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PERMEABILITY OF DUAL VOCATIONAL EDUCATION AND TRAINING

COMPARATIVE STUDY INCLUDING AUSTRIA, GERMANY, SWITZERLAND, ITALY, FRANCE, AND SLOVENIA

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T3 Horizontal and vertical permeability of dual education

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1 SUMMARIES

SUMMARY (EN)

Dual vocational education and training¹ (VET) plays an important role within the VET systems of the Alpine Space countries, as it is one of the main pathways to gain entry into a professional career.

The “traditional” concept of apprenticeship training was initially designed as a sort of systemic “one way street” with the sole and single purpose of providing a professional qualification for apprentices and the immediate transition into the labour market. As a result, this pathway has so far not provided access to Higher Education (HE). Due to the Bologna Process permeability has gained greater attention from the educational society and therefore much has changed since then. This report sheds light onto the current situation of permeability within the educational systems in the alpine space. For this purpose, the vertical, i.e. the change between the levels in both directions, the horizontal, the change between VET and HE as well as the international permeability between the education systems of the different countries are examined. Additionally, the report gives recommendations for action to improve the attractiveness of dual VET.

Due to the fast change in the modern labour markets and the fact that a constantly growing number of people are striving for HE, more permeability in both vertical and horizontal terms is urgently needed. Dual VET must provide options that give access to HE to maintain its attractiveness, especially

compared to academic tracks and/or full-time schoolbased VET programmes that offer double degrees.

The current analysis shows that there are several possibilities for a vertical or horizontal transition in all countries of the Alpine Space. Regarding **vertical permeability**, special examinations or courses lead apprenticeship graduates to a HE entrance qualification. In addition there are programmes in which learners can acquire both, a dual VET qualification and a HE entrance qualification, at the same time. The recognition of prior learning (RPL) (formal, non-formal or in-formal learning) is also an important element in permeability initiatives. However, these methods are currently not systematically established in any of the Alpine countries – except in France with its long tradition of using recognition procedures² to enable learning mobility regardless of the context of the acquired knowledge.

Measures relating to **horizontal permeability** can as well be analysed on the basis of the three categories mentioned (external additional examinations, internal modifications of VET and RPL). Most interestingly, no initiatives or approaches for external additional examinations were identified that would provide horizontal access to other VET pathways/programmes. Internal modifications of dual VET are currently not systematically established in any of the Alpine countries – except in Austria, where they are implemen-

¹ dual VET; the term apprenticeship [training] will be used synonymously in this report.

² Validation of Professional Experience (VAP) and Validation of Acquired Experience (VAE)

ted as modular apprenticeship training concepts or as a combination of different VET programs. In contrast, RPL is the approach used by many countries in the Alpine region to enable horizontal permeability. An example of this is the reduction of training duration for learners who have already acquired a qualification with similar learning outcomes.

Regarding **international permeability**, RPL is also the most widely used approach. There are even some forms of bi- or multilateral agreements on mutual recognition of vocational qualifications in almost all countries of the Alpine Space. Officially regulated procedures for formal recognition of professions and/or degrees are quite common as well. In contrast, no external additional examinations have been used to enable permeability in dual VET between the countries of the Alpine region up to now. And even outside the Alpine region there is only one example of an internal modification of dual VET in the form of transnational VET: In the German-Dutch border area, standards for a cross-border curriculum are developed³.

One of the major challenges for permeability is the diversity of occupational concepts in the countries of the Alpine Region. An occupation is usually defined in close cooperation with stakeholders from the relevant occupational field. Its composition is therefore highly influenced by contextual factors of the respective country (economic structure, size of enterprises, etc.). For this reason, the more diverse dual VET systems and economic structures between countries are, the greater the challenge of fostering international permeability.

OPTIONS FOR FUTURE DEVELOPMENT

The report highlights the fact that there are many options, especially at national level, to enhance vertical, horizontal and international permeability in dual VET. The **countries** of the Alpine Space **can learn from each**

other's experiences to find out if and how to adopt permeability measures for their national situation/context.

