benefit from a certain level of autonomy. With regard to the vocational education and training system the Federal government has the main responsibility.

The main legal basis for the organisation of the dual system is the Vocational Training Act (*Berufsausbildungsgesetz* or BAG), approved in 1970 and frequently amended, which identifies the Apprenticeship Training Regulations as the core of the dual system. The Regulations define objectives, contents and expected outcomes of the on-the-job training, with respect to each trade. The apprenticeship in the agriculture and forestry sectors is, on the other hand, regulated by a sector-specific regulation, coordinated by the relevant Ministry.

The off-the-job training delivered by the vocational schools is regulated by two important acts: the School Organisation Act (*Schulorganisationsgesetz*, SchOG, BGBl. no. 242/1962) and the School Education Act (*Schulunterrichtsgesetz*, SchUG, BGBl. no. 472/1986).

The dual system's success is the result of a process involving many institutions and bodies at different levels.

At the federal level, there are two reference Ministries: the Ministry for Digital and Economic Affairs (BMDW), in charge of the coordination and promotion of the cooperation among different institutional actors involved in VET, and the Ministry for Education, Science and Research (*Bundesministerium für Bildung, Wissenschaft und Forschung* - BMBWF), defining the curriculum and partially financing the vocational schools.

In each Land (Region) there is an Apprenticeship Office (*Lehrlingsstelle*), placed at the Regional Economic Chamber (WKO), but subordinate to the Federal Ministry of Economy (BMDW). The Office performs several duties supporting the apprenticeship: it provides information services for enterprises and young people; it assesses (together with the Chamber of Labour - AK) the applications of those enterprises wishing to offer training places; it verifies the law compliance of the apprentices' agreements; it provides the eligible enterprises with available grants; it organises the apprenticeship leaving examinations and appoints the chair of the evaluation commissions.

The Land Government provides the financial resources for building and maintaining the vocational schools, for purchasing equipment, machinery and teaching materials and - together with the Federal Government - co-funds the salaries of teachers and trainers.

The participation of enterprises and workers in the dual system is provided through various bodies. The Economic Chambers (WKO) and the Chambers of Labour (AK) are organizations with a mandatory participation by enterprises and workers, respectively. They represent the interests of the members, especially in the scope of the legislative processes; on the other hand, the collective agreements are signed by the WKO representing the enterprises, while the workers are represented by trade unions.

Both the Chambers are organised with representatives acting at federal and regional level; with regard to the dual system, they participate in the decision-making process through two Boards:

- the Federal Advisory Board on Apprenticeship (*Bundes-Berufsausbildungsbeirat – BBAB*) is a body with 12 members, 6 from the WKO and 6 from the AK, in addition to two representatives from the education sector, appointed by the Ministry of Economy, in charge of supporting the evolution of the dual system and defining new apprenticeship regulations;
- the Regional Advisory Board on Apprenticeship (*Landes-Berufsausbildungsbeirat - LBAB*), appointed by the Land Government and with 4 members equally representative of the WKO and the AK, acting as a consultation body.

At local level, companies hire apprentices and deliver their on-the-job training through authorised trainers or instructors. Vocational schools provide the general and theoretical training in addition to some practical training. School inspectors verify the quality of the service provided by the vocational school and ensure the implementation of the federal curriculum. Social Partners play also a crucial role in monitoring the dual system, in particular for the contribution coming from two research institutes, the IBW affiliated with the WKO and the ÖIBF with the AK. These institutes carry out analyses about the skills needs, to introduce new profiles and/or to update the existing ones; they produce information and supporting material for training, and organise the leaving examinations for the apprentices. Every two years, the IBW and the ÖIBF draw up a “Report on the situation of youth employment and apprenticeship training in Austria”, which is subjected to the assessment of the BBAB in order to elaborate reform proposals.

### **The training contract and the incentive measures for training enterprises**

The apprenticeship starts upon the signing of a training contract between the company and the apprentice. In case of a minor, a parent or another legal guardian is required to sign the contract.

The contract has to be concluded in writing and has to specify the some information related to the on-the job and school training provision, in addition to the compensation paid to the apprentice; standard forms are available at the Regional Apprenticeship Offices. After the stipulation, the contract has to be referred to the local Apprenticeship Office, which assesses the lawfulness of the data therein included; moreover, the Office may recognise credits on the basis of apprentice’s previous experience, thus reducing the length of the apprenticeship.

For each job, the (minimum) wage of apprentices is defined by the collective agreements. In the sectors where there are no such agreements, the compensation for the apprentices is agreed between the enterprise and the apprentice.

The compensation increases gradually along the apprenticeship. It goes from 25% (with respect to the wage per hour of a skilled worker in the same trade) received during the first year, it increases year by year, and in the last year it is approximately equal to 80% of the wage of an equivalent specialised worker. The apprentice is also paid during the school training and may receive one-off bonuses. The apprentices’ wages are not considered as a part of the business income; therefore the State partially funds the on-the-job apprenticeship, although indirectly. Moreover, there are other benefits dedicated to the training companies: during the first two



years of apprenticeship, neither the apprentices, nor the enterprises pay for health insurance contributions; for the whole period, the exemption from the payment of accident insurance contributions applies; unemployment insurance contributions are paid only for the last year.

In addition, there is a variety of other grants for the training enterprises, managed by the Apprenticeship Offices; for example, for new apprenticeship vacancies, some enterprises (start-ups, enterprises hiring apprentices for the first time or hiring after 3 years from the end of the last apprenticeship) may receive a grant amounting to € 2,000.

At the end of the apprenticeship there is no obligation for the enterprises to keep the young people in their staff.

### **On- and off-the-job apprenticeship training**

Before hiring an apprentice, the companies are required to show they meet the legal requirements, in terms of suitability of the available machinery and equipment, as well as of the skills of the instructor (*Ausbilder*) providing the on-the-job training. The instructor can be the entrepreneur him-/herself or another employee appointed by him/her; either way, the instructor is required to have a professional expertise in the trade, or in a similar one, and to have passed the initial training instructor examination - corresponding to a module of the master craftsman examination - to assess he/she has appropriate pedagogical skills; the attendance at a 40-hours training course leads to the exemption from the examination.

The accreditation procedure as a training enterprise (*Lehrbetrieb*) requires the company to submit an application to the Apprenticeship Office, in order to assess its own suitability. The successful outcome determines the issue of a “declaration” certifying that the company meets the requirements to take on apprentices. Companies have the possibility to train apprentices also within the framework of training alliances with other enterprises. Such alliances may be compulsory, in case the enterprise cannot fully provide the knowledge and the skills as required by the Training Regulation, or voluntary, in case of companies wishing to provide only part of the training, generally related to very specialised skills, that can also be an enrichment of the Regulation requirements. Since 2009, those young people who do not find a placement as apprentices in a company have the possibility to carry out the apprenticeship through a supra-company training model, the so called *Überbetriebliche Ausbildung* (ÜBA). At present, there are two ÜBA models, widespread in almost all the Austrian Regions:

- according to the ÜBA 1 model, an inter- or supra-company body (usually a vocational school) takes responsibility for the apprentice’s training for the entire length of the contract and then the apprentice receive the on-the-job training in one or more training enterprises;
- according to the ÜBA 2 model, the apprenticeship takes place through a sequence of many contracts with several enterprises, each of which taking responsibility for a part of the apprenticeship training.

The supra-company training (ÜBA) is fully financed by the Public Employment Service AMS, which also finances the placement in the apprenticeship of people belonging to groups at risk of exclusion.

Beyond the on-the-job training, the apprentice is required to attend a vocational school (*Berufsschule*) for one day or a day-and-a-half per week, i.e. for 20% of the time. The organisation of the learning at the vocational school can also be by “blocks”, i.e. continuously for eight weeks per year, scheduled in certain periods of the year for particular trades with a high seasonality. The vocational school imparts mainly the basic knowledge and skills related to the chosen occupation (65% of the curriculum) – i.e. theoretical training covering the subjects more related to the trade and some practical training in workshops; moreover, it takes charge of the general culture of the apprentices (35%). The curricula defined at federal level allow the schools to have a certain degree of autonomy, so that they can study longer some interesting topics out of a specific list. There are several formal and informal relations between enterprises and vocational schools: many teachers have worked in the same companies of the apprentices; often, on-the-job trainers and school teachers meet to discuss the latest developments in their field and schools get regularly in touch with the companies in case they need practical support and information, materials or data to keep their teaching material updated.

Since 2006, with the purpose to improve the attractiveness of the dual system, it has been introduced the possibility to organise apprentices’ training on a modular basis. In these apprenticeships the off-the-job training period is structured on three modules:

- the core module usually has a length of two years;
- the main module - job-specific - has a length of one year and,
- the specialised module - providing skills related to specific production processes or services - has a length of 6 months/1 year.

In the modular context, apprentices have the possibility to combine differently the specialised modules, by choosing even more than one. In November 2018, there are 11 modular apprenticeships, with 42 main modules and 32 specialised modules.

Generally, vocational school’s teachers are required to have a University degree, that can be a Bachelor’s degree or master’s degree; for the trainers in charge of the school-workshops for building up practical skills, a master craftsman certificate – in a similar or equivalent trade - is adequate.

At the end of the apprenticeship period, a leaving examination (*Lehrabschlussprüfung*) is planned, with the aim to verify that the required skills have been properly acquired. The examination is both practical and theoretical. Those young people who have successfully concluded the vocational school are exempted from the theoretical part. The examination can also be taken by young people - who are 18 years old, at least - that provide evidences of having elsewhere acquired the knowledge and skills required by the Regulation for a certain trade, in no formal or informal learning contexts also. Since autumn 2008, all the apprentices have the possibility to achieve also the *Berufsmatura* (or *Berufsreifeprüfung*) along with the apprenticeship qualification and, free of charge, to subsequently access the tertiary education. In order to achieve the *Berufsmatura*, which allows the entrance to all higher education pathways, four examinations have to be passed; three of them can be taken before the apprenticeship leaving examination, while - to qualify for the fourth and last one - young people are required to have passed the leaving examination and to be, at least, 19 years old. To qualify for the examinations, the school attendance is not compulsory; nevertheless, in each Region there is at least one institute pro-

viding preparatory courses with tuition fees, which are held outside the business hours but, in agreement with the company, the courses can be attended also during the business hours. Such costs, together with the examination fees and the costs for purchasing the learning materials, are refunded by the State. Apprentices have the possibility to achieve the Berufsmatura also in case they have passed only one examination during their apprenticeship period; the other examinations can be taken within the next 5 years.

In 2013, the initiative *Quality Management in Apprenticeship (Qualitätsmanagement Lehrlingsausbildung)* was launched; it is based on the establishment of a set of indicators, annually verified, such as, for example: drop-outs during the apprenticeship; young people not showing up for the leaving examination or failing in it. Since 2006/2007, vocational schools assure their quality through the *Qualitätsinitiative BerufsBildung*<sup>4</sup> - QIBB, a quality assurance system based on the Deming<sup>5</sup> Cycle: plan – do – check - act. The focus is on both the educational and the administrative action.

<sup>2</sup> ISCED classification - developed by the Unesco Institute of Statistics – is an integrated and consistent statistical framework for the collection and reporting of internationally comparable education statistics. ISCED classifies the levels of educational contents underlying the qualifications recognized by national education systems, from the lowest level (pre-primary education) to the highest level (research doctorate). For further information: <http://uis.unesco.org/>.

<sup>3</sup> For more detailed information look at the following website: <http://lehrberufsliste.m-services.at>

<sup>4</sup> For more information visit the website: [www.qibb.at](http://www.qibb.at)

<sup>5</sup> William Edwards Deming (1900-1993), United States, is known for his studies on how to improve production which, widely applied in Japan, contributed to the rise of the Japanese economic power.

## 2.2 FRANCE



Key indicators (2017):

Area: 640,679 km<sup>2</sup>

Population: 66,694,863 inhab.

Activity rate (aged 15-74): 62,1%

Unemployment rate (aged 15-74): 9,4%

Youth unemployment rate (aged 15-24): 22,4%

Young people aged 18-24 out of school with no upper-secondary qualification: 8,9%

NEET, aged 15-24: 11,5%

New-entrant apprentices: 294,800

Total apprentices (2016/2017): 412,266

### **Auvergne-Rhone Alpes**

Area: 69,711 km<sup>2</sup>

Population: 7,933,200 inhab.

New-entrant apprentices: 34,440

Total apprentices: 48,589

### **Bourgogne-Franche-Comté**

Area: 47,784 km<sup>2</sup>

Population: 2,819,635 inhab.

New-entrant apprentices: 13,772

Total apprentices: 18,494

### **Provence-Alpes-Côte d'Azur (PACA)**

Area: 31,400 km<sup>2</sup>

Population: 5,028,341 inhab.

New-entrant apprentices: 20,767

Total apprentices: 27,636

## **Relevance of the dual system for youth training and employment**

In August 2018, among the Countries in the eurozone, France reported the highest unemployment rate, following Greece, Spain and Italy. As regards youth unemployment, France ranks fourth for the number of unemployed 15 to 24-years-old people, still following Greece, Spain and Italy, while 18 to 24-years-old young people outside the school system and without an upper-secondary school qualification (early school leavers) are slightly less than 9%.

Apprenticeship - as an employment contract with a training content combining on-the-job and off-the-job training periods with the working activity - is considered a suitable tool for facilitating the placement of young people in the labour market, and for contrasting school dropping-out. For this reason, the apprenticeship has gradually gained a core position in the French labour policies framework, and many legislative measures have been taken, introducing structural changes in the regulation of such tool, with the aim to promote its use.

The latest reform is included in the *«pour la liberté de choisir son avenir professionnel»* act<sup>6</sup>, approved on 1 August 2018 and enacted on the next 5 September. The act introduces several changes in the apprenticeship regulation, to revitalise a tool which - despite the improvements recorded in the last years (see box) - remains not very attractive. Currently, only 7% of 16 to 25-years-old young people opt for the apprenticeship, despite 70% of the apprentices finds a job within seven months after concluding the training, while there are 1.3 million of NEET young people (*Not in Education, Employment or Training*). The legislative changes aim to meet the several challenges that the French apprenticeship has to face.

In the last years, the dual system has been attractive for already qualified young people. The limited access to the apprenticeship by non-qualified young people is a result also of the choices made by the employers, who usually recruit mainly the strongest academic profiles. Therefore, there is the need to introduce incentive measures for enterprises taking on as apprentices low-skilled young people.

Another challenge is the reduction in the high rate of apprenticeship drop-out. Every year, about 29% of the apprenticeship contracts break off before the end of the training period and the drop-out rate is even higher in the training programmes awarding lower qualifications, reaching 39%. A further critical point relates to the structure of the training provision at local level, that in some Regions is excessively fragmented. Moreover, the training contents does not always meet labour market needs; but also enterprises - particularly the small ones - hardly foresee what skills will be needed in the future to keep or improve their market positioning. Therefore, actions have to be taken regarding the existing training provision, introducing a mechanism for designing and modernizing qualifications and skills in line with the rapid changes in the production system and labour organisation.

At present, SMEs host more than 70% of the total apprentices. Nevertheless, these companies often lack in internal skills and tools needed for properly managing the apprenticeship contract and to follow the apprentices in their learning. To meet this challenge, support and assistance activities for the enterprises are planned to be enhanced.

The last challenge is the simplification of the dual system, which is particularly complex and its functioning is not very clear (Eurofound, 2018). This penalises above all those young people not

## **APPRENTICESHIP IN FRANCE IN 2017**

According to the figures published by the Research and Statistics Direction of the French Ministry of Labour (Dares, 2018), in June 2017 the stock of apprentices in France amounted to about 420,000. In the same year, the number of new apprentices was equal to 294,800, of which: 280,400 in the private sector and 14,500 in the public sector. Compared to 2016, an increase of 2,1% is recorded, higher in the public sector (+7,9%) than in the private one (+1,8%). Such increase is attributable, for more than the half, to the experimental measure introduced in 2017 which, in seven Regions, increased up to 30 years the age limit to access the apprenticeship. It is a trend reversal in comparison with the reductions in the new apprentices recorded from 2013 to 2015 and with a standstill in 2016. In 2017, the increase affects the tertiary-sector (+1,9%), building sector (+3,8%) and agriculture (+6,7%), while there is a slight reduction as regards the manufacturing (-0,6%). In the private sector, the increase concerns all the enterprises, except those with less than 4 employees (-1,4%), but it is higher in the enterprises with 50 to 250 employees (+4,4%). However, it should be pointed out that the enterprises hiring apprentices are for more than 70% small ones (up to 49 employees).

It is interesting that, with an increased age of the new apprentices, a higher level of

education is reported: indeed, there is an increase in apprentices with an upper secondary diploma or a higher qualification (+3,7%) as well as in young people entering an apprenticeship to acquire a tertiary-education qualification, while the number of apprentices wishing to achieve a Vocational Skill Certificate (*Certificat d'aptitude professionnelle* – CAP) is still reducing (-0,5%). For 86% of the new apprentices, the apprenticeship contract is the continuation of a school education (59%), while less than 1/3 of them have previously experienced an apprenticeship period.

As regards interruptions, 29% of the apprenticeship contracts signed between June 2015 and May 2016 was terminated before the prescribed term; for the same period between 2014 and 2015, a similar percentage was reported. Interruptions are more frequent in case of apprentices who are younger and with less schooling; in fact, among the apprentices younger than 18, or preparing to achieve the CAP-BEP level, interruptions reach 39%. Such percentage reduces to 19% for 21 to 25-years-old apprentices and to 18% for those apprentices who have to achieve a tertiary-education diploma (I-III level). Interruptions before the prescribed term are higher in smaller enterprises and show a large variability according to the economic sector.

benefiting from adequate information and guidance services, as well as those employers who consider the apprenticeship as a complex tool, without immediately detectable advantages. The reform will not be immediately operating; indeed, most measures will be into force only from 1 January 2019. Moreover, the enforcement of many measures requires the enactment of further decrees. Thus, 2019 will represent a transition stage which will gradually lead to the full implementation of the new apprenticeship regulation.

### **Apprenticeship beneficiaries and achievable qualifications**

The main legal basis of the French apprenticeship is included in the Labour Code (Code du travail), particularly in Book II of the sixth part of the Code, dedicated to “*La formation professionnelle tout au long de la vie*” (Lifelong vocational training).

The French Labour Code defines the apprenticeship as a tool contributing to the achievement of the national education objectives and, indeed, it addresses those young people who have completed the compulsory education and are older than 16 (or 15 at least, in case they have completed the lower secondary-education).

The age limit to enter into a contract used to be 25 but, in 2017, the experimental raising of the age up to 29 was authorised by law<sup>7</sup> in seven Regions (Bretagne, Bourgogne-Franche-Comté, Centre-Val de Loire, Grand Est, Hauts-de-France, Nouvelle-Aquitaine, Pays de la Loire; Île-de-France et Occitanie). The 2018 reform experimentally - and until 31/12/2019 - extends the new age limit throughout the national territory. The intent of the government aims at facilitating the spreading of the apprenticeship through the extension of the potential target.

Young people meeting the prescribed age requirements have the possibility to enter into an apprenticeship contract and to take part in a theoretical and practical training period, aimed at acquiring a vocational diploma, at upper-secondary or tertiary education level. Therefore, the French apprenticeship is completely included in the education system, as a labour contract aiming at achieving education qualifications. In addition, through an apprenticeship contract young people can obtain a vocational qualification listed in the National Register of Vocational Certifications - NRCP.

The French education system allows young people who have completed the compulsory school to continue their studies by choosing between two channels: the general and technical education sector, providing for the attendance of the *lycée d'enseignement général et technologique*, or the vocational sector, providing for the attendance of Vocational high schools (Lycée professionnel). The following qualifications awarded by the vocational sector can be achieved through an apprenticeship training:

- the first one - with a length of two years - qualifies the student for the exercise of a trade and leads to the achievement of the *Certificat d'aptitude professionnelle* (CAP - Vocational Skill Certificate);
- the second one allows to achieve the *Brevet d'études professionnelles* (BEP - Vocational studies Certificate) after two years;

- and, at the completion of the third year, apprentices can obtain the vocational baccalauréat (BAC) - corresponding to a vocational upper secondary education leaving certificate.

The tertiary-education system is structured in three levels: Licence – Master - Doctorat. Through an apprenticeship it is possible to obtain the following tertiary qualifications:

- at the end of two-years training paths after the achievement of the BAC the *diplôme universitaire de technologie*, *diplôme d'études universitaires scientifiques et techniques*, *brevet de technicien supérieur*, *diplôme d'études universitaires générales*;
- at the end of three years of study after the achievement of the BAC, the *diplôme national de technologie spécialisée*, *licence professionnelle*, *licence*;
- to achieve master's qualification after 4 or 5 years;
- to acquire the PhD with post-master courses.

In total, it is estimated that in France there are more than 15,000 recognised qualifications. The achievable qualifications are divided into 5 levels, from the V (the lowest) to the I (the highest) and they are different on the basis of the value of the qualification, and of the purpose, length and sector of the training.

The 2018 law reforming the apprenticeship assigns to a new body, the so-called *France compétences* the duties - previously under the responsibility of the National Commission for Vocational Certification<sup>8</sup> (*Commission Nationale de la Certification Professionnelle* - CNCP) - of listing the existing education provision and of updating it, in order to take into account the innovation of the labour system and organisation. At *France compétences* will be established a special Commission for Vocational Certification equally composed by representatives of the central Administration and of the Social Partners.

Vocational qualifications are collected into two different National Registers: the National Register of Vocational Certifications (*Répertoire national des certifications professionnelles* - RNCP) and the Specific Register. The first one includes all the education and vocational qualifications, diplomas and certifications, recognised throughout the national territory, organised according to the activity sector and the qualification level. The Specific Register includes certifications and entitlements corresponding to certain professional skills, complementary to the vocational qualifications.

The vocational certifications registered in the RNCP allow the validation of the skills and knowledge acquired, needed to exercise the professional activities. These certifications are defined through:

- a *Référentiel des activités professionnelles* (standards of professional activities - RAP), including the specific description of an occupation in terms of scope and context in which it is placed, duties and activities executed;
- a *Référentiel de compétences* (standards of skills) identifying the skills, including the cross-sectoral ones, and the knowledge needed to exercise an occupation;
- a *Référentiel d'évaluation* (standard of evaluation) defining criteria and arrangements for the evaluation of the skills and knowledge acquired.

Vocational certifications are classified by the qualification level and scope and are constituted by sets of competences, i.e. a consistent and uniform grouping of skills and knowledge contributing



to the autonomous exercise of a professional activity, and which can be assessed and certified. The structure of sets of competences should facilitate the validation process as well as the transition of young people from the apprenticeship to other education paths (*passerelles*).

The act reforming the apprenticeship changes the certification system for vocational diplomas and qualifications, with the aim to make them further meeting the labour market needs. It is foreseen, indeed, the enhancement of the role of Social Partners in the process of processing and regulating vocational diplomas and qualifications, except for those issued in the tertiary-education sector. For this purpose, the act standardises the rules for the membership of the Advisory Vocational Commissions (*Commissions Professionnelles Consultatives – CPC*), established in 1972 with the task to discuss projects regarding the creation, modernization and removal of vocational qualifications and their references, except for tertiary-education diplomas. The Commissions are composed by representatives of the central Administration and Social Partners, and by experts of various sectors. The act reforming the apprenticeship prescribes that at least half of the members of the Vocational Commissions represents the employees and employers' representative associations and establishes that no decision regarding the qualifications and their references - except for the evaluation standards - should be adopted without the approval of the Vocational Commissions.

Two registration arrangements are provided for the RNCP: the registration under ordinary law and the simplified registration. The registration under ordinary law relates to qualifications and diplomas with a vocational purpose issued in the name of the State and established by decree. These are included in the RNCP by *France compétences* for a period of 5 years following the approval by the relevant Advisory Vocational Commissions. The same ordinary procedure relates to vocational diplomas and qualifications, as well as those certifications and entitlements corresponding to certain professional skills, complementary to the vocational qualifications, defined by the relevant Ministries or a branch or other certification bodies. The simplified registration will relate to the vocational certifications involving emerging or highly developing occupations and skills identified by *France compétences*. The specific registration arrangements will be defined by decree of the Council of State.

## **The governance of the apprenticeship**

The functioning of the apprenticeship system is based on a quadripartite governance: State, Regions, trade unions and employers' associations, jointly with other actors, as the Chambers of Commerce and Industry, Chambers of Craftsmanship and Agriculture and the Bodies collecting taxes intended to fund the apprenticeship.

The collaboration among these bodies, as well as the mechanism of collection and provision of the resources dedicated to the apprenticeship, are considered very complex, heterogeneous and dysfunctional (Cahuc, Ferracci, 2014).

Therefore, the 2018 reform has acted deeply changing the governance and management system of vocational training and apprenticeship.

The funding system of apprenticeship has been simplified and centralised. The apprenticeship tax paid by enterprises - which was established in 1925 to fund the development of apprenticeship and of technological and vocational education - remains constant, set at 0,68% of the payroll. Compared to the past, the share of these resources dedicated to the funding of appren-

ticeship increases (equal to 87%), while the remaining 13% (so defined out-of-quota) is intended to fund the tertiary-education institutes (enterprises are free to choose the institutes to which pay their contribution).

Until the 2018 reform, the apprenticeship tax used to be collected by apprenticeship tax collecting bodies (so called OCTA - *Organismes collecteurs de la taxe d'apprentissage*), which, despite having been already reduced from 140 to 40 more or less, remained too numerous to assure an effective coordination of the funding system, as well as transparency and quality check of the expenditure (Cahuc, Ferracci, 2014).

The act reforming the apprenticeship simplifies the system, by entrusting the URSSAF network (*Union de recouvrement des cotisations de sécurité sociale et d'allocations familiales* - Union for collecting social security contributions and family allowances), managed by Social Partners for collecting some contributions from the companies to fund the welfare system, with the task to collect the apprenticeship tax as well. URSSAF will pay 87% of the apprenticeship tax to the new national agency - *France compétences* - which will have to assure the allocation of such resources to Regions and former OCTA bodies. The latter will be replaced by *Opérateurs de compétences* (OPCO – Joint Bodies for Skills Development).

The OPCOs - established by Social Partners agreements at sector level, and accredited by the State pursuant to criteria to be defined - will have the task to fund training centres according to the number of enrolled apprentices and will have to enhance their provision of technical support to sectoral Social Partners and to enterprises, especially the small ones. The OPCOs will have also the task to elaborate methodologies and tools for the analyses on the labour market evolution, in order to identify and bring forward the skills required by enterprises.

For each vocational diploma or qualification, the apprenticeship training cost will be defined at national level by the sectoral Social Partners. Regions will have the opportunity to increase this amount to improve quality and support the teaching innovation, as well as to prevent any imbalance, for example, between training centres for apprentices in areas with a more developed industry and those located in rural areas. The OPCOs will have to assure that the expected funds are available for each apprentice. The new apprenticeship financial regime will enter into force in 2020. As regards governance, the quadripartite management of the apprenticeship system is confirmed, though the reform aims to promote a higher centralisation at national level and a change in the role of each main actor of the system for the benefit of social partners, downsizing the Regions' role.