Firstly, there are **measures that can be taken within a country** and the respective national education and training system. Promising fields of action are a higher degree of modularization for dual VET, creating new dual VET tracks that combine apprenticeship training with a HE entrance qualification, enabling admission to higher education for existing degrees and establishing a comprehensive system for recognition of prior learning and professional experience.

Secondly, international initiatives could be broader in scope, i.e. **involving two or more countries**. Through standardizing and systematizing assessment and accreditation processes for dual VET degrees, the traditional bilateral setting of international recognition might be extended. Another approach is based on cross-border cooperation, like jointly defining curricula and learning outcomes forming a “common region of apprenticeship training”.

The report also sheds light on areas (within and/or between countries) where no permeability options exist up to now. These **“blank spots”** may be used as starting points for elaborating some basic ideas about permeability. One field of action might be to use external additional exams/trainings to foster horizontal as well as international mobility. Bridging offers like “pas-serelles” and/or trainings (i.e. that might fill qualification gaps) to ease movements between VET tracks and/or countries of the Alpine Space might be established. Similarly, internal modifications of dual VET (i.e. combining dual VET and full-time school-based VET programmes) might be an option to foster horizontal permeability.

³ Transnationale Berufsausbildung im deutsch-niederländischen Grenzgebiet (TraBbi); BÖTTCHER ET. AL. 2013;

<https://www.jobstarter.de/de/projektland-karte.php?D=321&F=18&M=137&S=M%C3%BClheimer%20Ausbildungsservice&V=list>

SUMMARY (DE)

Die duale Berufsbildung⁴ spielt in den Berufsbildungssystemen der Alpenraumländer eine wichtige Rolle, da sie eine der wichtigsten Möglichkeiten darstellt eine berufliche Laufbahn zu beginnen.

Das "traditionelle" Konzept der Lehrlingsausbildung war ursprünglich als eine Art systemische "Einbahnstraße" konzipiert, mit dem obersten Ziel, den Lehrlingen eine berufliche Qualifikation zu vermitteln um den sofortigen Übergang in den Arbeitsmarkt zu ermöglichen. Folglich hat dieser Weg bisher keinen Zugang zur Hochschulbildung ermöglicht. Durch den Bologna-Prozess jedoch, hat das Thema Durchlässigkeit in bildungspolitischen Kreisen an Aufmerksamkeit gewonnen, so dass sich seither viel verändert hat. Der vorliegende Bericht beleuchtet die aktuelle Situation der Durchlässigkeit innerhalb der Bildungssysteme im Alpenraum. Dazu werden die vertikale, d.h. der Wechsel zwischen den Ebenen in beiden Richtungen, die Horizontale, der Wechsel zwischen Berufsbildung und Hochschulbildung sowie die internationale Durchlässigkeit zwischen den Bildungssystemen der verschiedenen Länder untersucht. Zusätzlich spricht der Bericht Handlungsempfehlungen zur Verbesserung der Attraktivität der dualen Berufsbildung in den Alpenländern aus.

Aufgrund des raschen Wandels auf den modernen Arbeitsmärkten und der Tatsache, dass eine ständig wachsende Zahl von Menschen eine Hochschulausbildung anstrebt, ist mehr Durchlässigkeit sowohl vertikal als

auch horizontal dringend erforderlich. Die duale Berufsbildung muss Optionen bieten,

die den Zugang zur Hochschulbildung ermöglichen, um ihre Attraktivität zu erhalten, insbesondere im Vergleich zu akademischen Studiengängen und/oder vollzeitschulischen Berufsbildungsprogrammen, die Doppelabschlüsse bieten.