At national level, it is planned the establishment of the *France compétences* agency which will have a core and strategic role in the governance of the apprenticeship system. Operational since 1 January 2019, the new agency will exercise those functions previously assigned to Cnefop<sup>9</sup> (*Conseil national de l'emploi, de la formation et de l'orientation professionnelles*), Copanef<sup>10</sup> (*Comité interprofessionnel pour l'emploi et la formation*), Fpspp (*Fonds paritaire de sécurisation des parcours professionnels*) and CNC<sup>11</sup> and will be managed by the State, Regions, as well as employers' associations and trade unions. In addition to assuring funds to apprenticeship, *France compétences* will assure transparency of expenditures and system functioning, by defining certain indicators to assess the added value of the apprenticeship training, as well as by implementing monitoring activities and investigations on the evolution and the results of policies and actions developed

at regional level. Moreover, the agency will deal with the accreditation of those bodies which - starting from 2021 - will certify the providers wishing to apply for public resources to train apprentices.

At regional level, the strategic framework and the policies for the development of vocational training and guidance will be still defined in the *Contrat de Plan Régional de Développement des Formations et de l'Orientation Professionnelles* (CPRDFOP), having a multiannual validity and being structured on annual basis. Such contract is developed in the framework of the Regional Employment and Vocational Training Coordination Committee (*Comités de coordination régionaux de l'emploi et de la formation professionnelle* - CCrEFp), composed by State representatives, representatives of Regional Assemblies, trade unions and employers' organisations, as well as Regional Chambers of Agriculture, Commerce, Industry, and Craftsmanship. The committee has coordination, monitoring and assessment tasks regarding policies for employment and training.

The representative organisations take part in the drawing up of strategic guidelines for the implementation and development of apprenticeship. Through the definition of agreements among the State, Regions and sectoral organizations, the arrangements for the implementation of the strategic proposals are set out in order to develop vocational training in general and, particularly, dual training. Moreover, through the sectoral collective agreements, representative organisations have the opportunity to define special regulations for apprenticeship. Social Partners are represented in several bodies established at national and regional level contributing to define and implement policies and actions regarding vocational training and apprenticeship.

As highlighted, the 2018 reform significantly enhances the role of sector representative organisations in the Advisory Vocational Commissions for the definition and updating of vocational qualifications and the standards. Moreover, the reform entrusts these organisations with the task of establishing - for each vocational qualification - the costs of apprenticeship training that the OPCOs may accredit to the training centres.

Finally, as for the Chambers of Commerce and Industry and Chambers of Craftsmanship and Agriculture, they take part in the regional governance of the system and contribute to the development of the apprenticeship by exercising certain specific functions: management of training centres for apprentices; support to enterprises at the initial stage of the apprenticeship contract; intermediation to enter into an apprenticeship contract; training of trainers (*maîtres d'apprentissage*) who, in the company, will deal with the training of apprentices. Also, they compile statistics and carry out investigations on the career paths of young people trained through the apprenticeship.

### **The training contract and the incentive measures for training enterprises**

Apprenticeship requires the stipulation of a written contract between the employer - which can be in private or public sector - and the apprentice (or a relevant representative in case of a minor apprentice), according to a predefined scheme. Therefore, apprentices are employees benefiting from the whole set of provisions applicable to other employees.

The apprenticeship contract has a length of six months to three years, on the basis of the qualification and the diploma to be achieved. The sector national agreements establish the length of the contract and the structure of the dual path between the on-the job and the off-the-job training. To facilitate the adjustment of the contract's length according to the initial level of the apprentice's skills, the 2018 reform simplified the procedures, which will be established through an agreement attached to the contract and signed by the apprentice, the enterprise and the training centre.

Always to simplify the administrative procedure, from 1 January 2020 the registration of the apprenticeship contract will be replaced by a filing of the contract at the OPCO.

It will be possible to sign apprenticeship contract throughout the year and the start date of the training at the enterprise and at the training centre will have to be within three months of the stipulation. Young people failing in finding an enterprise will have the possibility to start a training period as *stagiaire* at the training centre, but the maximum length of the internship is reduced from one year to three months.

Interruptions occurring before the prescribed term involve a significant percentage of the apprentices (29%). To reduce the adverse impact of these interruptions, the 2018 reform established the involvement of a mediator aiming to avoid a judge. Moreover, the OPCOs might fund training, assessment and mentoring actions for former apprentices, while the centre formerly responsible for the off-the-job learning, after the interruption of the contract and for the following six months, has to ensure the possibility to continue the training. Also Regions can plan supporting actions for young people who have interrupted the contract before the prescribed term. The previous regulation on labour conditions for apprentices has been redesigned in order to facilitate the placement of young people into the work sector. Particularly, the maximum working hours per week has been increased from 35 to 40. The hours exceeding 35 will be paid as overtime according to sectoral national agreements between trade unions and employers' organisations.

The employer pays a wage to the apprentice, calculated according to the apprentice's age and his/her progress in the training. In 2017 such wage ranged from 25% (about 374 euro) of the Smic (standard minimum wage paid to employees) for 16-17-years-old apprentices in the first year of the contract, to 78% (about 1.100 euro) of the Smic for apprentices older than 20, starting from the third year of the contract. According to the provisions for the public sector, the compensation is increased by 10 points for the apprentices who have to achieve a IV-level diploma and by 20 points for the apprentices preparing to achieve a III-level qualification. According to the 2018 reform, the wage is increased by 30 euro per month for 16- to 20-years-old apprentices, while all over-18 apprentices will benefit from a contribution of 500 euro to pay for the driving licence. Enterprises benefit from financial incentives to hire apprentices. In order to simplify and make more transparent and easily-accessible the incentives system, the 2018 reforming act unified the previous three incentive categories into one contribution, which will be restricted to the enterprises with less than 250 employees, hiring at least one apprentice having to achieve a qualification not higher than the upper-secondary school diploma (*baccalauréat*). The amount of the contribution for each apprentice - which will be established by a decree - should not be less than 3,000 euro per year.

## On- and off-the-job apprenticeship training

The apprentice is required to take part in a training period in both an enterprise and a training centre for apprentices (*Centres de Formation des Apprentis* - CFA).

Enterprises wishing to hire apprentices are required to complete a declaration (*declaration d'engagement*), by which they certify the adequacy of the facility, equipment and security conditions on the basis of the needs for the apprentice's training, and they declare that within the organisation there's an apprenticeship instructor (*maître d'apprentissage*) or an *équipe* having the pedagogical and professional skills required to play a mentoring role for the apprentice.

Each apprentice must be compulsorily trained by a *maître d'apprentissage* - who can be either the entrepreneur or an employee of the enterprise - with the task to ensure the coordination of the training team and the relationship with the CFA. The *maître d'apprentissage* has a crucial role consisting of being a guidance and a support for the apprentice, able to guide him/her in the learning process and to transfer to him/her his/her own expertise. The apprenticeship reform of 2018 prescribes that to be a *maître d'apprentissage* a certification will be required, and it may be achieved through a training period or the recognition of the skills acquired through the experience. The task to define qualifications and skills required to become a *maître d'apprentissage* is assigned to sector representative organisations (*branches professionnelles*), which may define also the maximum number of apprentices that every *maître d'apprentissage* may train.

Together with the on-the-job training, the act regulating the apprenticeship imposes a minimum number of hours for the external training at a CFA. The 2018 act reforming the apprenticeship establishes that this number of hours is equal at least to 25% of the total apprenticeship period. The number of hours to be completed on-the-job and at the CFA changes according to the qualification and the expertise to be achieved. Generally, the number of hours to be completed at the CFA increases at an increased level of the diplomas/qualification to be achieved.

The CFAs represent the pillar of the French apprenticeship system. They are associations of public institutions and/or private bodies, especially established to provide the specific training needed to achieve diplomas and qualifications in the relevant sector. Therefore, CFAs bear the responsibility for the general, technical and practical training provided to the apprentices, in order to supplement and complete the on-the-job training.

The 2018 reform redefine the criteria for the establishment of a CFA and its mission, with the purpose of strengthening the quality of the provided training and of ensuring a better matching of the skills acquired at the CFA with the needs of the enterprises.

The new legislation simplifies the rules to establish a CFA. The requirement of signing an agreement with the Region to establish a CFA is replaced by the filing of a declaration of activity at an OPCO; however - to benefit from public funds - the centre must be certified by an independent body accredited by the *France compétences* agency. The certification is issued after the quality check regarding the training offer and the capacity to take-on, guide and support the apprentices. The changes in the apprenticeship funding system will have a significant impact on the training centres that will be funded according to the number of young people taking part in the

training. This means that in the future, the development of the CFAs will be based on their capacity to attract young people and enterprises.

Training centres will have to support young people in their learning experience and to facilitate their integration in the enterprise. For disadvantaged young people, training centres will assist in the search for the company for the stipulation of the contract, appointing a contact person entrusted with the task of facilitating their integration. Moreover, training centres will have to:

- inform the apprentices about their rights and duties, as well as on the applicable health and job security rules;
- ensure consistency between on- and off-the-job training, facilitating the cooperation between the trainers of the CFA and the *maîtres d'apprentissage*;
- promote gender equality and contrast any form of discrimination;
- facilitate national and transnational mobility of apprentices, identifying a contact person for mobility and permanently including mobility in training programmes;
- allow the apprentices who interrupted the contract before the prescribed term to continue the training period for six months, supporting them in the search for a new company;
- assess, throughout the training period, the skills acquired by the apprentices.

As regards the training planning, making the standards of qualification an operational reality is a responsibility shared by CFAs and training enterprises. To align the contents provided on-the-job with those developed in the centre, the CFA teachers meet the apprenticeship instructors at any beginning of the year and for each diploma, to draw up the pedagogical courses and the alternation timing and to define the appropriate teaching methodologies. The training is then autonomously delivered within the enterprise and, as appropriate, further detailed on the basis of specific production and organisation needs.

Within the CFA each apprentices' class or group refers to a "pedagogical tutor" who - in addition to teaching - is required to support the apprentice in his/her training, taking action to solve any learning issue, and to ensure the consistency and the connection among on- and off-the-job teachings, also through a regular discussion - by means of visits and meetings - with the apprenticeship instructor with whom he/she evaluates the apprentice.

To facilitate the connection between the on- and off-the-job training, and to allow the assessment of the learning acquired by the apprentice during the training, different tools are used: the apprenticeship booklet (*Livret d'apprentissage*), the liaison book (Document de liaison) and the connection card (*Fiche navette*).

At the end of the training period, the apprentice is required to pass an examination to achieve the qualification. The assessment and certification system of the acquired knowledge and skills is similar to the system applicable to other students; once the training is concluded, the apprentices take the leaving examination at the same conditions and with the same procedures applied to students following a full-time training. The specific tests are elaborated by the educational team. Generally, the examination includes those situations or activities considered to be at the core of the qualification in both cultural and occupational aspects.

<sup>6</sup> Law n° 2018-771 of 5 September 2018 “for the freedom to choose one’s professional future”.

<sup>7</sup> Law no. 2016-1088 of 8 August 2016 on work, modernizing social dialogue and securing career paths (relative au travail, à la modernisation du dialogue social et à la sécurisation des parcours professionnels).

<sup>8</sup> The Social Modernisation Act no. 7/2002 assigned to the National Commission for Vocational Certification, composed by representatives of the central administration, Regions, Chambers of the several sectors and Social Partners, the task to collect and update the education provision, as well as to include it in the National Register of Vocational Certifications.

<sup>9</sup> The act of 5 March 2014 established the Cnefop, composed by representatives of 12 Ministries, Regions and Social Partners, with the duty to express opinions on the set of legislation and regulations regarding employment and vocational training and guidance, and regarding the monitoring and assessment of policies for employment and vocational training.

<sup>10</sup> In 2014, employees’ trade union organisations and employers’ organisations established an Inter-branch Joint Committee - Copanef - with the priority task to define strategies and actions on training and employment.

<sup>11</sup> The Cncp was established by the Social Modernisation Act no. 73 of 2002 to enlist the existing training provision, update it and include it in the National Register of Vocational Certifications.

## 2.3 GERMANY



Key indicators (2017):

Area: **357,386 km<sup>2</sup>**

Population: **82,521,653 inhab.**

Activity rate (aged 15-74): **69,5%**

Unemployment rate (aged 15-74): **3,8%**

Youth unemployment rate (aged 15-24): **6,8%**

Young people aged 18-24 out of school with  
no upper-secondary qualification: **10.1%**

NEET, aged 15-24: **6,3%**

New-entrant apprentices: **523,290**

Total apprentices: **1,323,894**

### **Baden-Württemberg**

Area: **35,751 km<sup>2</sup>**

Population: **10,951,893 inhab.**

New-entrant apprentices: **74,656**

Total apprentices: **190,236**

### **Bayern**

Area: **70,551 km<sup>2</sup>**

Population: **12,930,751 inhab.**

New-entrant apprentices: **92,528**

Total apprentices: **240,465**



## **Relevance of the dual system for youth training and employment**

In 2017, Germany experienced once more the lowest youth unemployment rate throughout the EU countries (6,8%). Such success is ascribed mainly to the strength of its dual system, which constitute the main pillar of the education and training system.

Dual system is considered a core element, not only to ensure a high youth employability, but also for economic growth, prosperity and social cohesion in Germany. The key role of companies, the close cooperation among the Federal Government, Federal States and Social Partners, as well as the results related to the transition of young people into the labour market, are the characteristics of this successful model, widely acknowledged at international level.

### **APPRENTICESHIP IN GERMANY IN 2017**

According to data provided by the Federal Institute for Vocational Education and Training (*Bundesinstitut für Berufsbildung - BIBB*), at the end of 2017 there were about 1,32 million of apprentices throughout the country. Indeed, the tool is widely spread and slightly more than half of a cohort of young people leaving the lower-secondary school annually starts a dual path in one of the almost 330 recognised trades.

In 2017 523,300 new contracts were entered into. Therefore, there is a further increase of apprentices (+0,6% in comparison with the previous year) after many years of contraction, determined above all by the demographic decline of the cohorts of young people, in addition to the higher interest showed by young people and their families in more general education paths.

The increase recorded in 2017 is determined by the higher availability of job opportunities offered by enterprises, as well as by the higher demand brought about by the ever-widening access of migrants to the apprenticeship. The number of these young

candidates for apprenticeships has more than doubled compared to the previous year, from 10,300 in 2016 to 26,400 in 2017.

The supply-demand matching in each area and for each trade represents a key challenge, since there is always a percentage of the vacancies remaining unfulfilled as well as a number of young people unable to find an apprenticeship.

In fact, in 2017, the number of apprenticeships places offered by companies which remained vacant grew by 5,500 (+ 12,6%), a percentage that has not been so high since 1995, although with significant differences between trades and regions. As for the supply, in 2017 there were 23,700 young people who failed to find an apprenticeship (+3,200 or +15,4%), mainly due to growing employment problems in some areas of the country and the mismatch between job supply and demand.

In 2016, about 146,376 apprentices terminated their dual education path before the end specified in the contract. The solution rate is at 25,8%, increasing by almost one percentage point compared with the pre-

vious year and exceeding the usual fluctuation range since the beginning of the 1990s (20% to 25%). As in previous years, about two-thirds of the contracts were interrupted within the first year of the training.

In 2016, 444,207 apprentices took their fi-

nal examinations, counting -17% in comparison to the previous year. Nearly 413,000 young people took their final exam for the first time. The success rate was 90,0%, maintaining the previous year's level.

### **Apprenticeship beneficiaries and achievable qualifications**

In Germany, approximately half of young people completing the compulsory education - with a usual length of 10 years (the length of compulsory education can be different in each Region - *Land*) - access the dual training system (51,7% in 2016).

The access to the apprenticeship for young people doesn't require other special conditions, but the training enterprises can select the applicants according to specific characteristics, as the school previously attended or the marks obtained in one or more subjects. For some occupations, the achievement of the *Abitur* may be required for being selected, which is the upper-secondary school leaving certificate that allows university entrance.

The Federal Employment Agency (*Bundesagentur für Arbeit*) is responsible at federal level for what concerns the vocational guidance, but there are also many other bodies providing information and support to young people.

The Standing Conference of Ministers of Education and Cultural Affairs (*Kultusministerkonferenz* - KMK) has entered into a cooperation agreement with the Federal Employment Agency to provide guidance services during school paths. In schools, the vocational guidance is included in the curriculum of several subjects and, usually, classes are taught by a consultant from the local agency, who also deals with visits at information centres and companies, as well as short-term internships (of one to three weeks) at companies. In the last years, vocational guidance has become an increasing policy-priority, therefore many initiatives have been taken at local, regional and federal level.

Young people with learning difficulties or disabilities or with any other inclusion problems have the possibility to participate in initiatives aiming at preparing them for the apprenticeship. For example they could attend a pre-apprenticeship year, organised by vocational schools or inter-company training centres, or attend a basic vocational training year (*Berufsgrundbildungsjahr*) that afterwards can be recognised as the first apprenticeship year. These initiatives are supported by the federal budget; other measures are promoted by individual *Länder* or even by the largest municipalities.

Depending on the occupation, the length of the apprenticeship is between two and three-and-a-half years. By agreement between the enterprise and the apprentice, it is possible to reduce the prescribed length for specific reasons, for example recognising credits for a previous training

and/or job experience in the same sector or if the young person has already achieved the tertiary education entrance qualification.

Apprenticeship paths with a length of at least three years issue qualifications recognised at national level, which correspond to EQF 4-level. For all the paths with a lower length a training option is however provided for, to give young people the possibility to achieve a higher level qualification.

Once the apprenticeship is concluded, young people may continue their vocational training choosing among different options. There are lifelong training actions allowing to achieve higher-level qualifications, as the master craftsman one.

After some years of professional experience, those who have completed an apprenticeship may have the opportunity to access some courses at tertiary-education institutes according to the regulations adopted by the Federal State and on the basis of the admission requirements set out by the higher-education institute. The higher-education institute may also require of passing a test or having an interview to assess the suitability of the applicant.

For the apprentices the training is delivered in different venues: at the company, at the vocational school and, in some cases, in inter-company courses, depending on the specific provisions of the Training Regulation (*Ausbildungsverordnung*) for each trade (*Ausbildungsberuf*) adopted at federal level.

According to BIBB's data, in 2017 the number of qualifications achievable through the apprenticeship was 326; in the past few years the number has reduced due to the trend to aggregate more qualifications into a "broadband" one, with the opportunity to acquire different specializations in the last two years, also by selecting them among a list of options.

Indeed, the qualifications have a differentiated structure: most of them are associated with a single occupation (*Monoberufe*), but by contrast there's an increase in those relating to "occupation groups" or providing for different specializations according to the final part of the training or entailing the opportunity to undertake additional modules.

The training regulation is mainly focused on the on-the-job training - identifying the relevant objectives and contents - but it provides indirect directions for designing the school-education curricula, which have to include general competences as well. Therefore, the regulation specifies the length of the apprenticeship and the arrangements for the leaving examination and any intermediate examination (if required).

In general, the training regulation is structured in two parts: a section of provisions, describing the occupation, the work contexts and the requirements for the leaving examination, as well as an annex regarding the on-the-job training plan (*Ausbildungsplan*), specifying contents and timing. Between 2008 and 2017, 122 apprenticeship qualifications have been reorganised, above all due to the need to consider the new skills needs resulting from digitalisation processes and/or new safety, quality and environmental sustainability standards.

The modernisation process of existing qualifications or the introduction of new ones can take place at the request of professional organisations, or trade unions and employers' organisations, or at the initiative of the BIBB. The decision to start the review process or the establishment of a new trade is shared by the federal government with social partners and regional governments.

Upon the decision has been made, the BIBB has to prepare a regulation draft, relying on the support of experts identified by social partners and starting specific research to define objectives and contents of the on-the-job training. Alongside, experts delegated by *Länder* define a draft of a general curriculum for the training in vocational schools. After the drafting phase, the two teams of experts meet to debate about the two drafts and to align the relevant contents and timing. As a result, the regulation is adopted by the relevant minister, in agreement with the Minister of Education and Research.

Finally, in the framework of the Standing Conference of Ministers of Education (KMK) of federal states and federal government the school-curriculum is adopted.

### **The governance of the dual system**

Germany is a federal parliamentary republic made of 16 *Länder* and 3 city-states, each one with a considerable autonomy. In particular, education is regulated by the *Länder*, each of which with its own ministry having legislative and executive functions; on the contrary, vocational and on-the-job training is more a federal-level responsibility.

The reference legal basis for the functioning of the dual system is basically included in the Federal Law on VET (*Berufsbildungsgesetz* o BBiG) of 1969, with few amendments made over time. The law defines the apprenticeship management rules, with a reference to the on-the-job training, and, therefore, establishes the requirements to be met by those enterprises wishing to take on apprentices and the examination arrangements. For each recognised qualification, the training regulation defines objectives, contents and arrangements of the examinations. These regulations have a national enforceability.

The functioning of the dual system involves multiple bodies.

At federal level several Ministries are involved: the Ministry for Education and Research (*Bundesministerium für Bildung und Forschung* - BMBF) has a coordination role in order to ensure a consistent system; the definition of regulations is usually under the responsibility of the Federal Ministry for Economic Affairs and Energy (*Bundesministerium für Wirtschaft und Energie* - BMWF) and/or other sector Ministries, always in agreement with the Ministry for Education and Research. Ministries of Education and Cultural Affairs in German *Länder* are responsible for all what concern vocational schools. Particularly, they implement curricula for the school training and supervise the vocational schools. In order to promote the national standardisation of curricula, they cooperate in the KMK.

The coordination between the Federal Government and the *Länder* is based on agreements. The Committee for vocational education and training (*Ausschuss für Berufliche Bildung* - ABBi) is the venue for the inter-institutional debate on the dual system. Specifically, the Committee is involved in processes concerning the modernisation of regulations and the introduction of new qualifications.

The cooperation between the government and the social partners is an integral part of the dual system. In practice, any decision is based on consensus. Therefore, at federal level, the dual system is supported by the BIBB, the federal institute for vocational education and training, established in 1970. This body has tasks of both scientific research and support for the deve-

lopment of the dual system for the definition of training regulations, elaboration of an annual monitoring report, implementation of statistical surveys in cooperation with the Institute for Employment Research (*Institut für Arbeitsmarkt- und Berufsforschung* - IAB), implementation of pilot projects, participation in international cooperation venues. The Management Board of the BIBB is composed by representatives of Social Partners, Federal Government and *Länder*, in the equal amount of eight. Therefore, this body represents the main consultation body for what concerns apprenticeship at federal level in Germany.

The functioning of the apprenticeship system is further assured by the role of the “competent authorities”, usually represented by the Chambers: of industry and commerce, of handicrafts and of agriculture. In Germany, Chambers are associations with a compulsory membership of the sector enterprises, established at regional level with an organisation acting at federal level, as the German Association of Chambers of Industry and Commerce (*Deutscher Industrie- und Handelskammertag* - DIHK) and the German Confederation of Chambers of Skilled Crafts (*Deutschen Handwerkskammertag* - DHKT). The *Länder* appoint the competent authorities for the economic sectors not represented by the Chambers.

The competent bodies have the task to supervise the functioning of the dual system at sector and territorial level. Therefore, they are entrusted with the task of accrediting the enterprises offering apprenticeship places and of monitoring the fulfilment of requirements, registering contracts, providing counselling to enterprises, organising examinations, monitoring the system and supporting transnational mobility experiences.

Any of the competent body must establish a Vocational training committee (*Berufsbildungsausschuss*) with 18 members, identified in equal number among representatives of employers, employees and vocational schools. The Council must be informed and consulted about all the important matters regarding the vocational training, in order to encourage a continuous development of the quality of the system. Moreover, the Council takes decisions regarding training centres, the acknowledgement of credits for previous training and/or working experience, earlier access to leaving examinations, any conflict between apprentices. The Council also organize the Examination Boards for leaving examinations for the apprentices; such boards have to be formed in equal number of representatives of the employers’ associations and of the trade unions. At territorial level, the Regional Councils (*Landesausschüsse für Berufsbildung*), made up of representatives of employers, employees and the regional administration, still with advisory functions, have been established.

### **The training contract and the incentive measures for training enterprises**

In the German dual system the apprentices are considered as students and are hired by the company with a training contract governed by private law ensuring them a special legal status. Contract specifications are regulated by the vocational training law. The contract must be concluded in writing, signed by the company and the apprentice, with the legal representative’s assistance in case of a minor. The contract must include at least information about the qualification to be achieved, length and arrangements of the training, working hours, holidays, and wage that will be paid to apprentices. There are predefined forms available for enterprises, reporting

any necessary information. As soon as a new contract is concluded, it must be submitted to the competent authorities to be listed in the Register of ongoing apprenticeship contracts. The entry is performed only after the verification of compliance with the vocational training law.

The compensation paid to the apprentice represents the highest expenditure for the enterprise. Generally, the wage amount depends on apprentice's age and occupation; moreover it increases at least once per year. For many sectors there is a minimum amount prescribed by collective agreements or company agreements; generally, an apprentice's wage ranges from 25% to 45% of an average wage of a skilled worker in the same sector and occupation.

Also, enterprises bear the cost for on-the-job training, i.e. for instructors and teaching materials. On the other hand, enterprises don't benefit from any tax-relief measure, except for recruitment of specific target groups, as - for example - young people with disabilities, other groups at risk of exclusion, single mothers, women employed in traditionally-male occupations, and so on.

In construction sector historically there is a special provision, stating that enterprises not offering apprenticeship places contribute to fund the dual system through a taxation determined by collective agreements. Many attempts have been made to extend such provision to all sectors, but unsuccessfully so far.

The cost of training in vocational schools, of trainers and equipment, is borne by *Länder*.

Inter-company training centres are funded by the Federal Government, *Länder*, Chambers and, occasionally, by sector associations.

The federal government finances measures aiming at improving and promoting the apprenticeship. Public funds have been allocated by several federal ministries for the expenses relating to development, improvement, implementation and promotion of apprenticeship; for example, support programmes or measures aimed at enhancing guidance and information services. Other support programmes may be financed by Federal States, European Social Fund (ESF) or professional/sector associations.

Any five years the BIBB carries out a survey on dual system costs and benefits. The most recent record for the period 2012-2013 highlighted that companies bear an average net cost of 5,398 euro per apprentice. This amount varies according to professions and sectors, length of training programmes and company size. The most relevant cost item is the apprentice's compensation.

On average, 2/3 of gross costs are balanced by the production results of the apprentices. This number significantly changes among the different occupations. A further advantage is obtained when - at the end of the apprenticeship - companies hire their apprentices as skilled workers.

### **Off- and on-the-job apprenticeship training**

To provide an apprenticeship training, companies are required to meet certain requirements, assessed by competent bodies. The company must demonstrate to be able to make the apprentice develop all the skills included in the training regulation; therefore, in the enterprise the relevant working processes and equipment must be available. Moreover, the enterprise must have an instructor (*Ausbilder*) with appropriate professional and pedagogical skills: the profes-

sional expertise is given by a qualification in the same subject of the apprenticeship, or similar, while the pedagogical skill is proved through passing an aptitude examination prescribed by the Ordinance on Trainer Aptitude (*Ausbilder-Eignungsverordnung* - AEVO), planned by the competent bodies. The BIBB recommends the attendance of a preparatory course with a length of 115 hours before the examination.

For companies not fulfilling the requirements there are different options:

- they can refer to the training institutions providing inter-company training periods complementary to the on-the-job training. These are centres funded by the Land and, usually, governed by the Chambers, providing also additional training services;
- they can establish “networks” or “consortia” assuming different configurations for sharing the training obligations with other companies.

Both mechanisms may be supported by public funds.

To deliver the on-the-job training, generally a detailed training plan is elaborated, designed on the basis of what is prescribed by the Training Regulation. The company can also include additional subjects and skills and provide additional qualifications.

In large companies, instructors/trainers work full time on apprentices training; sometimes, the enterprise establishes a company training centre, in venues other than production. It can happen that apprentices spend the first/first-and-a-half year uniquely at these centres, outside the company production process, experiencing several activities or processes in a learning context, prior to taking part in the manufacturing process. On the contrary, in small and medium enterprises, instructors often deal with apprentices in addition to their work and, therefore, their engagement into the training process can be variable.

The competent bodies have also the task to monitor the on-the-job training progress; for this purpose they provide counselling and support services. To support instructors, the BIBB provide information and materials designed for the individual qualification and manages Internet platforms for supporting instructors and members of the examination boards.

The apprentice is required to keep a training book reporting, at least once per week, the tasks performed at the company; the registrations must be checked by the trainer and signed by both parties. In the book also the contents and topics taught by the vocational school must be reported. A pre-requirement to be admitted to the examination is the diligent completion of the entire book.

In the dual system, apprentices acquire the necessary skills for their occupation also at the vocational school, in addition to the on-the-job training, integrating theoretical and practical lessons. In general, the school attendance must be guaranteed for one or two days per week or may be planned by weeks “blocks”.

For those occupations in which the number of hired apprentices is very low, it may be required to centralise the school training, also by organising it by “blocks”. In these cases, support programmes for apprentices may be envisaged to cover subsistence and accommodation costs.

The general curriculum for the school training is elaborated in parallel with the training regulation; the *Länder* can use the curriculum as agreed at federal level or change it. In general, the curriculum is divided into learning areas, each described in terms of learning objectives, with information about timing and training length expressed in terms of hours. In addition to pro-



fessional contents, also general skills and subjects are planned, as German language and social science.

For certain apprenticeship qualification a specific training system has been implemented; it is structured in modules, designed with reference to the working processes characterising the occupation; the combination of all modules fully covers the learning outcomes prescribed in the training regulation.

The teachers of vocational schools are civil servants, with two kinds of requirements:

- those who have achieved a tertiary-level qualification to become professional teachers in a specific sector. They have been required to take the State examination and teach vocational and general subjects;
- trainers involved in practical workshops are, for example, master craftsman or certified technicians who have carried out the apprenticeship in the same sector or another relevant sector. These trainers must participate in specific educational training programmes for one or two years.

Throughout the apprenticeship a continued monitoring of the apprentice's learning is ensured; sometimes the training regulation provides for an intermediate examination, stating the relevant standards.

At the end of the apprenticeship period, a leaving examination is planned, with the aim to obtain the qualification certificate. The examination procedure is governed by the vocational training law and the codes for commerce or craftsmanship, as well as specified in training regulations in terms of contents and topics, timing, organisation, arrangements for the final assessment. The examination is articulated in a written test and an oral one; alternatively, practical tests may be included, as for example the execution of a "masterwork".

The competent body is required by law to appoint the examination commissions for each qualification, assuring an equal participation of employers and employees' representatives and at least one vocational-school teacher.

After the apprenticeship, apprentices receive three different certificates:

- the examination certificate of the competent body, or the qualification certificate as a skilled worker (*Facharbeiterbrief/Gesellenbrief*);
- the certificate of the vocational school;
- the references issued by the company.

Subject to specific conditions, the examination can be undertaken also by external applicants with recognised experience, validated as non-formal learning activities.



## 2.4 ITALY

Key indicators (2017):

Area: 301,338 km<sup>2</sup>

Population 60,589,445 inhab

Activity rate (aged 15-74): 57,1%

Unemployment rate (aged 15-74): 11,2%

Youth unemployment rate (aged 15-24): 34,7%

Young people aged 18-24 out of school with no upper-secondary qualification: 14%

NEET, aged 15-24: 20,1%

Total apprentices (only I-level apprenticeship) (2016): 10,682



### Liguria

Area: 5,416 km<sup>2</sup>

Population: 1,565,307 inhab.

Total apprentices (only I-level apprenticeship) (2016): 60

### Piedmont

Area: 25,387 km<sup>2</sup>

Population: 4,392,526 inhab.

Total apprentices (only I-level apprenticeship) (2016): 280

### Aosta Valley

Area: 3,261 km<sup>2</sup>

Population: 126,883 inhab.

Total apprentices (only I-level apprenticeship): -

### Lombardy

Area: 23,864 km<sup>2</sup>

Population: 10,019,166 inhab.

Total apprentices (only I-level apprenticeship) (2016): 2,601

### Veneto

Area: 18,345 km<sup>2</sup>

Population: 4,907,529 inhab.

Total apprentices (only I-level apprenticeship) (2016): 438

### Autonomous Province of Bolzano

Area: 7,400 km<sup>2</sup>

Population: 524,256 inhab.

Total apprentices (only I-level apprenticeship) (2016): 3,278

### Autonomous Province of Trento

Area: 6,212 km<sup>2</sup>

Population: 538,604 inhab.

Total apprentices (only I-level apprenticeship) (2016): 60

### Friuli Venezia Giulia

Area: 7,924 km<sup>2</sup>

Population: 1,217,872 inhab.

Total apprentices (only I-level apprenticeship) (2016): 43

## **Relevance of the dual system for youth training and employment**

In August 2018, among the euro area countries, Italy reports the highest unemployment rate, following Greece and Spain. As regards youth unemployment, Italy ranks third for the number of unemployed 15 to 24-years-old people, still following Greece and Spain, while 18 to 24-years-old young people outside the school system and without an upper-secondary school qualification are 14%.

In the framework of Italian labour policies, the apprenticeship has a long tradition and has alternately been more or less at the core in tackling the high level of youth unemployment and the early school leaving.

In Italy, there are three types of apprenticeship:

- the so called Type 1 and Type 3 apprenticeship, with a higher training obligation, since they allow to achieve an upper-secondary school, regional initial vocational education and training, and tertiary education qualification;
- the occupation-oriented type (the so called Type 2 apprenticeship), which is instead mainly aimed at achieving a contractual status and, therefore, less integrated in the education and training system (Garofalo, 2014; Tiraboschi, 2016).

Many legislative measures have introduced structural changes in the regulation of this tool with the purpose to facilitate its use by employers. The latest changes were introduced in 2015<sup>12</sup> with the main focus on first- and third-level apprenticeship, leaving the occupation-oriented apprenticeship almost unchanged.

Herein, in order to allow the comparison with the apprenticeship systems of the other countries concerned, the analysis on the Italian apprenticeship system is exclusively focused on Type one, which seems to be the most similar to the definition of apprenticeship brought by Cedefop and considered for the purposes of this research.

The new legal framework aims at promoting the Type 1 apprenticeship as an effective tool to balance the mismatch between the skills acquired through the school and the professional skills required by the labour market, speeding up the transition of young people to work. The objective is to foster young people access to work to tackle the early school leaving rate and to involve the high number of young people not in education, training or work (NEET).

The reform is aimed at building the “*via italiana al sistema duale*” (Italian path to the dual system), making Italy being closer to European best practices, particularly with regard to the German dual system. To undertake this path, the legislative measures aim to drive forward a tool as during the financial crisis years it hasn’t been capable of tackling the effects of the economic downturn on youth employment (box 2), unlike in other countries; on the contrary, it has suffered for a dramatic decrease, which highlighted the difficulties in using the apprenticeship as a resilient policy measure for tackling the challenges faced by young people in the Italian labour market (Cefalo, 2015).

The new Type 1 apprenticeship strengthen the relationship between the enterprise and the training institution, as the new regulation requires an agreement between the training parties before entering in the contract. By contrast, in the past, the company used to hire apprentices and,

afterwards, check what training opportunities at territorial level could allow the apprentice to be trained off-the-job and achieve qualifications; as a result, a significant number of young people was not involved in any training outside the enterprise.

Moreover, the new regulation addresses a reduction in the labour costs; for this purpose, remarkable incentives are set out for the enterprises using the apprenticeship<sup>13</sup>, plus measures aiming at cutting labour costs.

To take the new reformed system off the ground, the Ministry of Labour has decided to start in 2016 a national pilot project, through which monitor, jointly with Regions, all the local governance processes, with the final aim to build shared models on which the emerging dual system might be developed.

The pilot project, based on an Agreement reached in the State, Regions, Autonomous Provinces of Trento and Bolzano Permanent Unified Conference<sup>14</sup>, specifically supports the activation of regional vocational education and training initiatives viable also through Type 1 apprenticeship (see the following box).

#### **APPRENTICESHIP IN ITALY IN 2016**

According to XVII Monitoring Report by INAPP, in 2016 the average number of Type 1 apprenticeship contracts involved 10,682 young people on the national territory, with a contraction by almost 20% in comparison with the previous year. The share of this type compared to the total number of apprentices decreased from 3,3% of 2015 to 2,8% of 2016. Such reduction relates to all geographical areas, despite being higher in absolute terms in northern Italy with a decrease of about 1,000 apprentices. In percentage, it results in an increase in the Type-1 apprentices' concentration in the northern part, which in 2015 detained slightly less than 61% of the average apprentices stock, while in 2016 reaches up to almost 66%.

Apprentices with a Type-1 contract undertaking off-the-job training activities are 5,446, with an increase by 35% compared to the previous year. The result relates to a number of apprentices that is still very low, particularly when taking into account that more than 91% of them are concentrated in the

Autonomous Province of Bolzano (63,5%) and in Lombardy (27,9%). Nevertheless, it must be noted that in 2016 the 2015 reform was not fully implemented yet.

The development of Type-1 contracts was supported mainly by the pilot project of dual system, started in early 2016 and involving a total of 1,419 apprentices. On 31/12/2016, Type-1 apprenticeship training was introduced only in 7 Regions (Piedmont, Lombardy, Veneto, Friuli Venezia Giulia, Liguria, Marche and Lazio) - out of the 19 Regions taking part in the pilot project. 82% of the participants in training activities concentrates in Lombardy, followed by Veneto and Lazio (with about 6% of the total) and by Piedmont (with about 4%). In the remaining Regions, the number of apprentices undertaking training is very low.

Beyond the pilot project, as highlighted in the analysis carried out by the Cedefop (2017a), the main challenges that the country has to face to promote the development of the Type-1 apprenticeship in Italy relate, among others, to the following aspects:

- governance mechanisms: which are not fully implemented and integrated between national and regional level yet;
- social partners' responsibility in the development and consolidation of apprenticeship: which is inconsistent or limited;
- actions taken by the employers: who tend to consider the apprenticeship more as a low-cost contractual option to hire staff than an investment for the development of the company and, in general, have a limited information about Type-1 apprenticeship and its potential advantages;
- lack of support services to enterprises and lack of attention on the quality of the on-the-job training: subsequently, training is aligned more to the needs of the individual company than to those of the local labour market or of the sector; moreover, smaller enterprises struggle to develop the whole set of technical skills required;
- excessive responsibility of the training institutes: they are required to manage Type-1 apprenticeship planning and implementation, particularly when the employer is a micro or a small enterprise or when the cooperation between companies and training institutes is not regular and strong enough. Moreover, lack of national apprenticeship guidelines and curricula: which have led to a case-by-case organisation of Type-1 apprenticeship, with high implementation costs and fragmentation risk;
- fragmentation of regional education and training systems on which Type-1 apprenticeship is based: there are significant differences in terms of quality and effectiveness of training provision, representing a brake on apprenticeship development throughout the national territory (see box).

### **Apprenticeship beneficiaries and achievable qualifications**

Type-1 apprenticeship can be accessed by young people who have reached the age of 15, up to the age of 25.

Type-1 apprenticeship does not make up an autonomous training channel, but it is integrated in the initial education and training system, allowing to achieve the same qualifications of ordinary full-time paths in secondary education and in higher education and technical training.

Specifically, a young person who has successfully completed his/her school obligation - five years of primary school plus three years of lower-secondary school - has the opportunity to fulfil the education and training obligation up to the age of 18 also undertaking an apprenticeship in the second cycle, which is structured in two pathways:

- upper-secondary school, with a five-years length, including high school, technical education and vocational paths, all of which in State responsibility. Students have the opportunity to attend these paths through an apprenticeship contract, starting from the second year - once

they have reached the age of 15 - achieving, at the end, the *diploma di maturità*, which is the upper secondary school leaving certificate that allows them to fully access tertiary education. For apprenticeship, the qualifications awarded, training standards and models and arrangements for the final examinations are those defined for full-time paths in the framework of national regulations;

- vocational education and training (*Istruzione e Formazione Professionale* - IeFP) of regional responsibility, mainly aimed at developing the skills needed by production sectors, for a fast job placement. Three-years paths allow to achieve the qualification of professional operator (*Qualifica di operatore professionale*, EQF level 3) and to access the fourth year for the achievement of the vocational diploma of technician (*Diploma professionale*, EQF level 4). Subsequently, there is the possibility to attend the fifth integrative year, to access then the tertiary education. For the achievable qualifications in regional IeFP systems the minimum training standards, models and arrangements for the final examinations are defined at national level. The National Register of education and training qualifications lists twenty-two national qualifications for three-years paths, and twenty-one national qualifications for four-years vocational diplomas. Training standards defined at national level represents the minimum levels applicable throughout the territory and, therefore, the common basis of all the regional regulations governing Type-1 apprenticeship.

Moreover, a young person who has achieved an upper-secondary school diploma (or just the admission to the fifth year of upper-secondary education paths), or a vocational diploma of technician, has the opportunity to enter higher technical education and training courses (*Istruzione e Formazione Tecnica Superiore* - IFTS) allowing to achieve a higher technical specialisation certificate (*Certificato di istruzione tecnica superiore*, EQF level 5). IFTSs are also of regional competence and are aimed at training specialised technicians capable of monitoring organisational and production processes of enterprises related also to technological innovations and international markets trends. The general length is of two semesters, during which common basic and cross-sectoral skills for all IFTSs are developed, plus technical-professional skills relevant for the qualification to be achieved. Also for IFTSs, reference technical specialisations, together with the relevant technical-professional skills, have been defined at national level.

### **The governance of the dual system**

Type-1 apprenticeship is based on a multi-level governance, where the main institutional actors are:

- at national level, the State and, in particular, the Ministry of Education, University and Research (*Ministero dell'Istruzione, dell'Università e della Ricerca* - MIUR) and the Ministry of Labour and Social Policies (*Ministero del Lavoro e delle Politiche Sociali* - MLPS);
- the Regions and the Autonomous Provinces of Trento and Bolzano.

The State has the exclusive legislative competence in the areas of “education general standards” and “employment protection”. Moreover, the State defines the basic principles and the minimum training standards to be met by Regions in the execution of their specific competen-

ces related to the vocational training system, representing the basic levels of the services to be assured throughout the national territory. MLPS and MIUR cooperate to ensure the general coordination, monitoring and assessment, at national level, of the implementation of strategies and objectives set out in Type-1 apprenticeship legislation.

Regions have a concurrent legislative power for education and an exclusive one for vocational training. The Type-1 apprenticeship regulation is in the responsibility of Regions and the Autonomous Provinces of Trento and Bolzano. In the event of inaction by the Regions, the Ministry of Labour may proceed through decrees.

On all matters, the formal connection between the two institutional levels is represented by the State-Regions Conference.

Social Partners have a significant role in the education and training system.

First of all, they are entrusted with the task to define the regulation of apprenticeship employment relationship in collective labour agreements, which may refer to inter-sectoral agreements, in compliance with the principles prescribed by law. Collective agreements - structured by economic sector and/or territory, eventually supplemented by company agreements - constitute the basis for Type-1 apprenticeship implementation, since they mainly define working conditions of apprentices, wage levels, classification and career progression, as well as results to be achieved in the on-the-job training. Through the inter-sectors continuous training joint funds (*Fondi paritetici interprofessionali per la formazione continua*<sup>15</sup>), trade unions and employers' organisations may fund on-the-job training courses of apprentices. Despite recently social partners have taken actions through agreements to regulate the basic aspects of the apprenticeship employment relationship, collective agreements still pay little attention to crucial elements for the quality of apprenticeship, as the training capacity of the companies, role and competences of the on-the-job instructors/ trainers, jobs descriptions and their relevant updating, etc.

Moreover, Social Partners participate in decision-making processes on apprenticeship policies and measures, expressing their position and presenting proposals to national and regional institutions. At national level, there are no permanent connection venues between the institutions and the social partners but, usually, social partners are consulted by the Parliament in case of legislative reforms and frequently by the competent Ministries, as well as involved in technical commissions dealing with specific issues in the regulation. These technical bodies have limited functions, since they are mainly focused on specific projects or programmes and don't have permanent and/or cross-sectoral strategic functions. There is no permanent national multi-stakeholder coordinating body bringing together the institutional actors and social partners to define and set up implementation of Type 1 apprenticeship.

At regional level, Social Partners are appointed in tripartite commissions which define strategies and programmes concerning education and labour policies. With a specific reference to Type-1 apprenticeship, there are significant differences among the Regions in terms of governance structures, implementation of national legislation and regional regulation, stability in funding opportunities, as well as quality and flexibility of the training offer. Indeed, while in some Regions policies and measures for the Type-1 apprenticeship promotion and development measures have been applied for many years, in other Regions the system is still at the embryonic stage; subsequently, Type-1 apprenticeship has not a national dimension yet.

At local level, the management of apprenticeship involves mainly the training institution and the company, which are required to sign a joint agreement to regulate the respective tasks and responsibilities in the implementation of apprenticeship training and to define contents and length of the on- and off-the-job training.

Apprenticeship is annually monitored by the MLPS through the INAPP.

### **The training contract and the incentive measures for training enterprises**

The apprenticeship is a permanent contract with the purpose of training and employment. Therefore, the apprentice has the double recognition of student and worker.

The minimum length of apprenticeship, as prescribed by law, is six months, while the maximum length is established according to the length of the corresponding full-time education and training paths and taking into account the initial skills of the apprentice, as well as his/her contractual functions and tasks.

Subsequently, in the framework of VET system, the maximum length of Type-1 apprenticeship is three years to achieve the qualification of professional operator, and four for the vocational diploma. To achieve the upper-secondary school diploma, the maximum term is four years and one year for the achievement of the higher technical specialisation certificate.

Young people who have successfully completed the apprenticeship training have the possibility to extend the contract of one year, to strengthen and acquire additional technical and specialised skills, useful also to acquire the higher specialisation certificate or the vocational diploma. Such extension is permitted even if the apprentice has failed to pass the examinations for any three-years, four-years, IFTS qualification, nor the *diploma di maturità*.

The employee is not allowed to conclude an apprenticeship contract without a prior agreement with the training institution where the apprentice will undertake the off-the-job training. The agreement regulates tasks and responsibilities of the parties.

The apprenticeship is an employment contract which is very profiting for the enterprise, since it allows to remunerate the apprentice in a significantly lower extent<sup>16</sup> than an ordinary employee. The apprentice receives a compensation for his/her work determined by collective agreements and which is subject to a favourable tax treatment; the amount is set to progressively increase up to the wage of a skilled worker. Moreover, the apprentice is entitled to: social protection coverage in case of sickness or maternity; insurance against sickness, invalidity, old age, work accidents; entire social security; family allowances; social stock absorbers in case of involuntary unemployment.

With the recent reform<sup>17</sup>, to make the Type-1 contract even more beneficial and encourage employers to prefer it than other contractual forms, a substantial cut in the remuneration and more specific economic incentives have been introduced for those enterprises using this type of contract. Particularly, the contribution to be paid by employers in case of dismissal of the apprentice has been removed; employers' social contribution on taxable gross wage is reduced from 10%

to 5%; companies do not have to pay, for the hired apprentice(s), the contribution of 0,30% on wages due normally for lifelong training funds has been removed; employers' contribution for the social stock absorbers funding (Naspi) for craft businesses. These incentives are combined with other measures recently introduced to cut labour costs.

The employer must guarantee the delivery of on-the-job training and the possibility for the apprentice to participate in the off-the-job training. In the event of any non-compliance in delivering the on-the-job training financial penalties for the employer are established.

The apprentice is required to comply with the contractual provisions and meet the behavioural rules in the training institution and in the enterprise and, specifically, the rules relating to health and safety of workplaces and the training attendance obligation.

### **Off- and on-the-job apprenticeship training**

To enter into an apprenticeship contract, the employer is required to meet the following requirements:

- structural capacity: spaces to allow the internal training and, in case of students with disabilities, the overcoming and removal of any architectural barrier;
- technical capacity: availability of tools and machinery for the on-the-job training, pursuant to applicable rules;
- training capacity: ensuring the availability of one or more on-the-job tutors (instructors).

Nevertheless, at the moment there is no defined accreditation procedure for the enterprises, nor assessment about the fulfilment of the requirements.

Moreover, prior to the apprenticeship contract stipulation, an agreement must be signed between the company and the off-the-job training institution. The training institution is different according to the qualification to be acquired.

In case of secondary-school qualifications, institutions are state schools, fully funded through the national balance by the State, Regions and other local governments. In IeFP system, the training institutions are vocational training centres accredited by Regions according to the fulfilment of certain requirements, providing training activities funded as a result of annual or multi-annual public tenders. Finally, IFTS courses are designed and planned by temporary associations of universities, vocational training centres, high-schools and companies, funded by Regions as a result of public tenders.

The teaching organisation of the apprenticeship training is articulated in on-the-job and off-the-job training periods. The curricula are agreed between the training institution and the employer, designed with regard to specified national and regional standards, and implemented following the prior agreement.

Length, content and structure of the training path are established in the Individual Training Plan (*Piano Formativo Individuale* - PFI), that is elaborated by the training institution together with the enterprises, and becomes an annex to the employment contract. The training institution has the task to detail the curriculum identifying a balance point between the apprentice's right to reach the learning outcomes which are consistent with the qualification to be acquired and the



employer's need to develop knowledge and skills more related to the trade and more focused on the specific production sector. Indeed, the training institution, jointly with the employer, define in the PFI: the learning outcomes to be achieved in both on- and off-the-job training; criteria and arrangements of initial, intermediate and final assessment; support measures for apprentices.

The maximum length of the training at the training institution is prescribed by law. Particularly, for regional leFP paths, the off-the-job training cannot be more than 60% of the timing established for ordinary courses for the first and the second year (about 600 hours per year), and 50% for the third and the fourth year. For the year aimed at achieving the technical specialisation certificate, the off-the-job training cannot be more than 50% of the time, while for paths leading to achieve the upper-secondary school diploma off-the-job training cannot be more than 70% of the time for the second year and more than 65% for the third, the fourth and the fifth.

The on-the-job instructor – called “tutor” - aims at promoting the success of apprentices, facilitating the education and organisation cooperation between the training institution and the enterprise: he/she has to provide guidance to the apprentice in the learning path and monitor the implementation and the results.

The on-the-job tutor, who can be also the employer, has to facilitate the insertion of the apprentice in the enterprise; moreover, he/she is required to guide and assist the apprentice during the on-the-job training, to transfer to him/her the skills required to perform the working activities and, in cooperation with the pedagogical tutor appointed by the training institution, to provide any element useful to assess the apprentice's activities and the effectiveness of the training processes.

The training institution has to inform young people and their families on the arrangements regarding the application and the selection procedures to enter an apprenticeship, in order to guaranteeing the awareness of the choice. The selection process is up to the employer: it can be performed by means of questionnaires and individual interviews, but also choosing young people participating to preparatory courses or involved in traineeship experiences, in order to assess motivations, aptitudes and knowledge, also regarding the role to be played in the company.

The training institution, as the company, is required to identify a pedagogical tutor with the task to assist the apprentice in order to facilitate his/her learning, monitor the training progress and participate in the initial, intermediate and final assessment of the apprenticeship period. Moreover, both the tutors cooperate for the completion of the apprentice's individual dossier containing products, services and documents made by the apprentice during the training and validation certificates for the skills acquired by the apprentice.

Evaluation of learning is also a responsibility of the training institution, which can refer to the employer for what concerns the on-the-job training part. Such evaluation - that is performed also for the purpose of the admission to leaving examinations - is recorded in the individual dossier and notified to the apprentice. The (former) apprentices are guaranteed with the right to validate the acquired skills also in case of interruption or earlier termination of the contract, starting from a minimum period of three months.

In case of apprentice's failure in achieving the final learning outcomes, the employer has the possibility to terminate the employment contract.

Apprenticeship leaving examinations and the issue of qualifications and certificates are performed pursuant to the legislation on the respective ordinary upper-secondary school and regional vocational education and training paths. The assessments expressed by the on-the-job and off-the-job tutors in the individual dossier are also taken into account as well as the learning results defined in the individual training plan.

<sup>12</sup> Legislative Decree of 15 June 2015 no. 81, Legal framework for employment contracts and revision of the provisions regulating job tasks (Disciplina organica dei contratti di lavoro e revisione della normativa in tema di mansioni); Law of 13 July 2015, no. 107, Reform of the national education and training system and delegation to revise the legislative provisions (Riforma del sistema nazionale di istruzione e formazione e delega per il riordino delle disposizioni legislative vigenti); Decree of 12 October 2015, Definition of training standards for apprenticeship and general criteria for implementation (Definizione degli standard formativi dell'apprendistato e criteri generali per la realizzazione dei percorsi di apprendistato).

<sup>13</sup> Legislative Decree of 14 September 2015, no. 150, Reorganisation of employment services and active labour market policies (Disposizioni per il riordino della normativa in materia di servizi per il lavoro e di politiche attive).

<sup>14</sup> Agreement of the State, Regions, Autonomous Provinces of Trento and Bolzano Permanent Unified Conference, of 24 September 2015, Actions to develop and strengthen the dual system within the education and vocational training system (IFP) (Azioni di accompagnamento, sviluppo e rafforzamento del sistema duale nell'ambito dell'Istruzione e Formazione Professionale (IFP)).

<sup>15</sup> The national Inter-Sectors Continuous Vocational Training Joint Funds, pursuant to Article 118 of Law 388/2000, 23 December 2000, are associations promoted by social partners' organisations to fund employees' training.

<sup>16</sup> An apprentice can be paid maximum two levels lower than a worker with the same qualification (the one to be achieved at the end of the apprenticeship). Alternatively, the apprentice's wage can be established as a percentage of the same wage, and his/her wage increases during the service.

<sup>17</sup> Legislative Decree of 14 September 2015, no. 150, Reorganisation of employment services and active labour market policies (Disposizioni per il riordino della normativa in materia di servizi per il lavoro e di politiche attive).

## 2.5 LIECHTENSTEIN



Key indicators (2017):

Area: **160 km²**

Population: **37,810 inhab.**

Nationals employed in the country  
and in neighbouring countries: **19,398**

Activity rate: **1,4%** (considering only Liechtenstein nationals)

Youth unemployment rate (aged 15-24): **2,6%**  
(referred only to Liechtenstein nationals)

New-entrant apprentices (2016/2017): **278** first-year  
apprentices recorded in Switzerland;  
**351** first-year apprentices in Liechtenstein

Total apprentices (2016/2017): **900** apprentices  
recorded in Switzerland;  
**1,120** apprentices in Liechtenstein, of which 765 nationals

## **Relevance of the dual system for youth training and employment**

Macroeconomic indicators on Liechtenstein are widely reassuring about the economic trends in the next future. Indeed, Liechtenstein has the highest per-capita GDP of the world and the lowest youth unemployment rate (2,6%) of Europe. Currently (2016/2017 data), on the national territory 1,120 young people are employed as apprentices and other 900 are recorded in Switzerland. Not all these apprentices are nationals of Liechtenstein since, given the geographical location and the country's dimensions, many people daily commute from Austria and Switzerland.