Die aktuelle Analyse zeigt, dass es in allen Ländern des Alpenraums mehrere Möglichkeiten für einen vertikalen oder horizontalen Übergang gibt. So führen unter anderem spezielle Prüfungen oder Kurse die AbsolventInnen einer dualen Berufsausbildung zu einer Hochschulzugangsberechtigung und ermöglichen so einen **vertikalen Übergang**. Darüber hinaus gibt es Programme, in denen die Lernenden gleichzeitig eine duale Berufsbildung und eine Hochschulzugangsberechtigung erwerben können. Die Anerkennung von Vorkenntnissen (durch formales, non-formales oder informelles Lernen) ist ebenfalls ein zentrales Element der Durchlässigkeitsinitiativen. Allerdings sind diese Methoden derzeit in keinem der Alpenländer systematisch etabliert – abgesehen von Frankreich mit seiner langen Tradition der Anwendung von formalen, non-formalen oder informellen Lernmethoden.

Auch Maßnahmen zur **horizontalen Durchlässigkeit** können anhand der drei genannten Kategorien (externe Zusatzprüfungen, interne Modifikationen der Berufsbildung und des RPL) analysiert werden. Am interessantesten ist jedoch, dass keine Initiativen oder Ansätze für externe Zusatzprüfungen identifiziert werden konnten, die einen

⁴ Duale Berufsausbildung und die Bezeichnung Lehrlingsausbildung werden in diesem Bericht synonym verwendet.

horizontalen Zugang zu anderen Berufsbildungswegen/Programmen ermöglichen würden. Interne Modifikationen der dualen Berufsbildung sind derzeit zudem in keinem der Alpenländer systematisch etabliert - mit Ausnahme von Österreich, wo sie als modulare Lehrlingsausbildungskonzepte oder als Kombination verschiedener Berufsbildungsprogramme umgesetzt werden. Im Gegensatz dazu ist die Anerkennung von Vorkenntnissen der von vielen Ländern des Alpenraums verwendete Ansatz, um eine horizontale Durchlässigkeit zu ermöglichen. Ein Beispiel dafür ist die Verkürzung der Ausbildungsdauer für Lernende, die zuvor bereits eine Qualifikation mit ähnlichen Lernergebnissen erworben haben.

Im Hinblick auf die **internationale Durchlässigkeit** ist die Anerkennung von Vorkenntnissen auch der am weitesten verbreitete Ansatz. In fast allen Ländern des Alpenraums gibt es sogar einige Formen bi- oder multilateraler Vereinbarungen zur gegenseitigen Rückzündung von beruflichen Qualifikationen. Offiziell geregelte Verfahren zur formalen Anerkennung von Berufen und/oder Abschlüssen sind ebenfalls verbreitet.

Externe Zusatzprüfungen zur Ermöglichung der Durchlässigkeit in der dualen Berufsausbildung zwischen den Ländern des Alpenraums wurden dagegen bisher nicht eingesetzt. Und auch außerhalb des Alpenraums gibt es nur ein Beispiel für eine interne Modifikation der dualen Berufsbildung in Form einer transnationalen Berufsbildung: Im deutsch-niederländischen Grenzraum werden Standards für ein grenzüberschreitendes Curriculum⁵ entwickelt.

Eine der größten Herausforderungen für die Durchlässigkeit ist die Unterschiedlichkeit der Berufskonzepte in den Ländern des Alpenraums. Die Definition eines Berufes erfolgt in der Regel in enger Zusammenarbeit

mit Akteuren aus dem jeweiligen Berufsfeld. Seine Zusammensetzung wird daher stark von Kontextfaktoren des jeweiligen Landes (Wirtschaftsstruktur, Betriebsgröße etc.) beeinflusst. Aus diesem Grund sind die Unterschiede in den dualen Berufsbildungssystemen und Wirtschaftsstrukturen zwischen den Ländern größer.