The vocational training system has a significant role in the education system of Liechtenstein. Indeed, at the completion of nine years of compulsory school (5 years of primary school + 4 years of low-secondary school), 60-70% of young people undertakes a vocational training with a length of two, three or four years, generally through the dual system.

Given the small dimension of the country, from decades a strong cooperation has been operating with neighbouring countries, especially Switzerland, that has led to a gradual alignment between the two training systems. Such cooperation is particularly strong and structured with reference to the dual system implementation, such that the two systems are very similar.

### **APPRENTICESHIP IN LIECHTENSTEIN IN 2017**

In Liechtenstein there are 303 training companies (2017 data) of manufacturing, industrial, services and administration sector offering apprenticeship opportunities for 80 different trades. In comparison with the previous year, the number of companies is reduced by 5,9%. In 2017, also the number of available apprenticeships out of the total number of vacancies decreased with regard to the previous year, going from 6,3% to 5,9%. Subsequently, in 2016/2017 period the number of apprentices reduced to 1,120 (-2,7% in comparison with the previous year). 68,3% - about two-thirds - are Liechtenstein residents, while the others come from neighbouring countries. 8,4% of apprentices have attended also a scho-

ol to obtain a *Berufsmaturität*, a vocational upper-secondary school qualification.

Two-thirds of the apprentices are concentrated in three sectors: mechanical engineering, administrative and office jobs, technical professions. Quite a number of young people is in health sector as well.

In 2017, 86 contracts were interrupted during the first year, for the most part by the apprentice. According to the Office for Vocational Education and Training and Career Guidance (*Amt für Berufsbildung und Berufshilfe* - ABB), 70% of these young people can find a provisional solution. And in most cases, the interrupted apprenticeship is later on continued in another company or another trade.

With 291 qualified apprentices in 2017, the qualification rate reaches 95,1%, the best result from 2012. The share of apprentices that achieved also the *Berufsmaturität* was

4,5%. The retention rate, i.e. the share of apprentices who, one year after the end of the apprenticeship, is still in the same enterprise, was 36,9% in 2016.

### **Apprenticeship beneficiaries and achievable qualifications**

At the completion of nine years of compulsory school, most young people choose to continue their studies in the initial vocational training system. These young people usually are at least fifteen years old.

The Office for Vocational Education and Training and Career Guidance (*Amt für Berufsbildung und Berufsberatung* - ABB) promotes actions to support the students' choices during their two final years in lower-secondary schools and those who, having failed in finding an apprenticeship, voluntarily enrol for the tenth year or pre-apprenticeship courses. Moreover, ABB has realised an App (*BIZ-App*) providing a set of information to support young people in their choice and connecting guidance offices of the different cities of Liechtenstein with those of eight cantons of Switzerland, in order to make visible all the available apprenticeship opportunities.

Initial vocational training in Liechtenstein is structured in three types of pathways and certifications:

- the basic pathway addresses young people who could not complete an ordinary pathway due to a disability or other issues, which put at risk their inclusion in the labour market. The pathway has a length between one-and-a-half and two years and allows to achieve an *Anlehre* certification succeeding a practical examination. These young people have the opportunity to continue their training participating to another basic pathway or entering a two-years pathway generally at the second year;
- the two-years training allows the achievement of a basic vocational qualification (*Berufsattest* - BA). It is a qualification recognised by the State allowing to practice an occupation; otherwise - at the completion of the two-years course, young people can continue their training, accessing the second year of the vocational diploma path;
- the pathway achieve the vocational diploma (*Fähigkeitszeugnis* - FZ) has a length of 3 or 4 years.

Initial vocational training pathways are organised in two arrangements, despite issuing the same qualifications: as a dual training, with the cooperation of enterprises, or as full-time courses. Only a small part of young people chooses full-time pathways, while most of them is in the apprenticeship system, mainly in three-years (57%) and four-years paths (40%).

In Liechtenstein, the apprenticeship training traditionally has been organised in a "triple" system: in the dual system, student attend a vocational school while acquiring the on-the-job

practical training; in the “triple” system there are also additional inter-company training courses. At the achievement of the Vocational Diploma (FZ), young people can access a new apprenticeship, with the opportunity to get some credits recognised. Or, they can study for a *Berufsmaturität*, that is a vocational upper-secondary school qualification. It can be obtained attending an additional course that can be completed in 2 years on a part-time basis, or in one year on a full-time basis (*Berufsmaturitätsschule* - BMS II). Indeed, it is possible to achieve the *Berufsmaturität* also while participating to three- or four-years apprenticeship pathways (*Berufsmaturitätsschule* - BMS I). The *Berufsmaturität* allows to access all the tertiary-education pathways in Liechtenstein and Austria, as well as the Universities of Applied Sciences (*Fachhochschulen*) in Switzerland.

Apprenticeship pathways are implemented on the basis of Ordinances on Training or Training Regulations (*Bildungsverordnungen*) enacted by the Government for each trade. The Ordinances, introduced at the request of sector representative associations or at the initiative of the Government, include indications on contents and objectives to be achieved during the on-the-job training and at the vocational school, in addition to the inter-company training; they specify the length of the training and the coordination of the two venues; they set out admission requirements and examination procedures. Moreover, the ordinances specify the maximum number of apprentices who can be hired by the enterprise, in relation with the number of employees of the same company already qualified.

After the adoption of the amendments of the vocational training law in 2008, a process of full-review of the Ordinances was introduced, with the purpose to align them to the Swiss ones. This process was assigned to the management of the ABB.

Also adults - with no age limits - can access initial vocational training, attending a “shortened” pathway, in case they have recognised credits for previous training experiences, or undertaking the full pathway, including the vocational school and the inter-company course.

## **The governance of the dual system**

Liechtenstein is a constitutional monarchy based on hereditary succession. The country is very small, made up of just 11 municipalities. The Parliament is formed by 25 representatives elected by the people, while the Government is composed of a cabinet of five people.

In the current legislative period 2017-2021, education and training competences are in the responsibility of the Ministry for Home Affair, Education and Environment (*Ministerium für Inneres, Bildung und Umwelt*); the Minister has also the executive power for the matters managed by the Office for Education (*Schulamt*) and the ABB. The State is entrusted with all the competences in the VET field.

The first Apprenticeship Act (*Lehrlingsgesetz*) of the Principality of Liechtenstein, which dates back to 1936, defined the dual structure of the initial vocational training, by introducing the obligation to attend the vocational school (*Gewerbeschule*) and to pass a leaving examination to acquire the qualification. The first Vocational and Professional Education and Training Act (*Berufsbildungsgesetz* or BBG) was approved in 1976. A core point of this law is the statement allowing young people to attend vocational schools in other countries; particularly, the cooperation with Switzerland play a key role for what concerns the apprentices training. The BBG was completely reviewed in 2006 and then in March 2008, also in order to improve the alignment of the legisla-

tive framework with the Swiss correspondent.

According to the Vocational and Professional Education and Training Act, the dual system implementation is in the responsibility of the following bodies:

- the Government - performing the supervision of the entire education system, including the vocational training - and, particularly, the Ministry for Education. The Government takes decisions regarding the allocation of financial resources, the recognition of credits and the courses that can be funded;
- the ABB, which is responsible for the vocational training system implementation in accordance with the guidelines established by the Ministry for Education. In addition to the provision of guidance services to young people up to 25 of age, the ABB supports young people and enterprises taking part in the dual system. In particular, the ABB is in charge of the following tasks:
  - management of a registry of available apprenticeship opportunities and ongoing apprenticeships;
  - approval of apprenticeship contracts and identification of vocational schools for the off-the-job training;
  - establishment of Training Ordinances;
  - assessment of training enterprises and, in general, of the compliance with the standards regarding apprenticeship, employment and safety;
  - admission to qualification examination, recording of outcomes, issue of certificates;
  - management of the available resources for vocational training;
- the Advisory Committee for Vocational Training (*Berufsbildungsbeirat*), that is a body providing advice and support to the Government and to the ABB. It is made up of seven members, identified among representatives from labour organisations, primary education and vocational training system, appointed by the Government with a four-years mandate. The Committee supports the Government in establishing strategies for the development of the vocational training system, in coordinating activities and in the integration with the education system; moreover, it is in charge of adopting Training Ordinances (*Bildungsverordnungen*) and promoting the implementation of pilot projects.

Finally, in view of the long-established cooperation with Switzerland for the implementation of vocational training, representatives of Liechtenstein have the opportunity to participate in several Swiss groups and meetings, as those of the Conference for Swiss VET Offices (*Schweizerische Berufsbildungsämter-Konferenz* - SBBK) and are members of various vocational school commissions, vocational training centres, examination commissions, etc.

### **The training contract and the incentive measures for training enterprises**

The apprenticeship path is governed by a contract, compulsorily concluded in writing, in three counterparts, and signed by the enterprise and apprentice, in addition to a parent or other legal representative in case of a minor. The contract, in addition to reporting personal records, specifies the apprenticeship trade, length of training, working hours and the apprentice's compensation

according to the provisions of collective agreements. Moreover, the contract, set out the vocational school where the apprentice will undertake the off-the-job training.

Following the stipulation, the contract must be registered at the ABB, which verifies the compliance with the Regulations, authorises the enrolment at the chosen vocational school and, where applicable, sets out another school.

While the State bears the cost for the attendance of the vocational school, the enterprise bears the cost of the apprentice's wage. The wage - which must be specified in terms of gross wage in the employment contract to be submitted to the ABB - can be established through a free negotiation between the parties, provided that the minimum wage requirements prescribed by those collective agreements defined "compulsory" by the Government are met.

The "next-step" digital platform, managed by the ABB, publishes the available apprenticeship places, generally specifying the "suggested" wage, which increases annually in line with the apprentice's progressive skill acquisition.

### **Off- and on-the-job apprenticeship training**

In the apprenticeship model of Liechtenstein, training is delivered according to the provisions set out in the qualification-specific Ordinances, and generally provided by three bodies:

- training enterprise;
- vocational school;
- other training centres providing additional inter-company courses.

To activate an apprenticeship place, enterprises are required to obtain a previous authorisation by the ABB. Therefore, they file an application and the ABB assesses the fulfilment of the requirements, planning a visit, when appropriate, in cases of a first issue. Annually, the ABB sends to training enterprises a "tag", which can be shown to make it visible that the enterprise is a training venue.

To obtain the authorisation to hire apprentices, companies must demonstrate they meet the requirements to provide high-quality training and, particularly, to have on-the-job trainers with appropriate skills, i.e. with:

- a vocational diploma (FZ) for the qualification that to be awarded through an apprenticeship or one equivalent;
- 2 years of professional experience;
- a certificate of attendance of a training course, with a length of 20/40 hours, which aims to share information on the apprenticeship legislative basis and provide certain pedagogical skills required to manage youth training. The 40-hours course leads to a certification equivalent to the Swiss qualification of "master". Courses are free of charge.

The training enterprise can also be replaced by an enterprise consortium; in such a case, the consortium must be governed by a written agreement which sets out the responsibilities of each party and the leading body; the latter applies for the authorisation to hire and signs the apprenticeship contract on behalf of the entire consortium.

To support enterprises in assuring a high-quality training, Liechtenstein has borrowed a Swiss in-



strument: “QualiCarte”. It is a self-evaluation instrument for enterprises, useful to define measures to improve training results, as well as the attractiveness of the enterprise and the selection of young people to be hired in apprenticeship.

In parallel with the on-the-job path, apprentices are required to attend the vocational school for one or two days per week, according to the provisions of the Training Ordinance. The attendance of vocational school is compulsory and the school for each apprentice is chosen by the ABB. In some cases, it is also possible that the ABB exempts young people from the attendance of certain subjects, based on credit recognition. Vocational school, for its part, is obliged to take on all the young people with an apprenticeship contract, according to the specific mandate.

Apprentices hired in Liechtenstein attend the vocational school in Switzerland. For this purpose, Liechtenstein participates in the Inter-cantonal Vocational Training Agreement, regulating also the amount of compensations paid for each student. Indeed, the training delivered by vocational schools is free of charge for apprentices; the amount of compensation varies according to the qualification, ranging from a gross amount of CHF 500 for the first year, up to CHF 1,100 for the fourth year of apprenticeship.

Vocational school provides both general education and specific skills necessary to promote the acquisition of professional skills, in compliance with the Ordinances. Particularly, school training is aimed at promoting the development of the apprentice’s personality as well as his/her integration in the society, promoting the development of the competences required to acquire and perform an occupation, contributing to a sustainable development and an increased equity in the society. At the end of each semester, the school draws up a report, which is sent to the training company. On-the-job instructors are entrusted with the task to evaluate the report with the apprentices, identifying any measure needed to improve the progress.

The final examination is planned in the last semester of the training, in order to assess the fulfilment of the training objectives. It can be in written or oral form, according to the provisions of the Ordinance.

In the apprenticeship “triple” system it is provided also for the attendance of additional inter-company courses, which have the objective to develop the basic professional skills, supplementing the training provided by vocational schools. These courses are generally organised by sectoral professional associations, with a length ranging from few days to several weeks, implying a compulsory attendance. The contents of these courses are defined by the training Ordinances.

The requirements to be fulfilled by the teachers of inter-company courses are: a qualification equal or corresponding to the apprenticeship’s one; at least two years of professional experience in the sector; attendance of a training activity with a minimum length of 1,600 hours if full-time, or 2,300 if part-time.

Also for the inter-company training, “Qualük” instrument has been borrowed from Switzerland. It is a self-evaluation tool for training centres, useful to identify the potential improvement of the training structure and, thus, to increase the quality of the training offer.

The participation cost for these courses is paid by enterprises, net of contributions that may be offered by the State, and attendance hours must be included in working hours. The ABB may exempt from attendance those apprentices who - in turn - participate in internal training courses on the same contents.

## 2.6 SLOVENIA



Key indicators (2017):

Area: **20,273 km<sup>2</sup>**

Population: **2,065,895 inhab.**

Activity rate (aged 15-74): **64,9%**

Unemployment rate (aged 15-74): **6,6%**

Youth unemployment rate (aged 15-24): **11,2%**

Young people aged 18-24 out of school with no  
upper-secondary qualification: **4,3%**

NEET, aged 15-24: **6,5%**

Apprentices entering the pilot project in 2017/2018: **58**

New-entrant apprentices in the pilot project  
in 2018/2019: **72**

## **Relevance of the dual system for youth training and employment**

In 2008, Slovenian economy experienced an economic downturn, with a GDP reduction by 7,8%. In 2012 - after a poor growth in 2010 and 2011 - the country faced a new recession. Current economic forecasts foresee a regular growth: by 3,3% for 2017 and 3,1% for 2018 (European Commission, 2017).

For 15 to 24-years-old people, unemployment has increased from the beginning of the crisis in 2008 reaching the peak of 21,6% in 2013. From 2014 it has been reducing: in 2017 it was by 11,2%. According to economic growth forecasts, a significant reduction in unemployment will be likely recorded in the next few years.

The Slovenian government has established specific strategies to increase youth employment levels, including also the reintroduction and development of apprenticeship.

In Slovenia, apprenticeship was removed in the late 1970s and reintroduced in the 1990s. Particularly, in 1996 - in the framework of a renewed vocational education and training system based on principles of social partnership, training-job alternation and on the creation of a complete vocational training path, including post-secondary and post-tertiary levels - two pathways with a work-based learning part were introduced: a dual system and a vocational and technical education programmes (at upper-secondary and post-secondary school level) including also an on-the-job training period.

The reform promoted in 2001 - which introduced occupational standards, modularisation of vocational education and training programmes, competence-based approach and links with the national system of vocational qualifications - led to the adoption of a new vocational training law in 2006. The new law kept the vocational and technical education programmes, but removed the dual system.

The reasons for such choice have not been clarified, but some experts have assumed that the removal of the dual system may be linked, above all, to the prevailing perception that it was not enough linked to the labour market and so that the enterprises found difficulties in actively participating to a system such that most of the occupation-oriented pathways was developed in school workshops instead of on-the-job (Klaric et al., 2012; Medveš, 2013).

In Slovenia, starting from 2012 - also as a result of the actions taken at European level to support the relevance of the work-based learning as one of the key tools to tackle the high youth unemployment - growing interest is being shown in apprenticeship again, so that it has become one of the priorities at government level. In December 2016, at the end of a debate between the government and social partners, a draft law was presented in the Parliament. The process resulted in the adoption, in May 2017, of the new apprenticeship law<sup>18</sup>.

The law regulates the apprenticeship contract and the on-the-job training, while doesn't include the off-the-job training undertaken at the training institution, which is still governed by the vocational training law of 2006.

The law enforcement will be gradual with a first pilot stage covering three years: 2017/2018, 2018/2019, 2019/2020.

The pilot project, that will be funded with 2,1 million from European and national funds (80% ESF, 20% State), has been prepared by the Ministry of Economic Development and Technology in cooperation with social partners, while the Ministry of Education has selected the schools participating in the project. The pilot project is included in the ESIF project - Reform of vocational upper-secondary education, including the following activities:

- testing and identification of tools and methodologies to create a dual training system capable of fulfilling the labour market needs;
- development of flexible and individualised teaching methodologies and learning paths;
- support of enterprises and training institutions, also through the elaboration of recommendations and development of manuals and other support instruments;
- creation of a catalogue of learning outcomes (standard) that will be the unique reference for the definition of apprenticeship plans;
- development of training programmes for teachers of vocational schools and for on-the-job instructors/tutors;
- creation and implementation - in cooperation with social partners - of an apprenticeship registry, to make the enterprises wishing to carry out alternation paths visible.

During the first year, the pilot project was focused on three qualifications in the sectors of woodwork, hotel and gastronomy services, as well as metalworking, and involved 5 upper-secondary schools, 26 companies and 53 apprentices. In the 2018/2019 school year, 16 schools will be involved and the training offer will be extended to additional sectors.

In order to assure an increased participation in the pilot project of young people and enterprises, the Slovenian Institute for Vocational Education and Training (*Center Republike Slovenije za poklicno izobraževanje* - CPI<sup>19</sup>) in autumn 2018 began a wide promotion campaign for apprenticeship. Moreover, information and awareness-raising activities for enterprises are provided by Chambers of Commerce and Industry (*Gospodarska zbornica Slovenije* - GZS) and the Chambers of Craftsmanship (*Obrtno-podjetniška zbornica Slovenije* - OZS).

The poor participation from young people and enterprises stems from some critical points. A recent study carried out by the Cedefop (2017b) on the school-job alternation in Slovenia has highlighted that rarely Slovenian companies agree to participate in dual paths with a length longer than 24 weeks and that less than half of the interviewed enterprises are available to hire a young person after the apprenticeship. It is a bad signal for the apprenticeship, given that at least 50% of the learning activities is expected to be carried out on-the-job.

Also young people and their families have a negative perception of three-years vocational education programmes, which are the basis of the apprenticeship, and of vocational schools delivering these programmes, since they consider them not good enough in providing appropriate suitable preparation to assure a successful access to the labour market and a satisfying career.

## **Apprenticeship beneficiaries and achievable qualifications**

Slovenia has developed a vocational education and training system which is mainly governed by the vocational training law of 2006 and higher education law of 2004. On the other hand, the 2017 law reintroducing the apprenticeship establishes the regulation of apprenticeship contracts and on-the-job training.

At the age of 15, at the end of the compulsory education, Slovenian young people have the possibility to continue their studies at a general-secondary education institute (*Gimnazija*) or undertake a VET path<sup>20</sup>. During the second year, students have the possibility to enrol in one of the following programmes:

- technical upper-secondary education programmes: with a length of 4 years and leading to the *poklicna matura*, that is the vocational upper-secondary school leaving qualification. These programmes provide for a 4- to 12-weeks on-the-job training period. After the *poklicna matura*, students can access vocational higher education courses or the labour market while they need to pass some additional exams to enter university;
- vocational upper-secondary education programmes<sup>21</sup>. These are three-years programmes, providing two types of pathways:
  - full-time vocational pathway: about 20% (at least 24 weeks) of the programme is carried out on-the-job and the remaining time at school;
  - apprenticeship training (introduced by the apprenticeship law of 2017): at least 50% of the programme is carried out on-the-job, at least 40% at school;
- short-term upper-secondary education programmes: two-years programmes, at the end of which it is possible to access the labour market or continue the studies.

The 2017 law prescribes that the apprenticeship can be used - in addition to in three-years vocational secondary education programmes - also in continuous vocational training. Indeed, the apprentice is defined by law as a young person, at least 15 of age, who has completed the compulsory education and is enrolled in a vocational upper-secondary education programme that is undertaken for a minimum of 50% on-the-job or as an adult, unemployed or employed, who is enrolled in a vocational upper-secondary education programme with the purpose to be retrained or continue the studies.

## **The governance of the dual system**

The governance of the vocational and technical education programmes involves, at national level, the State's central administration and, particularly, the Ministry of Education, Science and Sport (*Ministrstvo za izobraževanje, znanost in šport* - MoESS<sup>22</sup>), the Ministry of Labour, Family, Social Affairs and Gender Equality (*Ministrstvo za delo, družino, socialne zadeve in enake možnosti* - MoLFSAEO<sup>23</sup>) and the Ministry of Economic Development and Technology<sup>24</sup> (*Ministrstvo za gospodarski razvoj in tehnologijo*), the Chambers GZS and OZS, trade unions and, at local level, enterprises and schools.

Before the enforcement of the new apprenticeship law, the governance structure of the VET system had some weaknesses. According to the survey carried out by the Cedefop, there is a consensus gap on roles and responsibilities assigned to the different actors, especially by trade

unions and employers' organisations which complain about their unequal representation compared to the competent Ministries and training institutions. Social partnership shows to be weaker at regional and local level. Among the reasons of the issues there are also a poor regulation of the governance structure and a decision-making process mainly based on personal contacts and informal agreements.

Between 2016 and 2017 several activities were realised to enhance the dialogue and cooperation with social partners, including also the consultation process that led to the definition of the new apprenticeship law.

Moreover, the competences of Chambers of Commerce, Industry and Craftsmanship were strengthened. The 2017 law entrusts the Chambers with the following tasks relating to apprenticeship:

- implementation of information and promotion activities on apprenticeship;
- cooperation with schools and employers for the design of apprenticeship training plans;
- assessment of the adequacy of working conditions and equipment during the apprenticeship, according to the requirements prescribed in the training programme;
- monitoring of the compliance of employers - who are required to be registered at one Chamber - with the obligations deriving from apprenticeship contracts;
- creation, updating and storage of three registries: registry of available apprenticeship opportunities, the registry of apprentices and registry of on-the-job tutors; information about apprentices and on-the-job tutors are submitted to school institutions to promote the beginning of apprenticeship training paths;
- provision of advice services to employers;
- acting as mediators in case of disputes between apprentices and employers to avoid a legal recourse;
- development of programmes for on-the-job tutors and implementation of the relevant training activity;
- provision of support to young people in identifying available companies to undertake the apprenticeship.

Social partners are represented in both the Council of Experts of the Republic of Slovenia for vocational education and training (*Strokovni svet Republike Slovenije za poklicno in strokovno izobraževanje*), and in the Sector Committees for Occupational Standards.

The Council of Experts - composed by experts appointed by the competent Ministries, the Chambers GZS and OZS and Trade Unions - is the main guidance and coordination body of the vocational and technical education system. The Council promotes the occupational standards and the catalogues of the skills to be achieved during the alternation path, that are then adopted by the Ministry of Labour; it also puts forward vocational education and training programmes, to be adopted by the Ministry of Education.

Sector Committees, consisting of experts and representatives of the competent Ministries, Chambers and Social Partners, establish the priorities for the development of occupational standards and designate the experts responsible for defining vocational profiles and catalogues of knowledge and skills.

Occupational standards are the basis of vocational education and are updated any five years in relation with the needs of the labour market. Usually, a vocational education programme is designed referring to more than one standard and includes also general subjects. On this aspect

there is a disagreement between the school and enterprise sectors. Indeed, in the view of competent Ministries and schools apprenticeship training programmes, aiming to the achievement of the same qualification of school paths, should keep the same “educational standards” at the same extent; this is to assure the quality of apprenticeship and the “permeability” of the system, i.e. the possibility for students to move from one training path to another and to access higher education. Otherwise, young people and their families would be discouraged to undertake an apprenticeship training path. According to Chambers of Commerce, Industry and Craftsmanship, instead, this choice represents an obstacle to the spread of apprenticeship, since enterprises are neither interested, nor equipped, to provide a so wide training for a set of different occupations (Cedefop, 2017).

Another body entrusted with important tasks in the field of apprenticeship by the 2017 law is the Slovenian Institute for Vocational Education and Training (CPI), working in cooperation with experts on training and work. It is in charge of the following tasks:

- it identifies system solutions for the development of the apprenticeship;
- it coordinates the drawing up of the catalogues of knowledge and skills to be developed during the on-the-job training period;
- it coordinates the activities to define the standards for intermediate and final examinations;
- it contributes to elaborate the training programmes for on-the-job tutors;
- it defines the methodologies to be adopted in the vocational path;
- it promotes the development and the dissemination of teaching materials;
- it promotes the coordination between Chambers and schools;
- it monitors and evaluates the effectiveness of the system and the quality of the vocational training.

Coordination and monitoring of the apprenticeship pilot project are in the responsibility of a Commission made of representatives of the Ministry of Education, Ministry of Labour, Chambers of Commerce, Industry and Craftsmanship, Social Partners plus a representative of the schools involved in the project. The Commission has the task to draw up an annual report on the implementation of the apprenticeship to be submitted to the Ministry of Education and issues recommendations to improve the implementation of the pilot project.

### **The training contract and the incentive measures for training enterprises**

The employer is required to sign a written contract with the apprentice (or, in case of a minor, with his/her parents) once he/she is enrolled in a school where a part of the dual training programme will be carried out. The contract must include a set of information about the apprentice, the employer, their duties and rights, the labour agreement (start and length, amount of the apprentice’s compensation, etc.), as well as on the training programme (programme, length, structure of the on-the-job training, etc.).

The length of the contract is related to the length of the vocational training path which is of

three years, but under certain circumstances (sickness, birth of a child, etc.) can be extended for a maximum of one year.

To sign an apprenticeship contract, the employer is required to meet the following requirements:

- he/she is registered in the registry of apprenticeship vacancies;
- he/she pursues an activity consistent with training programmes that can be carried out in apprenticeship;
- he/she ensures working conditions and equipment that are considered appropriate by the competent Chamber, according to the training programme carried out in apprenticeship;
- he/she provides the apprentice with a tutor for the entire length of the training;
- he/she has not been sentenced by final judgement for a breach of labour laws and is not subject to ongoing winding-up proceedings.

Once the apprenticeship contract is signed, the company submits it to the competent Chamber which will register it after the verification of its compliance with the law.

The apprentice is classified as a student, but the employer - in addition to allowing the apprentice to undertake the training programme provided by the school - is required to pay a monthly compensation to the apprentice. The law specifically sets out the minimum monthly amount of the compensation, that in the past was regulated by sector agreements of the social partners. The compensation cannot be lower than 250 euro for the first year, 300 euro for the second year, and 400 euro for the third year; collective agreements can establish amounts higher than those prescribed by law.

Moreover, the apprentice for the entire training period is covered with the same insurance arrangements than employees (health insurance, accident insurance, etc.). The apprentice is also entitled to reimbursement of expenses incurred to perform the training programme, as travel, subsistence and mission costs.

The coverage of the expenses incurred by the apprentice to attend the on-the-job training is ensured by the Ministry of Economic Development. The same Ministry - together with the Ministry of Education - funds a part of the costs borne by the employers for the on-the-job training of the apprentices. The employer, indeed, is granted with 2.000 euro per each apprentice.

The employer has the obligation of ensuring health and safety of the workplace during the practical training, and of guaranteeing to the apprentices the acquisition of the basic knowledge on health and safety of workplaces.

The employer can entrust the apprentice only with workload provided for in the individual training programmes and is required to ensure that the apprentice is trained for the entire training period by an on-the-job tutor or instructor. The latter is required to have at least an upper-secondary education qualification, a recognised expertise in the pedagogical-andragogic field and at least three years of working experience; alternatively the on-the-job tutor is required to have the master qualification or to perform management functions in the professional field in which the apprentice is trained. The on-the-job tutor is obliged to attend a training course, generally provided by the competent Chamber, to acquire the skills and knowledge required to effectively perform the functions prescribed by law. The on-the-job tutor has the obligation to train the apprentice at least for 20% of his/her on-the-job training, to monitor the entire training period of the apprentice and to assess the relevant progress in the learning process.



## **Off- and on-the-job apprenticeship training**

The 2017 law establishes that, in the implementation of the training programme, the vocational school and the company must cooperate in order to guarantee the high-quality of the training. The employer is responsible for the quality of the on-the-job training, while the school institution is responsible for the quality of the school training.

Vocational education and training institutes are obliged by law (VET Act, Articles 15-17) to apply the principles of EQAVET Recommendation<sup>25</sup>; this obligation of assuring quality of training paths is extended also to apprenticeship. However, since national quality descriptors are not directly applicable to dual education paths, the school institution is required to decide on how to include them in quality assurance.

For what concerns the on-the-job training, the main bodies responsible for quality assurance and control are the Chambers GZS and OZS. The Chambers have the task to verify the adequacy of on-the-job working conditions and equipment, as well as to assure the compliance of the employers with the contract obligations, despite the law does not establish specific quality standards relating to the apprentice's learning during the on-the-job training.

The law establishes that the on-the-job training can be partially provided by inter-company training centres. These are training centres organised by professional schools to allow students and local companies to improve their technical capacities and skills. These centres could play a significant role in those cases in which apprentices don't have the possibility to develop all the required skills on workplaces.

Companies and schools cooperate to design training plans for the apprentices and define the cooperation ways.

The apprenticeship plan, signed between the school, the employer and the competent Chamber, establishes:

- the objectives of the on-the-job training, matching them with the objectives of the off-the-job training, in compliance with the education programme;
- structure and timing of the dual training, taking into consideration the specific characteristics of the occupation/trade for which the apprentice is trained;
- forms of cooperation between the school and the employer and arrangements for the exchange of information regarding the apprentice's learning path and absences, any breach, etc;
- how to participate in the final examinations.

The length of the training cannot be longer than 8 hours per day and 36 hours per week. During school holidays, apprentices have the opportunity to attend the on-the-job training, provided that the employer must ensure for the apprentice at least six continuous weeks of summer holidays and at least eight days of holidays throughout the year, as specified in the school calendar. To be admitted continuing the studies the next year, apprentices are required to undertake all the scheduled training hours and, usually, at the end of the second year - and, however, at least once during the path - they have to take an intermediate examination. Contents, methods and procedures of the intermediate examination are adopted, at the proposal of the competent Chamber, by the Council of Experts. The intermediate examination is performed by the Chambers of Commerce, Industry and Craftsmanship.

While the apprenticeship training takes place in several learning venues (school classrooms and

laboratories, company, inter-company training centres), the training institution is responsible for final examinations, which are planned on the basis of the reference legislation on VET. Employers don't have a formal responsibility for what concerns the learning outcomes and their opinion doesn't contribute to the definition of the final mark assigned to students. Nevertheless, some schools encourage employers to use the evaluation grids elaborated by the CPI, where the enterprises are invited to evaluate the students according to certain indicators, as punctuality, relationship with colleagues and superiors, professional development.

<sup>18</sup> Apprenticeship Law no. 003-02-4/2017-9, 8 May 2017.

<sup>19</sup> The CPI is a Body dealing with research and development activities for VET.

<sup>20</sup> In the 2015/2016 school year, 63% of the students was enrolled in a general-secondary education institute and the remaining 37% in a vocational education and training programme.

<sup>21</sup> Students can move from one course to another and, after succeeding the leaving examination, they can choose either to access the labour market or to enrol in a technical education programme to achieve the *poklicna matura*.

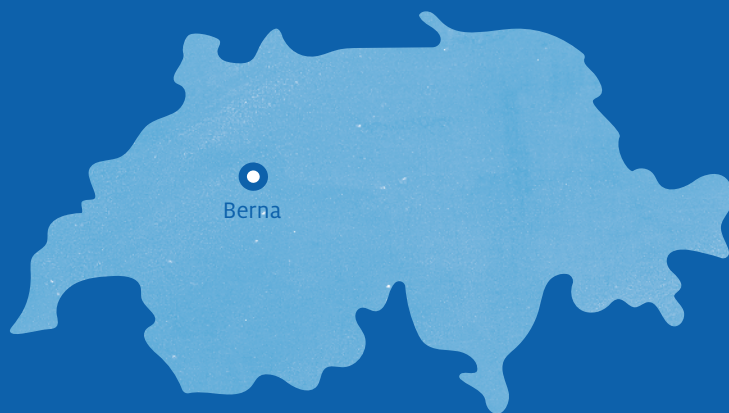
<sup>22</sup> The MoESS establishes and implements education policies and the relevant regulations.

<sup>23</sup> The MoLFSAE0 - together with MoESS - for the provision of vocational education and training programmes. It establishes occupational standards and the vocational knowledge and skills catalogues in the certificate system.

<sup>24</sup> The Ministry of Economic Development and Technology elaborates the rules for verifying and keeping the registry of apprenticeship opportunities, and defines the conditions to be met by the enterprises to use the apprenticeship. The Ministry provide also the financial support to employers hiring apprentices.

<sup>25</sup> See: Recommendation of the European Parliament and of the Council of 18 June 2009 on the establishment of a European Quality Assurance Reference Framework for Vocational Education and Training (EQAVET) (2009/C 155/01)

## 2.7 SWITZERLAND



Key indicators (2017):

Area: 41,291 km<sup>2</sup>

Population: 8,419,550 inhab.

Activity rate (aged 15-64): 75,6%

Unemployment rate (aged 15-74): 4,8%

Youth unemployment rate (aged 15-24): 8,1%

Young people aged 18-24 out of school with no  
upper-secondary qualification: 4,5%

NEET, aged 15-24: 6,5%

New-entrant apprentices: 68,922

Total apprentices: 193,352

## **Relevance of the dual system for youth training and employment**

With a population of about 8,5 million of inhabitants, Switzerland is among the richest countries of the world, in terms of GDP per capita. Its economy is increasingly based on the tertiary sector, while the most traditional sectors as agriculture, construction and mechanic industry are declining. In line with the main macroeconomic indicators, its labour market is a place in which to seek opportunities that in 2017 determined the highest activity rate in Europe (following Iceland), with an unemployment rate lower than 5%.

The vocational training system is considered one of the strengths of the country, since it allows to train skilled professionals capable of steering the economy towards the figures shown by the indicators. This system is the result of the joint effort of institutional actors - Confederation and Cantons - and professional organisations. The apprenticeship, in turn, represents the most important link between the education sector and the production sector, in addition to being the training option preferred by young people in the framework of the upper-secondary education. Studies carried out a few years ago have highlighted that for those young people who have undertaken an apprenticeship, the risk to be unemployed is two-and-a-half/three times less than for unskilled workers. Moreover, employees who have undertaken an apprenticeship have a significantly lower chance to be unemployed than workers with a purely-academic qualification.

### **APPRENTICESHIP IN SWITZERLAND IN 2018**

A two-year annual review of the apprenticeship market situation from 1997 to 2017 is conducted in the “Transitions Barometer” project through a survey involving companies and young people who face the choice of a training. In order to analyze the situation, all young people who complete compulsory education in the summer of the year in question are interviewed.

In the summer of 2018, 36,274 young people started an apprenticeship. Almost two thirds of them (63,5%) started a three-year apprenticeship and one third a four years one; short apprenticeships are the exception (2,8%). Training in the commercial sector is at the top of apprenticeships chosen by young people; in the middle there are those apprenticeships in the technical

and social fields and the lower average is in the crafts and medical fields. Girls and boys have different preference regarding the choice of a profession, with the exception of commercial training, which is always their first choice, as in the past.

It should also be noted that there are significantly more boys (59%) than girls (41%) among the apprentices. Young people took a long time to apply for this apprenticeship: 71% started applying one year before or more. A clear difference can be observed between the linguistic regions: while short-term applications are clearly the exception in German-speaking Switzerland (11% having applied six months or less), they are much more widespread in French-speaking Switzerland and Ticino (49% having applied 6 months or less). Most young people sent several applications at the same time.

In total, 25% of the companies that participated in the survey offer apprenticeship places. Only 86% of the apprenticeship offered places were filled in August 2018. In the areas of transportation, finance and insurance, as well as the arts, recreation and entertainment, and the mining industry, almost all of the proposed apprenticeship positions were filled. In relative terms, many places remained vacant in the construction, agriculture and forestry sectors.

70% of companies that could not fill all their apprenticeships indicated that they received only unsuitable applications. One-third of companies have hardly received any applications, while 15% of them mention a short-term withdrawal of candidates. In 2018 the supply of places in most companies has remained stable as in 2017.

It has increased significantly in the information and communication sector, in the hotel

industry and in the arts, entertainment and entertainment sectors.

58% of training companies offer apprentices the opportunity to achieve a *Berufsmaturität* during their apprenticeship, which is the vocational upper-secondary school qualification. In fact, this opportunity is captured by 26% of apprentices who started an apprenticeship in August.

Out of the 56,792 apprentices that ended their training in the summer of 2018, 80% worked in companies in German-speaking Switzerland, 17% in French-speaking Switzerland and 3% in Ticino. Most apprentices at the end of their training leave their training company after graduation. One third obtain a fixed position in their training company, while 16% are hired for a fixed term. Only 3% of the training companies have not yet decided the question of a possible hiring.

## **Beneficiaries and achievable qualifications**

At the end of the compulsory school - which has a length of eleven years, of which two at the nursery school, six at primary school and three at the lower-secondary school - two thirds of young people (68,3% in 2016) continue the studies in the vocational training system, choosing one of the 230 trades available. Therefore, it may be stated that the initial vocational training system is the main pillar of the upper-secondary system and - according to the strategic lines promoted by the country - it represents also the first stage of a lifelong learning system.

So, young people access the initial vocational training, generally at the age of 15/16, by choosing a path in the framework of two macro-types of programmes:

- a basic path, with a length of 2 years to acquire a federal VET certificate (*Eidgenössische Berufsatteste* - EBA) allowing to directly access the labour market or the second year of the three- or four-years paths;
- a path with a length of 3 or 4 years allowing to achieve a Federal Certificate of Competence (*Eidgenössische Fähigkeitszeugnisse* - EFZ) allowing to both exercise a certain profession and continue the training at a higher level.

In the framework of the initial vocational training, certifications can be achieved in two ways:

- through the apprenticeship, for all the 230 achievable qualifications;
- through full-time paths, limited to certain qualifications of specific sectors, depending on the territorial availability.

The achievable full-time qualifications are, therefore, the same achievable through the apprenticeship, i.e. the reference Regulations, defining training objectives and paths and examination arrangements, are equal; nevertheless, full-time training - in comparison with the apprenticeship - can have different timing for the achievement of the qualification.

Young people participating in programmes aimed at the certificate EFZ have the opportunity to achieve at the same time the *Berufsmaturität* by attending an additional preparatory course providing general knowledge (*Berufsmaturität - Teilprojekt 1 - BM1*). With the *Berufsmaturität*, young people can then directly access the higher technical schools (*Fachhochschulen*) with no requirement to pass an admission examination, or they can take the examination to access the university. Such *Berufsmaturität* can be achieved only in combination with an EFZ qualification, by attending the preparatory course and taking the relevant examination also after the completion of the apprenticeship path (*Berufsmaturität - Teilprojekt 2 - BM2*).

After the 2004 reform of the Vocational Training Act (*Berufsbildungsgesetz - BBG*), for the first time it was implemented a standardisation process for all the qualifications, with the aim of making them comparable and promoting the “permeability” of the paths.

Any qualification refers to a federal ordinance (*Bildungsverordnungen*) enacted by the State Secretariat for Education, Research and Innovation (*Staatssekretariat für Bildung, Forschung und Innovation - SBFI*), which is part of the Department for Economy, Education and Research (*Eidgenössischen Departement für Wirtschaft, Bildung und Forschung*). The Ordinance, including the Regulation of VET, is the result of a consultation and cooperation process between the Confederation and Cantons, together with labour market organisations and schools.

Any Regulation defines the elements needed for the training implementation: length, contents and objectives to be achieved, delivery arrangements and venues, structure of the final and intermediate, if applicable, examination. Moreover, it also establishes provisions for the apprenticeship contract, as the maximum number of apprentices that the company can hire, personal and environmental safety and risk prevention standards, documents needed during the training. A Training Plan (*Bildungsplan*) is attached to any Regulation; it is drawn up by sector representative associations and describes learning objectives, contents and timing of the training in the different training venues. In Switzerland, two models are used to elaborate Training Plans: a skill-based model and a skill-resource-based model. In the first model, the skills to be acquired are described starting from skills areas, then specific skills and finally performance standards; there are different types of skills: technical, methodological, social and of personal autonomy. In the second model, the curriculum describes the skills to be acquired by the apprentice and details those resources needed to manage the different situations.

Moreover, for each Regulation a Commission for development and quality is established; it can be occupation-specific or covering a group of similar occupations. Such Commission is composed by representative of the Confederation, Cantons and professional organisations of training institutions and industry (employers and employees) and is responsible for the curriculum updating basing on the evolution of labour market needs. When a change is needed, the Commission submit a specific request to the SBFI. Training Regulations can be changed also at the request of

Cantons and at the initiative of the SBFI itself.

In addition to the basic vocational training, there is also a higher vocational training, included in the tertiary-level of the education system, which can be undertaken also through an apprenticeship. The higher vocational training allows the acquisition of those qualifications required to exercise a significantly complex professional activity, with specialised and management responsibility. Therefore, high-profile professionals are provided to the economic sector. The admission to higher vocational training is usually allowed after the achievement of an EFZ (federal VET Diploma) or an equivalent secondary-level qualification. In the framework of the higher vocational training, the most spread qualifications are those provided after a federal examination; there are about 450 federal examinations, plus 57 higher vocational schools in 8 professional sectors.

### **The governance of the dual system**

Switzerland is a federal republic, made of 26 Cantons, each with a considerable autonomy. Cantons are the main responsible bodies for Education; in fact, the federal recognition of upper-secondary school leaving certificates is governed by a Confederation-Cantons agreement. On the other side, the Confederation - in consultation with Cantons and economic sector - is entrusted with the legislative competence on vocational training.

Particularly, the federal training competence is assigned to the Secretariat for Education, Research and Innovation (SBFI), part of the department including Economy. Cantons participate in the definition and implementation of training policies through the Conference of Cantonal Ministers of Education (*Schweizerische Konferenz der kantonalen Erziehungsdirektoren* - EDK).

The Vocational Training Act (BBG) together with the Ordinance on VET constitutes the legislative framework regulating the whole basic and tertiary vocational training and the lifelong training. In line with the federal framework, Cantons draw up their training law. At cantonal level, there are 26 Offices in charge of the vocational training implementation and which coordinate their activities in the framework of the Swiss Conference of VET Offices (*Schweizerische Berufsbildungsämter-Konferenz* - SBBK), i.e. the EDK's operational team. Cantons manage vocational schools offering opportunities of apprenticeship, full-time training programmes, preparatory courses for *Berufsmaturität*.

The participation of the labour sector is a permanent element of the coordination, management and evaluation of the vocational training. Representatives of entrepreneurial organisations and trade unions take part in the Federal Commission for VET (*Eidgenössische Berufsbildungskommission* - EBBK), appointed by the Federal Council and chaired by the SBFI, that has the task to support the training policies coordination, assess development projects, as well as research, surveys, pilot projects and provision of services.

In 2016 the Commission approved the "partnership charter" (*Charta der Verbundpartnerschaft*), which defines the basic principles of the joint work, starting from the adoption of a cyclical approach with the following stages: planning – decision – implementation - evaluation. Several workshops are annually planned to facilitate meetings of representatives of institutions and labour sector (National meeting on VET, Annual partnership meeting, Autumn meeting with stakeholders, etc.).

Also at a more operational level, there is an extensive cooperation, so that representatives of the labour sector are involved - among other things - in the validation of non-formal learning, accreditation of training programmes of vocational schools, implementation of final examinations. The monitoring of vocational training is managed by the Federal Statistical Office and SBFJ, in addition to the Coordination Centre for Research in Education (*Schweizerische Koordinationsstelle für Bildungsforschung* - SKBF) operating to support both the Confederation and the Swiss Conference of Cantonal Directors.

### **The training contract and the incentive measures for training enterprises**

To access the apprenticeship it is required to be 15 of age (14 in some cantons), to have fulfilled the compulsory school and find a company wishing to take on the young person. Cantons organise guidance services, by working closely with schools and teachers, particularly related to students attending the last two years of compulsory school. For young people failing in finding an apprenticeship (or a full-time opportunity in a vocational school) there are specific programmes, like the school for the 10<sup>th</sup> year, pre-apprenticeship courses and other opportunities combining off- and on-the-job training.

The publication process regarding the available apprenticeship vacancies generally starts one year before the enrolment in the vocational school (in August of each year); young people who are interested submit their application and may be invited for an interview or a selection test. In case of a successful outcome, the next step is the signing of the contract.

The apprenticeship contract is an agreement between an apprentice - and his/her legal representative, if minor - and an enterprise, and is based on standard rules and a federal standardised model. The contract, that has to be in written form, defines the governing rules of the employment relationship - complying with VET and labour legislation - and, specifically, determines the working hours, training and trial period length, salary. The apprenticeship contract is then notified to the cantonal training office which, for its part, reports the enrolment to the vocational school.

The apprentice's salary can vary according to the profile, territory and also the individual enterprise and, usually, increases on annual basis at an increase of the apprentice's skills. The law does not establish a minimum wage (which is instead provided for in some cantonal regulations), that is determined through a free negotiation between the parties. In most cases, recommendations from sector organisations are taken as reference, despite they have not a binding nature.

Therefore, the apprentice's salary may be different according to the enterprise's location (canton, city, rural area) and wide differences in the approach of enterprises are found. The surveys carried on show that at least for the first year, the salary is very low, equal to about 12% of a skilled worker's salary. Social contributions have to be paid from 1 January of the year in which the apprentice comes of age.



Generally, enterprises do not benefit from incentives to hire apprentices. Several studies have shown the net gain of the enterprise resulting from the difference between the apprentice's salary (and the on-the-job training costs) and the advantage in terms of productivity for the work performed.

School vocational training, on-the-job trainers' and instructors' training, grants for inter-company courses, as well as apprenticeship guidance or preparatory initiatives are funded by the public system, i.e. Confederation and Cantons. In particular, Cantons bear about three fourth of the expenditure.

A specific characteristic of the Swiss System is represented by IVT funds (*Berufsbildungsfonds*) established by the professional organisations as a contribution to the training system by enterprises not offering apprenticeship opportunities. The Government can declare the adhesion to these Funds compulsory for an entire professional sector. In some Cantons there are also compulsory cantonal Funds for all the enterprises.

Sectoral or "inter-company" courses, usually organised by professional organisations, are funded through membership fees to be paid by enterprises, public subsidies and any sector fund.

### **Off- and on-the-job apprenticeship training**

The Swiss dual system is actually the integration of three elements:

- training in the training enterprise hiring the apprentice;
- training in the vocational school;
- an additional training in sector inter-company courses.

The Training Regulations establish the task for each part, in terms of training engagement and objectives to be fulfilled.

Enterprises wishing to offer apprenticeship opportunities must be previously accredited. This means that they are required to meet the following requirements:

- environment suitable for the training, according to the provisions of the Regulations, in terms of space and achievable skills;
- instructors meeting the requirements prescribed by the Regulations, including the mandatory training attendance, i.e.: the corresponding vocational diploma (or other similar certificate, as specified by the Regulation) and attendance of the 40-hours training course.

Cantons can also provide for additional requirements for the accreditation issue.

The accreditation of enterprises is a task performed by cantonal training offices. The enterprises interested in it are required to submit a request focused on hiring specific apprenticeship profiles; cantonal offices evaluate the documents and plan a visit on-site. In case of a successful outcome, the enterprise is accredited, and from that moment can promote its apprenticeship offer through the cantonal registry.

Cantons are also responsible for the verification of the maintenance of the accreditation requi-

rements; therefore, they plan regular inspections which may also lead to the withdrawal of the authorisation. Small and medium enterprises not capable of providing the whole training as required by Regulations have the possibility to establish consortia (*Lehrbetriebsverbund*) and share the apprenticeship costs. The SBFJ makes available certain resources to support the establishment of such networks.

On the job, apprentices are trained with the guidance of instructors, according to the arrangements, objectives and contents established in the on-the-job training plan, drawn up on the basis of the Regulation. Each semester, the instructor shares the individual learning objectives with the apprentice, reporting them in a report.

Each apprentice has his/her own “training diary” (*Lerndokumentation*), reporting an overview of all the training objectives to be acquired in the three training venues. So, the diary becomes a monitoring tool regarding the skills gradually acquired by the apprentice and a tool allowing to connect the three entities taking part in the training. The apprentice has the responsibility to report in the diary the training activities, with a regular check by the trainer.

In turn, the instructor takes record of the training process progress in a monitoring report and evaluates the skills acquired at least once per semester. Such monitoring report is compulsory and many sector organisations have elaborated specific templates.

The off-the-job training at the vocational school takes place 1 or 2 days per week, according to the apprenticeship trade. In some venues, and for certain trades, the school attendance is organised by “blocks”, i.e. the apprentices attend the school continuously for a certain number of days, in alternation with on-the-job periods. The school provides both basic training and vocational knowledge, planning also workshops for practical training. Each semester apprentices receive evaluation notes, reported on the school diary; the regulations establish the importance of these evaluations for the final examination. To pass the examination, in general, the average mark of 4 is required (on a scale of 1 to 6).

The enrolment in the vocational school is in the responsibility of the enterprise; the attendance is free of charge for the apprentice.

For all the trades, inter-company courses (*Überbetriebliche Kurse*) are planned; these are implemented in the training centres of associations or large companies, where apprentices have the opportunity to improve their basic skills. The length of these courses is, according to the trade, between 4 and 12 weeks throughout the training.

Inter-company courses are organised by the sector representative associations and are compulsory. The courses are funded with the membership fees paid by the companies, in addition to the resources from the Confederation, Cantons and professional organisations. Apprentices do not bear any cost for inter-company courses.

For some trades, intermediate examinations are organised during the basic vocational training. These allow to verify if the provided training complies with the Training Regulation and if the apprentices are successfully undertaking the training. Basic vocational training is concluded with a final examination (*Qualifikationsverfahren*). The apprentice is required to prove the achievement of the objectives described by the Regulation and teaching programme, as well as the development of the skills and knowledge required to exercise the trade. The final mark is equal to the

median of the weighted marks of all the subjects included in the final examination, including the evaluations obtained in the on-the-job training and inter-company courses. The examinations are organised by the Vocational Training Department, which designates experts to be involved in the evaluation boards. The apprentice deals with practical works characterising the trade, and answer questions to verify the achievement of occupational skills and general culture knowledge.

**3.**

***COMPARISON OF DUAL SYSTEMS:  
STRATEGIC OBJECTIVES TO STRENGTHEN  
THE COOPERATION AMONG REGIONS OF  
THE ALPINE SPACE***

### **3.1 GOVERNANCE**

The analysis of governance models for apprenticeship systems - in cross-country comparative terms as well - has produced an extensive scientific literature which supranational bodies have drawn on, with the double objective, on one hand, of identifying successful factors of some countries in the access to - and participation in - the labour market of young people and, on the other hand, of detecting key objectives to be pursued to strengthen training systems in those countries recording unsatisfactory results.

In such scientific literature, the notion of “governance” is not-uniquely explained, as it refers to several parameters such as: the form of cooperation among the different bodies - institutional and non-institutional - involved in the functioning of dual systems, strength and consistency of the legal framework, specific role performed by social partners and any other labour market bodies supporting apprenticeship, systems of funding and costs allocation, focus on access criteria rather than output standards, monitoring processes on the evolution of the dual system - medium- and long-term results on individuals’ careers paths included - in order to define the most appropriate development strategies.

In pursuing the objective chosen by the Action Group 3 of Eusalp - since the main purpose is of identifying priority objectives in which the effective cooperation among Alpine Regions will be promoted to strengthen dual systems - it has been possible to focus just on some of the parameters defining governance models. Therefore, the factors taken into account have been only those for which the experts participating in the survey have highlighted the need to focus the efforts on to promote the success of dual systems.

Many of the experts from the various Regions/*Länder*/Cantons of Austria, Germany, Switzerland and Liechtenstein have highlighted as strengths both a strong and well-established operation model and a suitable legal framework. Indeed, in the aforementioned countries, the apprenticeship legal framework - usually structured upon a specific apprenticeship law and with some rules included in a law on the school system - has been representing a sound reference for decades, despite the amendments occurred from time to time. Therefore, these characteristics pinpoint the dual system as a successful mechanism, ensuring a smooth access of young people to the labour market, and contributing to keep the youth unemployment rate at a reasonable level; these same characteristics make it easier for enterprises to find the skilled workers required, with an expertise consistent with the needs of innovation, growth and competitiveness of the economic system.

In France also, the apprenticeship system is traditionally codified, mainly with a reference to the achievement of 4- and 5-level qualifications (as classified in the French education system); however, it is just complementary to the initial full-time education and training system. Accordingly, the apprenticeship legal framework is based on rules included in the Labour Code and renewed through extensive reforms, as the recent law for the freedom to choose one’s professional future (2018). Indeed in recent years, several reforming actions have been taken. These reforms pursue the common objective of facilitating the development of the dual system, trying to balance an education model focused mainly on general education and university in order to promote youth

employment; moreover, the most recent measures have also focused on the governance system, redefining the relationship between central State - which has benefited the most - and Regions. In the other two Alpine countries - Italy and Slovenia -, where the dual system is still in an experimental phase since only recently a new legal framework was defined (2015 in Italy and 2017 in Slovenia), there is a common feeling that effective operational arrangements - suitable to encourage the participation of young people and their families, as well as to attract enterprises – are still to be found. Therefore, there are areas of improvements for the legal framework, for example with regard to the system of funding and costs allocation of, or the definition of specific rules for minors working through an apprenticeship.

From the experts interviewed in the framework of the Eusalp project, it emerges a widespread awareness that the cooperation among different actors and at different levels - national, regional and also local - is an essential element to ensure a successful dual system. An effective governance of the dual system firstly calls into question those bodies performing as main actors, i.e. central and local institutions, social partners and representatives of training institutions; however - according to the characteristics of each country - it addresses a wider range of bodies: Chambers of Commerce, Industry and Craftsmanship, employment services, bodies dealing with the monitoring and evaluation of the system, labour experts.

For what concerns the involvement of institutional actors, it has to be considered that Alpine countries present different forms of government, which entail a various complex of institutional actors participating and a variable allocation of competences among them.