OPTIONEN FÜR DIE ZUKÜNFTIGE ENTWICKLUNG

Der Bericht unterstreicht die Tatsache, dass es insbesondere auf nationaler Ebene viele Möglichkeiten gibt, die vertikale, horizontale und internationale Durchlässigkeit in der dualen Berufsbildung zu verbessern. **Die Länder des Alpenraums können dabei von einem Erfahrungsaustausch profitieren** und herausfinden, ob und wie Durchlässigkeitsmaßnahmen für ihre nationale Situation/ihren nationalen Kontext eingesetzt werden können.

Zum einen gibt es **Maßnahmen, die in einem Land** und innerhalb des jeweiligen nationalen Bildungs- und Ausbildungssystems **ergriffen werden können**. Vorrangige Handlungsfelder sind ein höherer Modularisierungsgrad der dualen Berufsausbildung, die Schaffung neuer dualer Berufsbildungswege, die eine Lehrlingsausbildung mit einer Hochschulzugangsberechtigung kombinieren, die Ermöglichung des Hochschulzugangs für bestehende Abschlüsse und die Etablierung eines umfassenden Systems zur Anerkennung von Vorbildung und Berufserfahrung.

Zweitens könnten internationale Initiativen breiter angelegt sein, d.h. **zwei oder mehr Länder einbeziehen**. Durch die Standardisierung und Systematisierung der Bewertungs- und Akkreditierungsprozesse für duale Berufsbildungsabschlüsse könnte der tradi-

⁵ Transnationale Berufsausbildung im deutsch-niederländischen Grenzgebiet (TraBbi); BÖTTCHER ET. AL. 2013;

<https://www.jobstarter.de/de/projektland-karte.php?D=321&F=18&M=137&S=M%C3%BClheimer%20Ausbildungsservice&V=list>

tionelle bilaterale Rahmen der internationalen Anerkennung erweitert werden. Ein anderer Ansatz basiert auf grenzüberschreitender Zusammenarbeit, wie z.B. die gemeinsame Festlegung von Curricula und Lerninhalten, die eine "gemeinsame Region der Lehrlingsausbildung" bilden.

Der Bericht beleuchtet auch Bereiche (innerhalb und/oder zwischen den Ländern), in denen es bisher keine Durchlässigkeitsoptionen gibt. Diese **"weißen Flecken"** können als Ausgangspunkt für die Ausarbeitung einiger grundlegender Ideen zur Durchlässigkeit dienen. Ein Aktionsfeld könnte die Nutzung externer Zusatzprüfungen/-ausbildungen sein, um sowohl die horizontale als auch die internationale Mobilität zu fördern. Überbrückungsangebote wie "passerelles" und/oder Ausbildungen (d.h. die Qualifikationslücken füllen könnten) zur Erleichterung der Mobilität zwischen Berufswegen und/oder Ländern des Alpenraums könnten geschaffen werden. In ähnlicher Weise könnten interne Modifikationen der dualen Berufsbildung (d.h. die Kombination von dualer Berufsbildung und vollzeitschulischen Berufsbildungsprogrammen) eine Option sein, um die horizontale Durchlässigkeit zu fördern.

SUMMARY (FR)

La formation professionnelle en alternance (EFP)⁶ joue un rôle important dans les systèmes d'EFP des pays de l'espace Alpin car il s'agit d'une des principales voies d'accès à l'entrée dans une carrière professionnelle.

Le concept "traditionnel" de formation en apprentissage a été initialement conçu comme une sorte de "voie unique" dans le seul et unique but de fournir la qualification professionnelle des apprentis et la transition vers le marché du travail. En conséquence, cette voie n'a pas permis jusqu'à présent d'accéder à l'enseignement supérieur. En raison de la perméabilité le processus de Bologne a bénéficié d'une plus grande attention de la part de la communauté éducative la société et donc beaucoup de choses ont changé depuis.