Austria, Germany and Switzerland are Federal States, although presenting different degrees of decentralisation. By reference to apprenticeship, generally the regions' (*Länder*) autonomy is limited by the need of ensuring compliance with standardised rules and of reaching similar results for the labour market. Therefore, the dual system regulation, as regards the direct involvement of companies, is always under the federal responsibility, while, as regards the vocational schools, it is entirely defined at regional level in Germany and Switzerland and centralised at federal level in Austria. Instead, the management of vocational schools is always performed at regional level. The connection between the two institutional levels is not everywhere ensured by the establishment of Committees or other dual system-oriented permanent venues.

France and Italy present a more centralised form of government, where Regions play a strong role; in fact, traditionally, in both countries, Regions have exercised a very wide autonomy on vocational training. Following the establishment of macro-regions in France, with the 2018 reform the definition of development strategies for the VET system has returned to the central position through the establishment of the France compétences agency; in Italy, the focus on the employment nature of the apprenticeship emphasises the coordination role played by the national law. The framework of institutional levels involved in the management of the dual system is easier in Slovenia and Liechtenstein, where only reference ministries of the national government are involved.

As regards the involvement of Social Partners, generally in the sector specific literature the dual systems of German-speaking countries - Austria, Germany, Switzerland and Liechtenstein - are defined as “corporatist” for sharing a model of apprenticeship entailing the widest involvement of employees’ trade unions and employers’ organisations across all planning, management and evaluation phases. Indeed, in these countries, tripartite Committees (or even “quadripartite”, given the involvement of representatives from two institutional levels) are usually established,

which permanently deal with the analysis of apprenticeship and the elaboration and dissemination of strategic guidelines for the evolution of the system, operating at both national (federal) and regional level. Moreover, professional organisations play a specific role in the functioning of apprenticeship, through the participation in the mechanisms to define and amend the “training regulations”, as well as through the role played by the Chambers in Austria and Germany in relation with the accreditation of enterprises and the examination system.

On the contrary, in France and Italy the management of the VET system is usually defined as a state-regulated model, with a higher focus on initial full-time training than on apprenticeship and an active role of Social Partners performed mainly at regional level. However, in this respect, it should be mentioned that one of the purposes of the recent French apprenticeship reform is the enhancement of the sector representing organizations’ role; specifically, Social Partners are among the members of France compétences, the new agency established by the 2018 reform, entrusted with a crucial task in the functioning of the apprenticeship system. Instead, in Italy the dialogue with Social Partners on apprenticeship and training at national level is a responsibility and a choice of each ministry, since there are no dedicated formal venues.

Lastly, in Slovenia the apprenticeship’s governance system is an integration of the two models described above: on one hand, there is a legal framework largely modelled on German-speaking countries, that is a result of the joint efforts of all the actors - institutional and non-institutional - required to support the apprenticeship and which involves several actors in the management of the dual system; on the other hand, the recent interest in a new apprenticeship and the launching of pilot projects, so far, have mainly given way to the active role of central institutions.

Beyond the different institutional structures, variety and variability of legal frameworks, the answers provided by the experts involved in the survey highlight the common attention paid to the promotion of initiatives aiming at facilitating a sound cooperation between institutional actors and representatives of the labour sectors, in order to support an effective apprenticeship system. In the framework of the definition of priority objectives for the cooperation among Alpine countries to strengthen dual systems, the following recommendation has been identified:

### **Recommendation:**

**1. Developing the competences of all those acting in the dual system, identifying stable cooperation fora, promoting the establishment of networks at national and regional level**

The need to identify measures supporting a stronger cooperation among the different parties involved in the dual system is perceived both in countries where the apprenticeship is under construction (Italy and Slovenia), and in countries where the dual system is well-structured, with a long tradition behind it (Germany, Austria, Switzerland, Liechtenstein and France).

In the first case, these measures aim at strengthening the governance mechanisms and the effectiveness of the dual system, by taking actions to develop the competencies of the cooperating actors and promoting the establishment of permanent venues for consultation and/or networks to ensure a high-quality system. In this perspective, many experts reported that there is a widespread need of more activities to share information on the new apprenticeship opportunities and the operational arrangements for managing the system. For example, a joint action

with Social Partners to define learning outcomes and evaluation arrangements for apprentices can be a fertile ground to promote a stronger cooperation (Italy - Friuli Venezia Giulia). However, there is a need of permanent, well-structured and organised venues to cooperate in the identification of more appropriate actions to strengthen the apprenticeship legal framework, to design structures capable of ensuring the horizontal permeability and the vertical development of the system, to elaborate a scheme for funding the training and supporting enterprises effective in making more places available, etc. Refining the regulation deriving from collective agreements may also contribute to foster the enterprises' willingness towards apprenticeship and to ensure the compliance with rights and obligations of apprentices, enterprises and on-the-job trainers. Many experts highlight that a wider involvement of labour-sector organisations can represent an opportunity to enhance the spread of apprenticeship in those countries where the dual system is still in the start-up phase.

In the territories where the dual system is based on a long tradition and is, therefore, well-structured, permanent venues for discussion and consultation on critical issues, strategies and opportunities are already in place. For example, an expert from Germany underlines the important role played by the BIBB's Committee at federal level and the various regional Committees, which are permanent bodies involving representatives of institutions and social partners.

However, despite the outstanding work of these bodies, there is a widespread awareness about the shared responsibility for the dual system, which involves several bodies and requires a continuous effort by the stakeholders in order to promote a constructive discussion in the view of a continuous improvement of the quality. This discussion can represent the ground for a continuous innovation of the dual system - as occurred recently in France, with the reform approved in 2018 – and of training contents, to ensure that, after the apprenticeship, young people are equipped with the most appropriate skills to access the labour market.

Particularly, experts outline the efforts needed to strengthen the networks supporting the apprenticeship and activate synergies among the various resources in order to promote the development of the system. An example can be provided by the Pacts on Apprenticeship or the Partnership Alliances signed at national level in Germany with three years of validity<sup>26</sup>, and at local level in Bavaria<sup>27</sup>, with annual validity, or in Italy, in the Autonomous Province of Bolzano. Building a shared strategy on the dual system development is a participatory governance action, which promotes an effective legislative, regulatory and contractual framework. The functioning of such framework is an essential condition - although not sufficient – for apprenticeship to show its positive impacts on school-job transition for young people, on youth unemployment rates, on enterprises and regions' growth and competitiveness.

The broad cooperation among different bodies is similarly crucial at local level, to ensure a suitable training offer for apprentices, based on shared operational objectives and organisational arrangements between vocational schools/training centres and enterprises. In this perspective, training institutions should identify the most appropriate internal organisation in order to manage the relations with the local ecosystem, including enterprises and sectors, as well as administrative institutions and other social bodies. Not surprisingly, a French expert from the vocational education system reported the introduction of an ad-hoc role within the vocational school staff to develop the relationships with enterprises and other local bodies/institutions. Such cooperation - as underlined by an Italian VET expert - leads to the joint establishment



of training courses according to a common vision and shared responsibility, as well as to the continuous updating and diversification of the offer, in terms of flexibility and customisation. Reference bodies of the economic system - mainly Social Partners and Chambers, presenting different characteristics and tasks throughout Alpine countries - contribute to enhance the regional network supporting apprenticeship. An example is the case of Ausbilderforum in Tirol, the on-the-job trainers' association promoting a set of initiatives aiming to support the connection of the different stakeholders. These venues are meant for sharing a common strategy and for drafting operational tools which may contribute to strengthen the skills of the different actors working in the system.

In order to ensure an effective participatory governance and, thus, the opportunity to support the dual system at best, another crucial element is the availability of data and information on the progress of apprenticeship and on critical issues regarding the whole system or single trades or regions or specific targets of young people and/or enterprise. In the view of a continuous improvement of the system, detailed information are required to take action with any corrective measure and/or introduce innovation in tools, procedures and rules.

Therefore, not surprisingly, most of the experts involved in the survey, underlined, as a focus of the current political debate and/or the objective of on-going measures, the promotion of analysis, monitoring and assessment activities. Therefore, in order to define the priority objectives for the cooperation among Alpine countries to strengthen dual systems, the following recommendation has been identified:

### **Recommendation:**

#### **2. Building viable monitoring and evaluation systems to define a shared and effective strategy for the development of apprenticeship**

To contribute to the improvement of the dual system, data and reports coming from viable monitoring and evaluation systems should be made available for all the actors, starting from the institutions, together with other analyses aiming to explore specific aspects which could result critical. Indeed, in all the Alpine countries, a considerable commitment is demonstrated to produce regular reports presenting a broad information framework and showing in detail the apprenticeship progress and apprentices' results. The annual reports on the available training are remarkable examples in Switzerland, Germany and Italy.

In many cases, specific bodies - usually research bodies - are in charge of the monitoring and evaluation of the dual system. For example, in Germany the BIBB has been established in early 1970s as a public research centre for apprenticeship, even if nowadays its mission includes also other training fields. The BIBB expresses the participatory governance of the German apprenticeship system, given that its Management Board is equally composed by representatives of employers and employees, federal government and regional governments.

A similar role in Austria is carried out by two research institutes (ibw and öibf) affiliated to the Economic Chambers and the Chambers of Labour; in addition to analyses and researches on apprenticeship, the two institutes participate in the updating of training regulations and in the elaboration of information and teaching materials. In Switzerland monitoring and asses-

sment of the system are among the tasks performed by SBFI, i.e. the Secretariat for Education, Research and Innovation, within the Department for Economic Affairs. In Italy, the legislation prescribes the drafting of an annual apprenticeship monitoring report produced by the INAPP, in agreement with the Ministry of Labour and in cooperation with Regions and Autonomous Provinces; the ANPAL – the National Agency for Active Labour Policies – is instead entrusted with the task of monitoring the actions taken to tackle youth unemployment.

Slovenia also reports that, with the pilot implementation of the new apprenticeship law, the monitoring action has been assigned to the sector research institute (CPI) to ensure an effective ongoing evaluation, as well as the follow-up of the project itself.

Beyond the bodies operating at institutional level to ensure monitoring and evaluation of the dual system, through the analysis carried out involving the experts, in the regions some interesting ongoing projects have been identified.

Among the examples, mechanisms of quality assurance are reported. For example, in Austria, social partners have launched the Qualitätsmanagement Lehrlingausbildung initiative, with the aim to analyse the system, through an annual monitoring of some key performance indicators. The focus has been particularly put on failure and drop-out rates. In Germany, the BIBB carries out annual surveys on apprenticeship, and the relevant results are the base for extensive specialised publications.

## **Examples of measures to promote governance**

### **Germany - Bavaria**

The German federal government, for the period 2015-2018, has signed an Alliance for Initial and Further Training (*Allianz für Aus- und Weiterbildung*) with representatives of enterprises, trade unions, Federal Agency for Employment and federal states.

The Federal Alliance highlights the common objective of strengthening the dual system and identifies a set of shared measures. For further information, see the webpage: <https://www.aus-und-weiterbildungsallianz.de>

At regional level, the Alliance for a strong vocational training in Bavaria (*Bundes-Allianz für Aus- und Weiterbildung*) has been established among the Land government, sector organisations and the Regional Directorate of the Federal Office for Labour, to promote and strengthen the dual system. For further information, see the webpage: <https://www.stmas.bayern.de/berufsbildung/allianz/>

### **Austria**

In 2013 Austrian Social Partners launched the initiative *Qualitätsmanagement Lehrlingsausbildung* (Quality management in dual education and training), with the purpose of monitoring the progress of dual system, and especially the results of final examinations. In particular, the analysis focuses on drop-outs rates and characteristics, percentage of (former) apprentices applying for the final examination and their success rate. Apprenticeship trades with a high number of drops-out and/or negative results at the final examination are further investigated to determine the causes of the critical issues and to develop corrective measures.

### **Austria - Tirol**

*"Ausbilderforum"* is the on-the-job instructors' association born over 20 years ago from a cooperation between the Land Tirol, Chamber of Labour, Chamber of Economy and the Austrian trade unions federation (*Österreichische Gewerkschaftsbund - ÖGB*). The Instructors Forum promotes the continuous training development for on-the-job trainers, planning a set of initiative aiming to support the link and the networking among the various actors of the dual system. For further information: <https://www.amg-Tirol.at/content/ausbilderforum>).

### **Italy - Autonomous Province of Bolzano**

In 2015, the Province signed the Pact for Apprenticeship (*Patto per l'apprendistato*) with Social Partners, with the purpose of improving the apprenticeship's attractiveness, supporting training companies a making more visible their commitment, promoting the cooperation between training companies and vocational schools. The measures provided for in the Pact have been implemented over three years and, in June 2018, the outcomes were presented.

<sup>26</sup> For further information, visit <https://www.aus-und-weiterbildungsallianz.de>

<sup>27</sup> For further information, visit <https://www.stmas.bayern.de/berufsbildung/allianz/>

## **3.2 ATTRACTIVENESS OF DUAL SYSTEMS**

Despite the positive results of the dual system - confirmed by many studies and successful cases - in recent years there is a contraction in both demand and offer of apprenticeship opportunities.

In Alpine Regions, the objective of enhancing the use of apprenticeship is pursued also through information, promotion, guidance and support actions, mainly addressed to young people and enterprises.

In this field, some differences throughout the Regions relate to tools and arrangements prioritised to promote the apprenticeship. Indeed - while in the analysed regional areas traditional open days, fairs, manifestations and promotion campaigns are planned - some countries/Regions aim at the strengthening of promotion activities based on Information and Communications Technology (ICT) and their applications. In France, for example, the recent apprenticeship reform establishes that the training centres must adjust their information systems making them compatible with a mobile application, which will allow young people to acquire, quickly and immediately, the information on the available training opportunities.

Moreover, in some Eusalp Regions, there are promotional initiatives regarding the excellent results, underlining the professional successes achieved by young apprentices by telling their stories and granting recognitions and awards, both to successful apprentices and enterprises offering high-quality training courses. In this regard, the Autonomous Province of Bolzano should be highlighted for the initiative *Ritratti di giovani che si sono qualificati attraverso un percorso d'apprendistato* (Portraits of young people qualified through apprenticeship). The initiative presents experiences of young people who have selected a technical occupation and have been successful in their professional activity. Their story shows that a qualification through the apprenticeship can also lead to an interesting professional career. Tirol also promotes excellence with an initiative, jointly supported by Land Tirol, Chamber of Commerce and Chamber of Labour - allows the enterprises, undertaking a strict assessment on apprenticeship processes and tools, to achieve the “excellent apprenticeship enterprise” certificate. Currently, more than 180 Tirol enterprises are certified as “excellent” and authorized to promote the certificate achieved. Another difference among the Alpine Regions relates to the bodies mainly in charge of developing apprenticeship information activities, as well as the beneficiaries of promotion actions.

With regard to the bodies, in some Regions the presentation of the apprenticeship system and the related advantages for young people, their families and enterprises and the provision of information on the available training offer are assigned mainly to training institutions, while in other regions these tasks are shared with other actors of the dual system. For example, in Slovenia, to ensure a wider participation in the pilot project by young people and enterprises, the Slovenian Institute for Vocational Education and Training (CPI) - i.e. the training R&D national body - in autumn 2018, launched a widespread promotion campaign on apprenticeship. Moreover, information and awareness-raising activities for enterprises are provided by the Chambers of Commerce, Industry and Craftsmanship.

Concerning the beneficiaries, in some Regions, communication and information activities are

addressed to young people and enterprises, but also to consultants supporting employers in their choice of the contract to be used to hire young workers, and to school managers and teachers to highlight apprenticeship's usefulness and advantages.

A quality guidance may also determine a promotion of the participation in apprenticeship, as it allows to overcome those stereotypes and preconceptions which may affect youth training and professional choices. Some countries/Regions in the Alpine Space focus on providing guidance in education and training institutions, with the objective to help young people in managing effectively and successfully their training and career. In Austria, for example, vocational guidance is a crucial aspect at school, for the 7<sup>o</sup> and the 8<sup>o</sup> level (age 13-14) and the 11<sup>o</sup> and the 12<sup>o</sup> (age 17-18). The objective of vocational guidance is promoting the skills in the career management, i.e. the capabilities of self-examination, decision-making, research and evaluation of information, as well as of defining and pursuing certain objectives. Students have the opportunity to acquire practical experience and build significant relationships through internships at local companies (with a general maximum length of one week), which train apprentices also. Moreover, students attending the 9<sup>o</sup> year have the possibility to attend the pre-vocational school, designed to provide vocational training and facilitate the transition to vocational education and training and, particularly, to apprenticeship programmes. In France, to help young people and their families in the choice of the most appropriate training, the apprenticeship reform entrusts Regions with the task of ensuring at regional level targeted and effective information and guidance actions. Particularly, through a skilled staff, Regions will plan information activities at school referring to training opportunities and professional development. To ensure the public guidance service, State and Regions will define a national framework, which will detail roles and action criteria for schools. Moreover, upper-secondary school's students will have the possibility to access an enterprise, a firm, an administration or a association as "watchers". Young people wishing to participate in an apprenticeship training, but not equipped with the knowledge and skills required, will have the possibility to attend a pre-apprenticeship course, that will be established in training centres mainly. Lastly, to contribute to aware and informed choices by young people, the French reform prescribes that all the training centres make available the satisfaction degree of young people, number of apprentices passing the final examination for the qualification and number of young people placed in the labour market after the training.

In this regard, some Alpine Regions are focusing on a stronger and broader integration of apprenticeship within the general education system. Such aim is achieved, on one hand, through the extension of the qualifications awarded through an apprenticeship and the simultaneous enhancement of general knowledge and key skills in curricula; on the other hand, through the implementation of measures which could facilitate the apprentices' access to tertiary-education. In Switzerland, the introduction of the Berufsmaturität started in the 1990s, when in France apprenticeship included I-III level qualifications; in Germany and Austria there are programmes variably well-structured, allowing apprentices to acquire qualifications suitable to access the higher education. Lombardy Region has made available a financial contribution (the so-called Dote lavoro) for those apprentices who, in off-the-job training, attend the supplementary course (V anno integrativo) in order to access the State upper secondary vocational education diploma, as well as for those who access tertiary education through an apprenticeship.

To promote the apprenticeship in those enterprises, especially small ones, not equipped with appropriate resources, many countries/Regions in the Alpine Space have introduced actions

for the enhancement of support services for companies, with regard to the planning and implementation of training paths and management of bureaucracy. Nevertheless, while in some regional areas support and guidance services are offered mainly by training institutions - as in the Autonomous Province of Trento, where training institutions support enterprises in drafting training plans and in the procedures to activate apprenticeship paths -, in other areas an increased involvement of sector and professional organisations in the implementation of technical and guidance assistance is promoted. In France, for example, the apprenticeship reform establishes that the OPCO, set up by agreements of sector Social Partners to fund training centres, will have to strengthen their technical support to enterprises and, specifically, small ones. In some countries/Regions work is being done to strengthen support and assistance services and measures addressing young people. In particular, in Bavaria, among the measures planned to make apprenticeship more attractive, there is the enhancement of services for those young people who left the school, in order to provide them with information and advice on vocational training opportunities. In France, pursuant to the apprenticeship reform, training centres are obliged to allow apprentices who terminated the contract prior to the prescribed term to continue the training for six months, and to support these young people in their search for a new enterprise. In some territories, measures to promote the attractiveness of apprenticeship are defined according to agreements among the various actors of the dual system. The identification of shared objectives facilitates the coordination in the implementation of the actions, and allows to achieve results consistent with the purposes. For example, in Bavaria and in the Autonomous Province of Bolzano, information, awareness-raising and assistance activities are the result of, in the first case, the Regional Alliance for training and, in the second case, the Pact for Apprenticeship, signed by public institutions with Social Partners to support the dissemination of dual systems. On the contrary, in other Regions, promotion and support measures and services are autonomously realised by public institutions and professional organisations and trade unions, beyond any national or regional framework defining the relevant roles and action criteria. Despite the efforts put in to promote the apprenticeship, the Regions' experts involved in the survey broadly share the opinion that the apprenticeship is still a little-known tool, not only for young people and their families, and enterprises as well, but often also for the entities that should promote it: teachers, tutors, consultants, Social Partners, etc., while there are too many available information resources, often deficient and unclear. Information, promotion, awareness-raising and guidance activities often lack in coordination among the various bodies responsible for these activities: State, Regions, training institutions, etc. Such lack may lead to discontinuity, fragmentation and poor consistency of information. Moreover, the apprenticeship system has an image deficit and a poor attention. On one hand, enterprises, to take on young people, prefer other tools - than apprenticeship - which are considered more appropriate for their needs, and more "user-friendly"; on the other hand, families and young people are often interested in long-term and academic programmes, believing that these offer more opportunities to access the labour market and have a satisfactory career. Actually, in some areas apprenticeship doesn't have a good reputation and is generally considered a substitute option in relation to general education courses. This situation characterises not only those territories with a more vulnerable apprenticeship system, but also those countries - as Germany and Austria - which, despite presenting a strong and well-structured dual system, record a contraction in the number of young people interested in apprenticeship, while there is

an increase in the range of students who consider a general education at upper-secondary level more useful.

Therefore, the improvement of the perception of apprenticeship as a tool able to promote an effective placement in the labour market is a need, together with the extension of its final purposes also at the tertiary-education level, as a response to the changes of the labour market. At the same time there is a need, on one hand, of enhancing the awareness-raising initiatives addressed to employers so that they may clearly perceive apprenticeship advantages and, on the other hand, of facilitating the apprenticeship management for enterprises, by the adoption of effective measures of incentive and technical support, especially addressed to SMEs. In such perspective, it seems to be crucial the role played by sector and professional organisations to promote the apprenticeship and the contribution that labour guidance services can offer in finding apprenticeship applicants and in ensuring the matching with enterprises, preventing the coexistence of remaining vacancies and young people unable to find an enterprise, as annually reported by the BIBB in Germany.

By taking into consideration the differences between apprenticeship systems in Alpine Regions, and taking into account the measures - provided or ongoing - to promote the attractiveness of apprenticeship, it is possible to make proposals to enhance the positive perception of apprenticeship.

### **Recommendation:**

#### **3. Improving the perception of apprenticeship among young people and their families by setting up awareness-raising campaigns and guidance services and promoting the horizontal and vertical permeability of training courses**

It is desirable that Eusalp Regions continue to develop and enhance information and awareness-raising actions addressed to young people, their families and enterprises to improve the perception of apprenticeship, as well as guidance and pre-apprenticeship actions addressed to young people. These actions should be defined in the framework of permanent and well-structured programmes, shared among the actors of dual systems; moreover, they should be structured so to offer information, guidance and advice services easily accessible and user-friendly and customised as possible. Information and awareness-raising actions should be extended to school staff, trainers, those providing advice to enterprises in the selection of the employment contract to be applied, as well as to the other entities that can promote the apprenticeship.

Among the tools used to promote the attractiveness of apprenticeship, skills competitions are particularly useful and effective, when aiming at highlighting the excellent results achieved by those young people who have undertaken an apprenticeship training. These talented young people become actual ambassadors of their own job and, with their example, may motivate their contemporaries in following in their footsteps. Skills competitions are also a promotion tool for training enterprises, which may highlight their social function and become a reference model for other enterprises.

The actions aiming to promote “horizontal and vertical permeability” of apprenticeship are particularly effective for a change in the cultural approach to apprenticeship by young people and

their families. These actions should, on one hand, facilitate the transition from an apprenticeship course to another education/training course for young people and, on the other hand, combine the apprenticeship with courses for the achievement of an upper-secondary education leaving certificate and facilitate the access to tertiary-education.

Actions aimed at preparing young people to access apprenticeship are equally useful, especially if through the introduction of transition training periods and the provision of support services to young people, for example in the search for the enterprise and in overcoming any logistic challenge (accommodation, transport, etc.).

### **Recommendation:**

#### **4. Providing enterprises, especially SMEs, with incentives, tools and support services to develop the supply of apprenticeship places and facilitate the organisation and management of training paths**

Enterprises - especially small ones - find major difficulties in the analysis of their occupational and training needs, and in the identification of suitable economic incentives, in the research of potential apprentices, in the performance of bureaucratic procedures, in the planning and provision of the whole training program, as well as in the identification of any partner enterprise. These difficulties can make the apprenticeship less attractive for enterprises. Therefore, it is important that enterprises can rely on a set of support tools and services. Assistance services to enterprises in the various territories should be ensured by multiple entities: not only Chambers or training centres, but also professional associations, public services for employment and bilateral bodies managed by employees' trade union associations and employers' professional associations. These bodies, given also their network with enterprises and their knowledge of the production sector, can ensure a better balance between the skills required by enterprises and the need of young people to obtain appropriate qualifications for the labour market and to get a satisfying job. Moreover, employees' trade union organisations and employers' professional organisations, through collective agreements, have a crucial impact on the definition of working and wage conditions and, through their initiatives, can contribute to the improvement of the quality and attractiveness of the apprenticeship.

### **Joint actions in Alpine Regions to promote the attractiveness of the apprenticeship**

The *DuALPlus - Increasing the attractiveness of dual education for skilled crafts and trades in the Alpine Space* project represents an opportunity to jointly develop an action to promote the attractiveness of the dual system. It has been presented by a partnership involving some bodies operating in the Alpine Space Regions under the Interreg Program. The project, approved and at the start-up phase, will allow Alpine Regions to realize common actions to improve the professional guidance for young people and to increase the horizontal and vertical permeability of dual systems, enhancing the quality of the training and the perception of the apprenticeship.



## **Examples of measures to promote the attractiveness of apprenticeship** **Information, awareness-raising and guidance**

### **Italy - Autonomous Province of Bolzano**

In the framework of the open-days organised at several vocational schools and the guidance fair of Bolzano, an information point - Pronto per l'*apprendistato* (Ready for an Apprenticeship) - is available for young people and their family, which provides key information and advice to successfully start a career.

### **Liechtenstein**

To obtain information on training system opportunities, guidance events and apprenticeship vacancies, young people and their families can access the digital platform [www.next-step.li](http://www.next-step.li) including also all the Training Regulations and other information useful for enterprises wishing to cooperate in developing the dual system.

### **France**

In France, a pre-apprenticeship course - called *3ème prépa pro* - has been introduced in some vocational schools, as the final year of lower-secondary school. It is a programme addressing students who find vocational studies attractive, to provide them with the opportunity to observe and discover new labour sectors, involving them in professional activities. The program includes vocational workshops, school-visits, on-site visits at companies, interviews, etc.

### **Germany - Bavaria**

In the most recent years, the Government of Bavaria launched several initiatives to promote the apprenticeship. Particularly, in 2018, in the framework of the second edition of the training week, more than 320 events were planned throughout the Region, allowing young people to obtain detailed information on apprenticeship programmes and occupations. In the framework of the Alliance for a strong vocational training in Bavaria (*Bundes-Allianz für Aus- und Weiterbildung*), several measures have been adopted to make the apprenticeship more attractive; among them the information and guidance platform BOBY, address to teachers and enterprises also. Connect to the platform here: <https://www.boby.bayern.de/>.

### **Italy - Friuli Venezia Giulia**

EffePi, a pool of Training Bodies of the Region of Regione Friuli Venezia Giulia, plans meetings with families and enterprises hosting young trainees to present them the apprenticeship system and the relevant training offer. EffePi organises also meeting with sector associations and, particularly, labour consultants and accountants to show achievable benefits and advantages for the enterprises through Type-1 apprenticeship.

## **Promotion of Excellence**

### **Italy - Autonomous Province of Bolzano**

2018 WorldSkills Italy edition, implemented in the framework of *Futurum* - a training fair -, offered to companies and apprentices a unique occasion to present their work. The initiative allowed talented young people to become ambassadors of their trade and other young people to be encouraged in following the same path.

Enterprises hiring young people with a Type-1 apprenticeship contract receive a badge stating the slogan *Noi formiamo esperti* (We train experts) as an award for their social commitment. Any year, about 3500 badges are assigned.

### **Austria - Tirol**

The *Ausgezeichneter Tiroler Lehrbetrieb* (Excellent apprenticeship enterprise ) initiative - jointly supported by Land Tirol, Chamber of Economy and Chamber of Labour - allows the enterprises, subject to a strict assessment of the apprenticeship training processes and tools, to achieve the certification of excellence. Currently, more than 180 Tirol enterprises are certified as “excellent” and authorized to promote the certificate achieved.

## **Facilitating the access of apprentices to tertiary-education**

### **Italy - Autonomous Province of Bolzano**

The initiative *Maturità con l'apprendistato* (Upper-secondary education leaving certificate with apprenticeship) allows young people who have achieved a 4-year vocational diploma (through apprenticeship also) to attend the supplementary course (*V anno integrativo*) that allows to access then the university. The supplementary year can be attended also through a Type-1 apprenticeship contract and this allows young people to get prepared for the State examination without having to renounce to their work. In this case, the course has a 2-year length, instead of 1 year as in full-time education.

### **Austria**

In order to increase the number of (former) apprentices taking part in the tertiary-education, the Federal Ministry for Education, Science and Research has launched a program (*Lehre mit Matura*) allowing students to get prepared for *Berufsreifeprüfung* (the upper-secondary vocational education leaving certificate) free of charge. Through this program more than 6,700 apprentices achieved the qualification required to access the tertiary-education.

## **Support to enterprises in the apprenticeship management**

### **Slovenia**

The transnational project *See the goal!* aims at promoting the quality of learning results in enterprises. Videos and guidelines have been realized as a support to the enterprises recruiting under apprenticeship. All the materials, including videos, are available at: [www.seethegoal-eu.si/](http://www.seethegoal-eu.si/)

### **Austria, France, Germany, Slovenia**

The *SERFA - SERVICES* For Apprentices transnational project, funded in the framework of Erasmus programme, aims at promoting the dissemination of apprenticeship as included in the strategy for the development of companies' competences. For this purpose, it aims at providing tools and services to support enterprises and, particularly, SMEs, in the management of apprenticeship. All the materials produced are available at the following address: [www.serfa-project.eu/](http://www.serfa-project.eu/)

### **3.3 TRAINING QUALITY**

The quality of the training is the core topic of the policies for the apprenticeship implementation. Indeed, the increase in quality levels of the training provided on- and off-the-job is indispensable to ensure that apprenticeship offers an effective response to the individual needs in terms of learning and satisfaction, also with reference to the job. This challenge concerns not only those territories where the dual system is not sufficiently developed yet, but also those with more structured systems, where some critical issues remain, preventing all the apprentices to successfully complete their course by achieving the final qualification.

Apprenticeship training quality is at the core of many European initiatives. The European Council, in March 2018, adopted a recommendation to invite Member States to ensure high-quality training programmes, to prevent apprenticeship to be restricted to low-specialised occupations, with poor training damaging its prestige. This recommendation is included in a framework of initiatives adopted at European level to support the same objective. In this regard, they should be reminded, the Advisory Committee for Vocational Training (ACVT) - promoted by the European Trade Union Confederation (ETUC) and by BusinessEurope, and composed by representatives of Governments and Social Partners from all the Member State - which, in December 2016, adopted an “Opinion on a shared view for the apprenticeship and an effective and high-quality in work-based learning”; or, also, the Working group on vocational education and training (2014-2015) constituted by representatives of Member States, Social Partners and VET providers, which elaborated 20 guidelines for the apprenticeship and an effective and high-quality in work-based learning.

The achievement of high-quality levels in the apprenticeship concerns all the Regions of the Alpine Space. The increase in the quality may be obtained through the extension and improvement of training programmes and the creation of suitable support materials (operational guidelines, recommendations, etc.) addressed to vocational school teachers and on-the-job trainers. In Tirol, for example, the on-the-job trainers’ association (*Ausbilderforum*) annually adjusts the lifelong training offer to the needs of on-the-job trainers. Training programmes are set up to facilitate the individual learning process; they are addressed to small groups, with up to 12 attendants, and allow to deal with topics related to demographic shifts and the increasing heterogeneity and diversity of students. The training offer aims at developing professional and educational knowledge and skills of trainers and is structured in customised workshops, experience exchange and action-oriented learning. Moreover, guidelines and examples of best practice are elaborated and disseminated, to improve on-the-job trainers’ skills and learning quality.

In Germany also, the training of trainers is a continuous process, compulsory for the entire teaching staff and crucial to establish and keep a high-quality training environment. Among the main topics dealt with in the training programmes for trainers, there are the inclusion of disadvantaged young people and the involvement of migrants in apprenticeship programmes.

In France, enterprises training apprentices are required to make available an apprenticeship master (*maître d'apprentissage*) or a team equipped with pedagogical and professional skills necessary to perform the guidance function for the apprentice. In order to exercise the *maître d'apprentissage* role, a certificate is required, which can be achieved through the participation in a training path or the recognition of the skills developed through the experience. The task of defining the qualification and skills required to become a *maître d'apprentissage* is assigned to sector professional organisations (*branches professionnelles*).

To support enterprises in the quality assurance for the training offered, Switzerland and Liechtenstein use a specific tool: *QualiCarte*. It is a self-evaluation grid, which expresses the quality in 28 indicators, useful to identify the actions needed to improve training results; however, it also provides information about the attractiveness of the enterprise and the effectiveness of the procedures used to recruit the apprentices.

The promotion of the apprenticeship quality is important also to encourage the access of disadvantaged young people to dual programmes. Some Regions have activated assistance measures for disadvantaged apprentices, to help them in facing relationship, psychological and learning problems. In other territories, vocational schools can rely on a team of internal consultants (teachers with a specific training and/or social educationalists) which supports disadvantaged young people in the search for an apprenticeship opportunity, and help them in developing social and personal skills. Moreover, disadvantaged young people can benefit from extra time (one or two years) to complete the apprenticeship or to achieve a partial qualification, which can facilitate their placement in the labour market. In some cases, economic contributions are provided for those enterprises hiring disadvantaged apprentices.

Other approaches for the development of the quality relate to: on one hand, the modularisation of training paths through the redesign of the curricula as skill-based programmes and the improvement of flexibility in the training offer; on the other hand, the promotion of a stronger connection between on- and off-the-job training. In Austria, for example, all the curricula have been redesigned as competence-based programmes. Skill-based teaching has been encouraged through the dissemination of best practices among vocational school teachers and the offer of specific courses for trainers.

In Lombardy, to promote the connection between on- and off-the-job training, training institutions, together with enterprises, are able to autonomously structure contents and timing of training modules. The regional regulation, indeed, does not establish restrictions on these aspects, to provide the highest flexibility in the teaching planning.

The connection between on- and off-the-job training can be achieved also by improving the matching of apprenticeship training with the needs of enterprises. In this respect, some Alpine Regions are working to build and implement systems able to adjust apprenticeship training programmes to the needs of the current labour market. In Germany, the structure of training regulations is increasingly diversifying: one-trade oriented regulations are the most common, but they are progressively decreasing; on the other side, "broadband" regulations are increasing. The latter allow to achieve qualifications for different sectors, or to choose among different modules, or to include additional modules. The Region of Friuli Venezia Giulia, for example, promotes the apprenticeship quality also through the maintenance - in agreement with Social Partners - of

the Register of regional qualifications. The management and updating of the professional and evaluation standards included in the regional Register allow to strengthen the relationships with the enterprises, and promote the use of innovative teaching methods through an essential tool for the evaluation of the competences acquired - the so-called Scheda Situazione Tipo (Typical Situation Card). This tool allows to classify the complexity in the implementation of a competence, through a set of increasingly difficult working situations, identified on the basis of the characteristics of the implementation (context, products/services produced, planned activities, tool required, techniques applied, materials used, etc.).

As underlined by this short description of the measures activated in the Alpine Space, the notion of training quality is multi-dimensional, covering multiple aspects of the training process. Nevertheless, as outlined also by the feedbacks received from the experts involved in the survey, some aspects are more relevant than others.

The final aim is the aggregation of such multiple aspects regarding the two main actors in the training provision: the school/vocational training centre and the enterprise.

At this level of the analysis, the achievement of high-quality training depends on school teachers and tutors and on on-the-job trainers and tutors who, as facilitators of the learning process, play a crucial role for the apprentices' educational success.

To allow these actors to carry out their function at best, it is appropriate to act with measures supporting their continuous professional development and their action to increase the quality level of the apprenticeship training. Moreover, it is necessary to enhance the cooperation among training institutions and enterprises in order to capitalise the advantages of the dual learning.

### **Recommendation:**

**5. Strengthening the educational institutions' capability of designing and implementing a high-quality dual training through the strengthening of teachers' competences and the adoption of teaching methodologies and tools that ensure the provision of flexible and customised paths**

This objective could be fulfilled by promoting the development of a training provision targeted to support vocational school teachers and tutors in carrying out their educational and facilitators role in the learning process.

To improve the quality and the effectiveness of the training available for teachers and tutors, the design and the supply of the programmes could be commissioned to organisations or networks composed of regional institutions, schools and training institutions, and social partners.

The training programmes addressed to teachers of vocational schools should relate to topics, as: competence-based curricula and teaching, monitoring and assessment of the learning outcomes, inclusion of disadvantaged young people, changes related to digital technology applications, etc.

The training provision could be also enriched through the realisation and dissemination of operational tool sets, to be used - for example - as didactic devices to understand, support and assess the learning process of apprentices, as well as through recommendations, guidelines and examples of best practices supporting the training of teachers.

The increase in the level of teachers' skills and expertise can facilitate a change in the education, going beyond the setting based on classes and subjects, and adopting a competence-based approach. Such process facilitates the introduction of innovative teaching methods and technologies, as well as the change in the role of teachers, who become learning facilitators and not only knowledge providers. Moreover, the competence-based structure for training regulations and curricula facilitates the link between the on- and off-the-job training and allows to develop a credit recognition system. The development of these processes can be supported by measures helping vocational schools/training providers in having the appropriate equipment and machines, as well as by the promotion of information and experiences exchanges among trainers and the dissemination of best practices.

These changes enable to take action on the training provision in order to make it more flexible and customisable. The flexible articulation of contents and time-planning of training allows to align the skill needs and the production times of enterprises with the educational programmes and the timetable at schools. In addition to this, individualised courses basing on apprentices' learning needs and personal aptitudes allow to more effectively contrast the school drop-out and facilitates disadvantaged young people in successfully complete an apprenticeship. The access to apprenticeship by disadvantaged young people may also be facilitated by structuring targeted support services addressed both to young people and vocational schools.

To promote the quality of the off-the-job training, in designing the qualifications that can be acquired through apprenticeship, it should be ensured a matching between the training required by the regulations and the skills needed by the labour market. It is essential that all Regions in the Alpine Space continue to work for the implementation and the updating of qualifications, tools and mechanisms ensuring the usability of the acquired skills.

### **Recommendation:**

#### **6. Promoting the quality of the on-the-job training by focusing on the development of trainers' skills and on the activation of support services to the companies for training provision and evaluation**

For this purpose, the aim should be the designing of training programmes, targeted at developing the teaching skills of on-the-job trainers and to acquire the skill set required to ensure the quality of the dual learning.

Specific measures could be adopted to support the professional development of on-the-job trainers and tutors operating in small enterprises. Indeed, due to the low number of employees, in small enterprises trainers and tutors generally are required to combine their usual work with the training of apprentices and, therefore, find difficulties in attending training courses. Furthermore, employers could also seek to prioritise the production needs of the enterprise, instead of the training needs of on-the-job trainers and tutors.

To motivate employers to support training for on-the-job trainers and tutors, the main need is to set up a flexible training provision, that ensures the fast development of the skills required for on-the-job trainers and tutors, and that meets the specific needs of the enterprises. For this purpose, the training offer could be defined and provided in cooperation with Social Partners.

Moreover, the recognition of the skills acquired by on-the-job trainers, through the activity carried out in dual training courses, should be facilitated.

Targeted policies supporting the enterprises could also provide for economic incentives for those employers who support the training of their trainers, and for the activation of some services for enterprises, i.e. for the management of administrative procedures, the selection of apprentices, the designing of training plans, the implementation of the training provided by the company, the assessment of apprenticeship results.

The improvement of the quality of the training within the enterprises may be also achieved by promoting the establishment of enterprises consortia networks, as well as the involvement of training experts.

### **Recommendation:**

#### **7. Building a permanent cooperation between training institutions and companies and promoting the co-management of training courses**

The quality of the dual training is related to process and product standards, which should be clearly defined. Nevertheless, to ensure an effective quality, it would be appropriate that these criteria do not derive exclusively from the mechanical application of legal and regulatory frameworks, but from a continuous dialogue between the training institution and the enterprise, aiming at the identification and the fulfilment of the shared objectives. The consistency between the two learning venues - enterprise and school - can be encouraged through a continued cooperation between teachers and trainers for the planning of the training, organisation and management of the learning process, monitoring, adjustment of the path and intermediate and final evaluation of the learning results.

To promote the systematic cooperation between the training institution and the enterprise, regular exchanges between vocational school teachers and on-the-job trainers might also be planned, also through the establishment of permanent working groups in charge of the overall assessment of the process and the identification of any corrective measure needed. The planning of regular visits of school's teachers at the enterprise, and vice-versa, can also facilitate the cooperation between the school and the enterprise. Such visits, indeed, allow the trainers to acquire important information about the progress of the learning process, and to act in order to solve any difficulty faced by the apprentices.

The visits might also be an occasion for joint assessment of intermediate learning results, aimed at ensuring a regular check on the learning process of the apprentices and at allowing teachers and trainers to rapidly act and, in any case, to support the apprentices in trouble before the final examination.

The shared design - between the training institution's teachers and the enterprise's trainers - of the assessment tools for the intermediate learning evaluation may facilitate the integration between the on- and off-the-job training. The joint assessment of the learning results should regard the final examination also. For this purpose, examination boards should include representatives from the school and the enterprises sector.



The cooperation and the co-management between the training institution and the enterprise implies a relation between the two bodies based on a mutual trust. A trust relation requires that each of the two bodies involved fully knows and understands the conditions and the needs of the other. To promote the mutual knowledge between training institutions and enterprises, it should be appropriate to provide school teachers and on-the-job trainers with more mutual knowledge opportunities, also beyond apprenticeship. This objective could be pursued, for example, through the establishment of networks for the local development and innovation, organisation of internships and visits at enterprises for vocational school teachers and full-time students, establishment of working groups on common topics of interest, planning of conferences and workshops at school held by enterprises' representatives, implementation of joint training between vocational school teachers and on-the-job trainers.

### **Examples of measures to promote the quality of apprenticeship**

#### **Austria - Tirol**

In the context of the quality assurance system for on-the-job apprenticeship training, guidelines and examples of best practices are elaborated and disseminated, to improve on-the-job trainers' skills and learning quality. These materials are available online at the following link [www.qualitaet-lehre.at/ausbilden-im-betrieb](http://www.qualitaet-lehre.at/ausbilden-im-betrieb).

#### **Liechtenstein**

All instructors are required to attend a specific training course in order to learn about the relevant legal framework and acquire the necessary educational skills. The Foundation for Continuous Vocational Training Development Kurse.li (*Stiftung für Berufliche Weiterbildung*), located at Schaan, periodically organizes training courses in collaboration with the ABB. Trainers receive information about the changes in training regulations directly from the ABB.

#### **Italy – Autonomous Province of Trento**

For eight years the Istituto Artigianelli of Trento and the Department of Cognitive Sciences of Trento University, have been working jointly to study and implement a new school model, able to respond to the new needs of society. The actions taken allowed to:

- changing the school didactic setting: a modular system has been established, going beyond the setting based on classes and subjects; therefore, it is possible to activate customised courses for each young person integrating the school education with the on-the-job training;
- shift from school to ecosystem: school is an ecosystem in which many realities cooperate to generate learning and innovation; school has started to host companies which actively cooperate with the VET institutions;
- defining qualifications and standards: a specific action has been implemented, which has led to the definition of the qualification learning outcomes at the completion of the three-,

four- and five-year course, in terms of skills and contents (related to the qualification of professional operator, vocational diploma of technician and diploma di maturità). For each disciplinary area, minimum standards have been defined.

### **Italy – Friuli Venezia Giulia**

The Region, together with social partners, is committed in the development and the updating of the List of regional qualifications. This action ensures to training providers an updated, structured, regular and transparent relation with enterprises and labour sector. The regional qualification standards will be available in the future also through a specific online application. For more information, look at:

[www.regione.fvg.it/rafvfg/cms/RAFVG/formazione-lavoro/formazione/FOGLIA15/](http://www.regione.fvg.it/rafvfg/cms/RAFVG/formazione-lavoro/formazione/FOGLIA15/).

### **3.4 IMPACT OF INNOVATION ON DUAL SYSTEMS**

Technological innovations and digitisation are determining radical changes in the whole society, opening new unpredictable scenarios. This requires for new skills to allow enterprises to take advantage from new business opportunities and to provide young people with concrete perspectives to access an extensively changing labour world.

Dual systems innovation is a core topic in the ongoing Alpine Regions debate, where the main actors are committed in the analysis of the strategies to be activated and in the implementation of specific measures, in order to promote a more effective and faster adjustment of the training offer to the needs of the labour market, capable also of facing the innovation challenges.

However, Alpine Regions approach this challenge from different perspectives. In some regional areas, for many years, it has been operating a system for updating training regulations for the on- and off-the-job training according to the needs of the labour market. Usually, these systems provide for updating modernization of the training regulations on a five-year basis, and are characterised by a well-structured governance, a strong involvement of Social Partners and an important technical support assigned to education and training research institutes.

In Austria, for example, the process for the introduction and updating of a training regulation starts with a preparatory phase, in which the Ministry for Digital and Economic Affairs, Social Partners or enterprise takes the initiative of creating a new trade or modernising an existing one, identifying the needs of the labour market and evaluating European and international development, as well as solutions adopted in other countries. Thereafter, there is the preparatory phase of regulation drafts, carried out by the competent sector research institutes; the materials elaborated are evaluated by experts of the Federal Advisory Committee for Apprenticeship (BBAB). The experts present their evaluations to the Ministry for Digital and Economic Affairs (BMDW). Subsequently, for each regulation, a group of experts - under the guidance of the Ministry of Education, Science and Research (BMBWF) - deal with the designing of curricula for vocational schools. The updating proposed are then assessed by all the stakeholders, through a consultation and review process. At the completion of this phase, the BMDW issues the training regulations and the BMBWF issues the curricula for vocational schools. There is also a follow-up phase, requiring: the elaboration of support manuals and additional materials by professional organisations of enterprises, supported by trade unions or vocational training institutes; the provision of information to enterprises and the planning of training initiatives addressing on-the-job trainers and off-the-job teachers; monitoring actions to verify the implementation of the new regulations and curricula, together with the results achieved.

The dual systems relying on well-structured and codified training regulations updating systems, on an effective governance of these processes, a broad involvement of Social Partners and on the support of the sector competent research institutes, are better equipped to face the innovation of the production system and labour organisation. At the same time, these system have to face long-term and complex adjustment processes; several steps are required for the analysis and processing of updates as well as the involvement of multiple actors. In Germany,

for example, in the last ten years, 122 training regulations - out of 326 - have been updated. All of this could affect the capability of these dual systems of being in line with the fast innovation of the production system and the labour organisation. Moreover, in these dual systems, the very high number of achievable vocational qualifications through the apprenticeship, and the relevant high specialisation, make it complex to organise training paths and final examinations and reduce the possibility of an easy transition from one education/training sector to another and from a lower education level to a higher one.

Alpine countries/Regions facing these challenges are activating initiatives to overcome the mentioned difficulties. In some Regions, an effort is being made to reduce the number of existing trades, to an extent as they continue to meet the needs of the production system, making, at the same time, the management of the system easier and ensuring a better balance between efforts made and results achieved. For example, in Germany, there has been a contraction in the number of vocational qualifications, which reduced from about 900 in the 1950s to 326 in 2017. Such a reduction is given also to the trend to aggregate more qualifications into a “broadband” one, developing an organisation basing on groups of occupations with the identification of common basic essential skills and the possibility to acquire several specialised groups of skills in the final two years, also optionally.

Another field of initiatives relates to the updating and specialisation of on-the-job trainers and off-the-job teachers on the innovative skills required by the labour market.

In Bavaria, for example, since the challenges of the fourth industrial revolution and digital transformation are new for both schools and enterprises, a joint training offer for on-the-job trainers and instructors has been elaborated, which is provided on- or off-the-job. In the Autonomous Province of Bolzano, there is a broad offer of refresher courses for teachers, focusing also on the innovation of the production system and labour organisation, while in Switzerland for many years there has been a commitment to develop teachers' innovation skills.

Some Regions are also involved in funding programmes for vocational schools that provide for the renewal of equipment, machinery and tools used in apprenticeship training, to meet the challenge of the fourth industrial revolution and the digital development in all economic sectors. This is the case, for example, of Switzerland and Bavaria, where the Ministry of Education is funding a specific programme to renew the equipment used in vocational schools. A core characteristic of the programmes is that schools are obliged to explain in details how the provided equipment, tools and computers will be used.

In Alpine countries/Regions, where the modernisation process of the training offer is traditionally led by public institutions mainly and, specifically, by the ministry of Education and Regions, it is in place a building and strengthening process of structured and codified venues of institutional debate, for the definition of new trades or the review of existing ones and of related curricula to adjust them to the gradual innovation of production contexts. To ensure a greater adherence of the training programmes to the labour market's needs, some dual systems are focusing on a strong and regular involvement of social partners and of individual companies as well.

In France, for example, the apprenticeship reform law has enhanced the role of Social Partners in the process of defining and establishing vocational diplomas and qualifications, except for those issued in the tertiary-education sector. The law requires that, at least half of the members of Vocational Commission - bearing the task of analysing projects for the establishment,

updating and removal of vocational trades and related curricula - should represent employees' trade union associations and employers' professional associations. These Commissions play a crucial role, since without their assent no decision on the qualification updating can be made. The qualifications must be compulsorily updated at least every 5 years, while in the past their duration was unlimited.

In Slovenia also with the recent reform of the dual system the role of Social Partners has been enhanced in the updating process of vocational qualifications. Indeed, pursuant to law, Sector Committees consisting of experts and representatives of the competent Ministries, Chambers and Social Partners, establish the priorities for the development of occupational standards and designate the experts responsible for defining vocational trades, regulations and catalogues of knowledge and skills. Occupational standards are the basis of vocational education and are updated any five years in relation with the needs of the labour market.

In this second group of countries/Regions also the debate among the stakeholders is focused on the aspects related to the updating of vocational profiles and, more generally, on the improvement of flexibility of the qualification systems to meet the innovation challenges.

In France, for example, the apprenticeship reform law has established that vocational certifications are classified by the qualification level and activity scope and are constituted by sets of competences, i.e. a consistent and uniform grouping of competences contributing to the autonomous exercise of a professional activity, and which can be assessed and certified. The provided structure of sets of competences should facilitate the assessment process of the learning outcomes as well as the transition of young people from the apprenticeship training to the full-time education (*passerelles*). Alpine Regions' experts confirm the same need to take forward and extend the strategies and the actions put in place, to allow dual systems to effectively respond to the ongoing changes in the labour sector.

The innovation challenge is on two sides: the identification and development of the new skills required by the labour market, and the upgrading of the training provision which must effectively meet the new needs of occupations and skills.

The first side recalls, at first, the need to enhance the tools for the forecast and analysis of the needs for new jobs and/or new competences.

Secondly, ensuring the extension, as well as the periodic and repeated review and updating of the training programmes in relation to the new needs for professional expertise and skills is a need, while avoiding the excessive specialisation of qualifications that could have negative impacts on the employability of young people.

The other side of the challenge concerns the enhancement of the effectiveness of training courses, in relation to the new skills required by the labour market.

### **Recommendation:**

#### **8. Ensuring the effectiveness of apprenticeship upon labour market innovations, enhancing the value of social investment in human capital**

An important contribution for the fulfilment of this objective might be firstly represented by the enhancement of tools and methods for the analysis and the forecast of the required skills.

The results of these analyses should be shared by those who are in charge of defining the contents of the training programmes, and quickly integrated into curricula.

Also the development of updating and specialisation initiatives for on-the-job trainers and vocational school teachers on the innovative skills required by the labour market and the renewal of equipment, machineries and tools used in the apprenticeship training courses can contribute to effectively meet the challenges of the fourth industrial revolution and the digital development in all the economic sectors.

Moreover, the impact of the technological innovation on production and working procedures requires a higher flexibility in the deployment of the personnel, and professional versatility. An effective response to these new needs can be given by reducing the specialisation of qualifications, without restrictions to a wide range of apprenticeship opportunities. This result can be achieved by combining a modular approach for apprenticeship training with the identification of a broad and uniform common base of general and cross-sectoral knowledge and skills. Furthermore, the orientation of apprenticeship training programmes to the development of a common set of general and cross-sectoral skills can improve both the “horizontal and vertical permeability” - facilitating the transition from one educational sector to another and the access to tertiary education - and the recognition and certification of the competences acquired.

Finally, tertiary education can provide an effective response to the changes in the labour markets and to the need of increasingly specialized workers. It is therefore suggested to promote actions aimed at developing the tertiary-education apprenticeship provision. Such paths, indeed allow to train high-specialised workers, equipped at the same time with remarkable general knowledge and skills, highly attractive for those enterprises facing the challenging technological and organisational innovation.

## **Examples of measures to face the impact of innovation on apprenticeship systems**

### **Austria**

The Ministry for Digital and Economic Affairs is working to reorganise the processes for the development of new apprenticeship vocational trades and the modernisation of existing ones, in order to reduce the time required to adjust the training offer to the needs of new skills. Such re-structuring is based on the direct involvement of companies, on the availability of a scientific support during the process and on the focus on new technological developments.

### **Austria - Tirol**

In the framework of the Digital Offensive (*Digitalisierungsoffensive*), which grants 150 million euro of investments in five years throughout Austria, with the objective of encouraging the use of digital technologies in the training provision and promoting the use of new tools and methods (MOOC, Virtuelle Pädagogische Hochschule), long-life training actions for trainers are funded.

### **Germany - Bavaria**

The Bavarian Ministry of Education funds a programme to innovate IT machines and equipment in vocational schools. The programme's objective is to support vocational schools which have to face the industrial revolution and digitisation challenges. Vocational school teachers and on-the-job trainers are provided with joint training opportunities to develop the skills required to face and manage innovation and digitalisation.

### **Italy - Autonomous Province of Bolzano**

Vocational school trainers are provided with a broad offer regarding refresher courses, also on technological and digital innovation. For details on the available training opportunities, see the following website: [www.provinz.bz.it/berufsbildung/themen/lehrpersonal-erzieher.asp](http://www.provinz.bz.it/berufsbildung/themen/lehrpersonal-erzieher.asp).

### **Italy - Lombardy**

The Enterprises' Association of Milan, Lodi, Monza and Brianza, also in cooperation with Lombardy Confindustria and the other territorial employers' associations, for a long time has conducted detailed analyses on the skills required for the most needed occupations in the regional labour market. In particular, a project - by which the skills of the 12 trades most required by the companies have been mapped - has been implemented, with the objective to raise the awareness among teachers from secondary-education institutes (technical institutes mainly) to link the curricula to such skills for the implementation of apprenticeship or the realisation of work-based learning experiences for full-time students.

### **3.5 TRANSNATIONAL MOBILITY OF APPRENTICES**

In the context of apprenticeship, transnational mobility constitutes a highly effective training action to prepare young people for the labour world and to extend their cultural horizons.

Indeed, mobility experiences abroad effectively contribute to promote the development, not only of technical-professional competences, but also of those cross-sectoral skills increasingly required by employers. The placement in a culturally different relational context indeed allows young people to enhance their social skills, i.e. that set of psychological, relational and communicative abilities playing a crucial role in the right interpretation and use of social interaction rules and allowing to be more effective in personal and professional relations (communicative, problem-solving, decisional, conflict management, etc., skills). Moreover, mobility experiences abroad may improve the language skills and, therefore, develop communication and relational skills. Finally, the transnational mobility may facilitate the dialogue between the job sector and training institutions, contributing to enhance the mutual trust and the cooperation with the purpose of improving the quality of the training and learning results.

In the context of the Alpine Space more favourable conditions are detected, resulting from the existence of economic and social characteristics, which are common for the Regions of such Space. Such conditions can facilitate the development of the mobility of apprentices. Mobility experience in this area would provide a significant contribution to the reduction of the job demand-supply mismatch in the Alpine macro-region.

Despite the unquestionable effectiveness, the transnational mobility of apprentices is still underdeveloped also throughout the Alpine Space Regions, although with remarkable differences among countries and territories.

Indeed, in some areas, the transnational mobility of apprentices is almost non-existent, as in Slovenia and Italy. Nevertheless, in Slovenia where, moreover, the apprenticeship is still at the pilot stage, about 600 students per year, mainly enrolled in 4-year technical education paths, and of 15-17 years of age, undertake a training period abroad. In some Italian Regions also, measures to promote the transnational mobility of students involved in full-time VET programmes have been introduced. The Region of Lombardy, for example, funded several projects in the 2016-2018 period, involving 730 students of the VET system in training experiences abroad.

On the contrary, in other Regions of the Alpine Space, the apprenticeship transnational mobility is a reality, although the number of the apprentices involved is still low. In Austria, for example, 615 apprentices in 2017 undertook a training period in another European country. Enterprises allowing apprentices to participate in mobility projects are entitled to receive the reimbursement of the apprentice's wage during the period abroad, and the apprentice is entitled to receive € 15 per each day spent abroad. Currently, in France about 7,000 apprentices spend two or three training weeks in another European country, while in Germany, which records the highest number of apprentices in transnational mobility projects, 5.3% of the apprentices - equal to 30,785 - were abroad in 2017. This figure, that in 2010 was equal to 2.4% (NABIBB, 2018), has increased also for the action taken by the Chambers of Commerce, Industry and Craftsman-



ship, which have activated a network of consultants to provide support in planning mobility initiatives. The coordination office, located at the German Chamber of Commerce and Industry (DIHK), supports the network of about 30 mobility experts, which is in charge of providing assistance on the following activities: planning, implementation, evaluation and report of stays abroad; search for partner companies abroad; search for incentives to enterprises; implementation of language courses and inter-cultural training; organisation of internships in Germany for young people from other European countries. From 1 January 2017, in Switzerland a new national agency for exchange and mobility - Movetia - was established, which is responsible for national, European and non-European mobility programmes addressed also to apprentices. Moreover, at the end of 2017, the Confederation and the Cantons have approved the Strategy for exchange and mobility. The strategy defines general objectives and measures to promote and refine exchange, mobility and cooperation among the stakeholders, in Switzerland or outside. In the meanwhile, the majority of the Swiss Parliament voted in favour of the participation of the country in European mobility programmes planned from 2021 and has requested to the Federal Council to open as soon as possible negotiations with the European Commission.

In the countries/Regions where apprenticeship transnational mobility measures have been introduced, the training period abroad - usually lasting no more than thirty days - are generally funded through the Erasmus Plus Programme. Nevertheless, in some regions also other programmes are used to fund the training abroad of apprentices; among them the X-Change programme ([www.xchange-info.net](http://www.xchange-info.net)). It is an initiative promoted by the *Internationale Bodenseekonferenz* (IBK, the association of nations neighbouring Lake Constance) and the Association of the Alpine States (ArgeAlp). Among these organisations there are the German *Länder* of Bavaria and Baden-Württemberg, the Swiss cantons of San Gallo, Thurgau, Zürich, Schaffhausen, Aargau, Appenzell, Grisons and Ticino, the Italian Regions of Lombardy and Trentino-Alto Adige, as well as the Austrian *Länder* of Vorarlberg, Tirol and Salzburg. They have been joined by Upper Austria Land. The European Union also contributes at financial level, in the context of the Interreg IV-A Programme, active in Alpine Rhine-Lake Constance-Haut-Rhin Region. The X-Change programme allow apprentices to carry out 4 weeks of their vocational training at a company in another country, establishing the apprentices exchange between the two companies. The programme provides a support in searching for the hosting company and in planning the mobility.

The exchange period is considered a part of the apprenticeship under the origin country's law, so that each company continues to remunerate its own apprentice. During the whole mobility period, the apprenticeship relation remains unchanged, as well as the compensation due to the apprentice, and the social security contributions. Since during the exchange the contract remains unchanged, the insurance coverage of the origin country keeps its validity; moreover, the mobility project manager enters into an extensive insurance for all the participants. For any additional (provable) expense, participants obtain a contribution up to EUR 20 per day or EUR 520 for four weeks. Training's length and contents are certified by the receiving company. During a public ceremony, the apprentices are provided with a certificate from the Lake Constance International Conference or from the Association of the Alpine States. Apprentices from EU countries are also provided with a "Europass Mobility" document, by which all the learning experiences abroad are certified.

In some areas of the Alpine Space, governments are committed in increasing, by a fixed number, the apprentices that in future will benefit from a training period abroad. For example, in France, the established number is equal to 15,000 apprentices per year. To simplify the organisation of the mobility periods, the French apprenticeship reform law has established that, during the stay-abroad, the apprentice is not obliged to alternate off-the-job training periods to on-the-job training periods, thus being allowed to undertake only either the on- or off-the-job training. The mobility period abroad cannot exceed one year and can take place in a European or non-European country. Moreover, during the mobility, the social security system of the hosting country bears the apprentice, unless considered as an employee according to the hosting country legislation. In this case, France bears his/her social security coverage in relation with sickness risks, including occupational disease, maternity, work accidents and invalidity. Despite the measures introduced in the Regions of the Alpine Space to promote the apprenticeship stay-abroad, there are still challenges for the development of transnational mobility.

The responses provided by the experts from the Alpine Regions allowed to identify some of the main obstacles to the transnational mobility of apprentices, which are briefly described below:

- the limited apprentices' knowledge of foreign languages, given also by the fact that the apprenticeship doesn't always provide for foreign languages teaching. This determines a set of difficulties, not only in placing apprentices in the hosting country's schools and companies, but also, for example, in ensuring that apprentices understand and comply with the rules on safety at work, and are able to benefit from the training required to develop professional skills.
- The restricted availability of companies, especially small ones, both in allowing the apprentice to move away from the workplace to stay-abroad, in case of a long-term mobility, and in hosting apprentices from foreign countries. The companies' lack of interest might depend on the poor sensitivity and understanding of the mobility's advantages and/or on organisational and financial difficulties.
- Apprentices' lack of interest in carrying out training periods in another country, due to language difficulties and problems of adaptation to the new context, as well as to the need of free time in summer, when the stay-abroad is usually provided. Moreover, if the national legislation provides that the mobility period is not funded by the company, apprentices often prefer to continue working in their own country, not to renounce to their salary. Finally, apprentices' families, especially in case of minors, are not always available to accept their children experience a training period abroad, as they are afraid that during these stays they would not receive the appropriate support and supervision.
- Difficulties in identifying the appropriate period for the stay-abroad, due to the different apprentice, school and company's needs. To combine these different needs and find an acceptable placement of the stay-abroad, the trend is to choose the summer period, after the closure of schools. Though, this solution limits the possibility to plan a long-term mobility (over 3 months). Subsequently, most of the mobility periods abroad of apprentices last less than one month.
- Difficulties in recognising and valuing the skills acquired by apprentices during the mobility periods abroad. The differences of programmes and vocational profiles in terms of know-

ledge, capabilities and skills required to achieve the qualification or the certificate, do not contribute to the recognition of periods abroad for the achievement of the qualification or certification. Moreover, given the general short-term length of the stays abroad, the opportunity for the apprentice to develop technical-professional skills is very limited, while the cross-sectoral skills which may be achieved by apprentices during the mobility periods are not always easily measurable and verifiable. The lack of common reference standards for the validation/certification of the skills acquired during the mobility periods determines a lack of the usability value of the skills, and reduces the apprentices' motivation in carrying out a training period abroad.

- Legal restrictions to mobility for young workers. In countries as Italy, where the apprentice is considered mainly as an employee, there are restrictions to transnational mobility due to contractual and legislative provisions on safety at work, protection of child labour, social security, health, injury and civil liability insurance, etc.

To overcome the obstacles to the mobility of apprentices, the actions - planned or taken - are mainly focused on the following areas:

- Developing and enhancing transnational networks among schools, vocational institutions, employers' associations and trade unions to promote mobility.
- Facilitating the certification of the skills developed by apprentices during their periods abroad and the relevant recognition for achieving the qualification.
- Enhancing the language skills of apprentices and trainers.
- Providing support services to training institutions, for the design and the implementation of mobility projects for apprentices.
- Putting in place communication activities on best practices addressed to enterprises, for the mobility abroad of apprentices and facilitating the experiences exchange.
- Promoting agreements with other countries, to facilitate the development of mobility.

In recent years, at European level, various initiatives have been taken to enhance the quality, provision and perception of apprenticeship, and recently mobility of apprentices has also arisen as a core topic. In 2016 and 2017 the European Commission - DG Employment has adopted, at the request of the European Parliament, two calls for pilot projects aimed at supporting the long-term mobility of apprentices. These initiatives have the final purpose of facilitating the mobility of apprentices, not only by offering them the opportunity to carry out a greater part of their training in another European country, but also by encouraging the bodies implementing the projects to identify and evaluate the obstacles found before, during and after the periods abroad, as well as to assess the feasibility of the creation of a European framework for the mobility of apprentices. Nevertheless, being an experimental activity, the funding received so far for pilot projects is limited: less than EUR 5 million in total.

Additional funding for the promotion of apprenticeship mobility should be allocated from the new Erasmus Plus Programme. The proposal submitted by the European Commission (COM 367 of 30/05/2018) for the period 2021-2027 and currently under evaluation by the national Parliaments, provides for a doubled fund allocation of the Erasmus Plus, which would be equal to about 30 million of euro, to triple the number of participants. Among the objectives provi-

ded by the Commission, there is also the increase of the actions to promote the mobility of apprentices. This objective might be achieved with the provision of the appropriate financial allocation and with measures aiming to decrease the administrative costs and expenses for apprentices, training institutions and enterprises, and to overcome the main obstacles to mobility, through - for example - the development of language skills of apprentices and trainers, the creation of partnership and local networks, the availability of services and tools to support training institutions, etc.

On the ground of the contributions from the experts interviewed, and taking into account the evolution of the legal framework at European and national level - as well as the ongoing activities -, in order to promote transnational mobility of apprentices the following recommendations may be addressed to Alpine Regions.

### **Recommendation:**

#### **9. Promoting awareness-raising and information campaigns on the benefits of transnational mobility for apprentices and companies**

It is important to promote awareness-raising actions and informative campaigns addressed to stakeholders, on the benefits and advantages of transnational mobility for enterprises and apprentices, and actions aimed at promoting the experiences exchange and the valuation of best mobility practices might be equally useful. These initiatives should also represent an opportunity to assess the possibility to activate pilot projects, allowing to develop practices and experiences, with a view to an effective use of resources which will be made available at European level in the next future. The initiatives might be also useful to give more value to the local networks among schools, vocational bodies, employers' associations and trade unions, in the view of their placement into a transnational network for the promotion of the mobility of apprentices.

### **Recommendation:**

#### **10. Implementing joint actions to promote the recognition of the skills acquired by apprentices in training periods abroad and to develop a network of mobility facilitators**

It is suggested to establish a technical working group comprising Regions, social partners and training institutions' representatives, possibly assisted by experts in the field with the task to present proposals to promote the mobility of apprentices. The activities of the working group might be particularly focused on the following actions:

- recognition of the skills acquired by the apprentices during the learning periods abroad. Basing on shared description of occupation and competences using the language of the areas of the activity, and starting from an economic sector of special interest for the territories involved, for example tourism, the working group might identify the competences, or part of them, included in one or more training regulations which may be developed by apprentices during their learning period abroad, with particular reference to cross-sectoral skills. The establishment of shared descriptors of working activities, and of the knowledges and capabilities required to carry them out, would allow the mutual recognition and the

certification of the skills acquired by apprentices. The activity of the working group, which might be gradually extended to other sectors, would facilitate the adaptation of the training programme's contents according to the skills required and ever-changing in enterprises and society, while facilitating the placement of learning periods abroad into the existing training provision.

- establishment of a network of “facilitators” of the transnational mobility of apprentices. To promote the activation of apprenticeship, providing learning periods abroad, a training and experience-sharing project could be developed addressing those operators in charge of the design and the implementation of apprenticeship within the Alpine Space. The object of the project is to allow the operators to develop the skills required to ensure high-quality levels in the design and the implementation of mobility experiences abroad for apprentices; to carry out a role as facilitators and mediators between the training institution and the hosting enterprise; to facilitate the use of tools and methodologies allowing the evaluation and the mutual recognition of the skills acquired during the mobility period. Once trained, the operators would become part of a network in charge of the implementation of specific initiatives for the development of the mobility of apprentices, and of the presentation of proposals aiming to improve the quality of apprenticeship.

## **Examples of measures implemented to promote the transnational mobility of apprentices**

### **Austria - Tirol**

Among EU mobility programmes for apprentices, there are initiatives, such as the projects *TirolerInnen auf dem Walz* (Tyroleans on the train) and Exchange, which grant scholarships for mobility experiences to trainees, apprentices, young workers and students from Tirol vocational, lower and upper secondary schools. The Chamber of Labour - which is one of the main partners in the mobility implementation (*AK goes Europe and Rückenwind programmes*) - provides companies and trainers with information on mobility opportunities, within events like the so-called "Workbrunch".

### **Arge Alp: Austria, Germany, Italy, Switzerland**

Reserved to apprentices under dual training for any trade, the Xchange project allows to undertake a professional internship of 3/4 weeks in another training company in a foreign country. Since 2001, the programme has involved more than two thousand young people from regions of the Arge Alp community: Oberösterreich, Salzburg, Tirol and Vorarlberg (Austria), Bavaria and Baden-Württemberg (Germany), Alto Adige, Lombardy and Trentino (Italy), Liechtenstein, and Cantons of Appenzell Ausserrhoden and Appenzell Innerrhoden, Aargau, Grisons, San Gallo, Schaffhausen, Ticino, Thurgau and Zürich. For more information, see pages at: <https://www.argealp.org/projekte/xchange/>

### **Germany**

In 2013 the German Bundestag has established the reference parameter for transnational mobility of apprentices at 10% in 2020. This objective, much more ambitious than as indicated by the European Council - which is only at 6% -, will require a strong effort by all the actors of the dual system. A survey carried out by the National Agency for Erasmus+ Programme at the BIBB has highlighted that in 2017 in Germany 5.3% of those who qualified in vocational schools had a transnational mobility experience during the training. Download the report at: [www.bibb.de/dokumente/pdf/PM\\_BWP\\_Internationale\\_Mobilitaet.pdf](http://www.bibb.de/dokumente/pdf/PM_BWP_Internationale_Mobilitaet.pdf)

### **France**

One of the objectives established by the French apprenticeship reform is the increase in the number of apprentices participating in the transnational mobility. Currently, about 7,000 apprentices undertake two or three weeks of training in another European countries. The objective is to increase this number to 15,000 apprentices, who will have the possibility to attend a training period abroad, with a maximum length of one year.

## **ANNEX 1 – List of the experts involved**

We would like to thank the following experts in the dual systems of the countries of the Alpine Area, identified thanks to the collaboration of the members of the AG3, who kindly participated in the survey on dual systems, providing information, references, documentation.

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## **ANNEX 2 – List of abbreviations**

The list of abbreviations used in the text is reported with the indication of the complete name and the specification of the reference country. The abbreviations are listed following the alphabetical order according to the official language of the reference country, with the translation in English by the authors whereas a translation is not available in formal documents or in dedicated websites. For Switzerland, the abbreviations and the relative denominations are reported in the various official languages, while in the text the German version has been adopted.

<b>ABB</b>	Amt für Berufsbildung und Berufsberatung, Liechtenstein; Ufficio per la formazione e l'Orientamento professionale.
<b>ABBI</b>	Ausschuss für Berufliche Bildung, Germania; Comitato per l'istruzione e la formazione professionale.
<b>AFC</b>	Attestato federale di capacità; CFC - Certificat fédéral de capacité; EFZ - Eidgenössische Fähigkeitszeugnis, Svizzera.
<b>AEVO</b>	Ausbilder-Eignungsverordnung, Germania; Ordinanza sulle competenze degli istruttori aziendali.
<b>AMS</b>	ArbeitsMarktService, Austria; Servizio per l'impiego.
<b>ANPAL</b>	Agenzia Nazionale per le Politiche Attive del Lavoro, Italia.
<b>AK</b>	Arbeiterkammer, Austria; Camera del Lavoro.
<b>BA</b>	Berufsattest, Liechtenstein; Qualifica di operatore professionale.
<b>BAG</b>	Berufsausbildungsgesetz, Austria; Legge sulla formazione professionale.
<b>BBAB</b>	Bundes-Berufsausbildungsbeirat, Austria; Comitato Federale per l'Apprendistato.
<b>BBG</b>	Berufsbildungsgesetz, Liechtenstein; Legge sulla formazione professionale.
<b>BBiG</b>	Berufsbildungsgesetz, Germania; Legge sulla formazione professionale.
<b>BEP</b>	Brevet d'études professionnelles, Francia; Brevetto di studi professionali.
<b>BIBB</b>	Bundesinstitut für Berufsbildung, Germania; Istituto Federale per la Formazione.
<b>BMBF</b>	Bundesministerium für Bildung und Forschung, Germania; Ministero Federale dell'Istruzione e della Ricerca.
<b>BMDW</b>	Bundesministerium für Digitalisierung und Wirtschaftsstandort, Austria; Ministero Federale per la Digitalizzazione e l'Economia.
<b>BMBWF</b>	Bundesministerium für Bildung, Wissenschaft und Forschung, Austria; Ministero Federale per l'Istruzione, la Scienza e la Ricerca.
<b>BMS</b>	Berufsmaturitätsschule, Liechtenstein; Scuola per il diploma di maturità professionale.
<b>BMWE</b>	Bundesministerium für Wirtschaft und Energie, Germania; Ministero Federale per gli Affari Economici e l'Energia.
<b>CAP</b>	Certificat d'aptitude professionnelle, Francia; Certificato di attitudine professionale.
<b>CCFP</b>	Comitato consultivo tripartito per la formazione professionale, Unione Europea; BAB - Beratende Ausschuss für die Berufsausbildung; ACVT - Advisory Committee on Vocational Training.

- CCrEFp** Comités de Coordination régionaux de l'Emploi et de la Formation professionnelle, Francia; Comitato Regionale su Occupazione e Formazione Professionale.
- CDPE** Conferenza svizzera dei direttori cantonali della pubblica educazione; CDIP - Conférence suisse des directeurs cantonaux de l'instruction publique; EDK - Schweizerische Konferenz der kantonalen Erziehungsdirektoren, Svizzera.
- CEDEFOP** Centro europeo per lo sviluppo della formazione professionale; European Centre for the development of vocational training.
- CES** Confederazione europea dei Sindacati, Unione Europea; CES - Confédération européenne des syndicats; EGB - Europäischen Gewerkschaftsbunds; ETUC - European Trade Union Confederation.
- CFA** Centre de formation pour l'Apprentissage, Francia; Centro di formazione per l'Apprendistato.
- CFP** Certificato federale di Formazione Pratica; AFP - Attestation fédérale de formation professionnelle; EBA - Eidgenössisches Berufsattest, Svizzera.
- CFFP** Commissione federale della formazione professionale; CFFP - Commission fédérale de la formation professionnelle; EBBK - Eidgenössische Berufsbildungskommission, Svizzera.
- CNCP** Commission Nationale de la Certification Professionnelle, Francia; Commissione nazionale di certificazione professionale.
- CNEFOP** Conseil National de l'Emploi, de la Formation et de l'Orientation Professionnelles, Francia; Consiglio nazionale per l'occupazione, la formazione e l'orientamento professionale.
- COPANEF** Comité interprofessionnel pour l'emploi et la formation, Francia; Comitato interprofessionale per l'occupazione e la formazione.
- CPC** Commissions Professionnelles Consultatives, Francia; Commissioni professionali consultive.
- CPI** Center Republike Slovenije za poklicno izobraževanje, Slovenia; Centro per l'Istruzione e la Formazione Professionale della Repubblica di Slovenia.
- CPRDFOP** Contrat de Plan Régional de Développement des Formations et de l'Orientation Professionnelles, Francia; Contratto di Piano Regionale per lo Sviluppo della formazione e dell'Orientamento Professionale.
- CSFP** Conferenza svizzera degli Uffici della Formazione Professionale; CSFP - Conférence suisse des offices de la formation professionnelle; SBBK - Schweizerische Berufsbildungsämter-Konferenz, Svizzera.
- CSRE** Centro svizzero di coordinamento della ricerca educative; CSRE - Centre suisse de coordination pour la recherche en education; SKBF - Schweizerische Koordinationsstelle für Bildungsforschung, Svizzera.
- DIHK** Deutscher Industrie- und Handelskammertag, Germania; Associazione tedesca delle Camere dell'Industria e del Commercio.
- DHKT** Deutschen Handwerkskammertag, Germania; Confederazione tedesca delle Camere dell'Artigianato.
- EQF** European Qualification Framework; Quadro europeo delle Qualificazioni.
- EUSALP** European Union Strategy for the Alpine Region; Strategia dell'Unione Europea per la Macroregione Alpina

<b>FPSP</b>	Fonds paritaire de sécurisation des parcours professionnels, Francia; Fondo paritetico per la messa in sicurezza dei percorsi professionali.
<b>FZ</b>	Fähigkeitszeugnis, Liechtenstein; Diploma professionale.
<b>GZS</b>	Gospodarska zbornica Slovenije, Slovenia; Camera del Commercio e dell'Industria della Slovenia.
<b>IAB</b>	Institut für Arbeitsmarkt- und Berufsforschung, Germania; Istituto di Ricerca sul lavoro.
<b>IBK</b>	Internationale Bodensee Konferenz; Associazione dei Paesi che si affacciano sul Lago di Costanza.
<b>IBW</b>	Institut für Bildungsforschung der Wirtschaft, Austria; Istituto per la Ricerca Educativa per l'Economia.
<b>ICT</b>	Information and Communications Technology; Tecnologie dell'informazione e della comunicazione.
<b>IeFP</b>	Istruzione e Formazione Professionale, Italia.
<b>IFTS</b>	Istruzione e Formazione Tecnica Superiore, Italia.
<b>INAPP</b>	Istituto Nazionale per l'Analisi delle Politiche Pubbliche, Italia.
<b>ISCED</b>	International Standard Classification of Education; Sistema internazionale di classificazione standard dell'istruzione.
<b>KMK</b>	Kultusministerkonferenz, Germania; Conferenza permanente dei ministri dell'istruzione e degli affari culturali.
<b>LBAB</b>	Landes-Berufsausbildungsbeirat, Austria; Comitato Regionale per l'Apprendistato.
<b>LFPr</b>	Legge sulla formazione professionale; LFPr - Loi fédérale sur la formation professionnelle; BBG – Berufsbildungsgesetz, Svizzera.
<b>MIUR</b>	Ministero dell'Istruzione, Università e Ricerca, Italia.
<b>MLPS</b>	Ministero del Lavoro e delle Politiche sociali, Italia.
<b>MoESS</b>	Ministrstvo za izobraževanje, znanost in šport, Slovenia; Ministero dell'Istruzione, della Scienza e dello Sport.
<b>MoLFSAE</b>	Ministrstvo za delo, družino, socialne zadeve in enake možnosti, Slovenia; Ministero del lavoro, famiglia, affari sociali e pari opportunità.
<b>MP1/2</b>	Maturità Professionale – sottoprogetto 1/2; MP1/2 - Maturité Professionnelle – Projet partiel 1/2; BM1/2 - Berufsmaturität - Teilprojekt 1/2, Svizzera.
<b>NEET</b>	Not in Education, Employment or Training; Giovani che non sono inseriti in percorsi di studio o formazione e non lavorano.
<b>OCSE</b>	Organizzazione per la Cooperazione e lo Sviluppo Economico; OECD - Organisation for Economic Co-operation and Development.
<b>OCTA</b>	Organismes Collecteurs de la Taxe d'Apprentissage, Francia; Organismi di raccolta della tassa per l'apprendistato.
<b>ÖGB</b>	Österreichische Gewerkschaftsbund, Austria; Federazione austriaca dei sindacati dei lavoratori.
<b>ÖIBF</b>	Österreichisches Institut für Berufsbildungsforschung, Austria; Istituto Austriaco per la Ricerca sull'Istruzione e la Formazione Professionale.
<b>OIL</b>	Organizzazione Internazionale del Lavoro; ILO – International Labour Organization.
<b>OPCO</b>	Opérateurs de compétences, Francia; Organismi paritetici per lo sviluppo delle Competenze.

<b>OZS</b>	Obrtno-podjetniška zbornica Slovenije, Slovenia; Camera dell'artigianato e delle Piccole e Medie Imprese.
<b>PFI</b>	Piano Formativo Individuale, Italia.
<b>PMI</b>	Piccole e Medie Imprese, Italia.
<b>QIBB</b>	Qualitätsinitiative BerufsBildung, Austria; Sistema di gestione della qualità delle scuole professionali.
<b>RAP</b>	Référentiel des Activités Professionnelles, Francia; Referenziale delle attività professionali.
<b>RNCP</b>	Répertoire national des certifications professionnelles, Francia; Repertorio nazionale delle certificazioni professionali.
<b>SEFRI</b>	Segretariato per la Formazione, la ricerca e l'innovazione; SEFRI - Secrétariat d'Etat à la formation, à la recherche et à l'innovation; SBFI - Staatssekretariat für Bildung, Forschung und Innovation, Svizzera.
<b>Smic</b>	Salaire minimum interprofessionnel de croissance, France; salario minimo interprofessionale di crescita.
<b>ÜBA</b>	Überbetriebliche Ausbildung, Austria; Formazione sovra-aziendale.
<b>URSSAF</b>	Union de Recouvrement des cotisations de Sécurité Sociale et d'Allocations Familiales, Francia; Unione per il recupero dei contributi per la sicurezza sociale e gli assegni familiari.
<b>WKO</b>	Wirtschaftskammer Österreich, Austria; Camera dell'Economia austriaca.

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**80 million people, 7 countries, 48 regions, mountains and plains  
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