Ce rapport met en lumière la situation actuelle de la perméabilité au sein des systèmes éducatifs dans l'espace alpin. À cette fin, il examine la « perméabilité verticale », c'est-à-dire le changement à niveau égal dans les deux directions (enseignement classique et professionnel) et la « perméabilité horizontale », c'est-à-dire le passage entre la formation professionnelle et l'enseignement supérieur, ainsi que la « perméabilité internationale » entre les systèmes éducatifs des différents pays. En outre, le rapport donne des recommandations d'actions pour améliorer l'attractivité de l'EFP en alternance.

L'analyse actuelle montre qu'il existe plusieurs possibilités de transition verticale ou horizontale dans tous les pays de l'Espace alpin. En ce qui concerne la **perméabilité verticale**, des examens ou des cours spéciaux conduisent les diplômés de l'apprentissage à

un diplôme d'entrée à l'enseignement supérieur.

En outre, il existe des programmes dans lesquels les apprenants peuvent acquérir une double qualification en matière de formation professionnelle et une entrée dans l'enseignement supérieur qualifiant, dans le même temps. La reconnaissance des acquis de l'apprentissage (apprentissage formel, non formel) est également un élément important des initiatives de perméabilité. Cependant, ces méthodes ne sont actuellement pas établies de manière systématique dans chacun des pays alpins - sauf en France, qui a une longue tradition d'utilisation de procédures de reconnaissance pour permettre la mobilité d'apprentissage, quel que soit le contexte des connaissances acquises.

Les mesures relatives à la **perméabilité horizontale** peuvent bien être analysées sur la base des trois catégories mentionnées (examens complémentaires externes, examens internes modifications de l'EFP et de la reconnaissance des apprentissages). Il est également intéressant de constater qu'aucune initiative ou approche pour des examens externes supplémentaires n'ont été identifiées, qui permettraient un accès horizontal à d'autres filières/programmes d'EFP. Les modifications internes de la formation professionnelle en alternance ne sont actuellement établies systématiquement dans aucun des pays alpins - sauf en Autriche, où elles sont mises en œuvre sous la forme de concepts de formation modulaire en apprentissage ou d'une combinaison de différents programmes de formation professionnelle.

⁶ double EFP; le terme apprentissage [formation] sera utilisé de manière synonyme dans ce rapport

En revanche, la reconnaissance de l'apprentissage est l'approche utilisée par de nombreux pays de la région alpine pour permettre une perméabilité horizontale. Un exemple de cette approche est la réduction de la durée de formation pour les apprenants qui ont déjà acquis une qualification avec des résultats d'apprentissage similaires.

En ce qui concerne la **perméabilité internationale**, la reconnaissance des apprentissages est également l'approche la plus utilisée. Il existe même des formes d'accords bi- ou multilatéraux sur la reconnaissance mutuelle des qualifications professionnelles dans presque tous les pays de l'Espace alpin. Les procédures officiellement réglementées pour la reconnaissance officielle des professions et/ou des diplômes sont également assez courantes. En revanche, jusqu'à présent, aucun examen externe supplémentaire n'a été utilisé pour permettre la perméabilité de la formation professionnelle en alternance entre les pays de la région alpine. Et même en dehors de la région alpine, il n'existe qu'un seul exemple d'adaptation interne de l'apprentissage professionnel sous la forme d'une formation professionnelle transnationale : dans la zone frontalière germano-néerlandaise, des modules existent pour un programme d'études transfrontalier⁷.

L'un des principaux défis en matière de perméabilité est la diversité des concepts professionnels dans les pays de la région alpine. Une profession est généralement définie en étroite collaboration avec les acteurs du domaine professionnel concerné. Sa composition est donc fortement influencée par les facteurs contextuels du pays concerné (structure économique, taille des entreprises, etc.). Pour cette raison, plus les systèmes d'EFP en alternance et les structures économiques sont diverses entre les pays plus le défi de promouvoir la perméabilité internationale est important.

⁷ Formation professionnelle transnationale dans la région frontalière germano-néerlandaise (TraBbi); BÖTTCHER ET. AL. 2013;

OPTIONS POUR UN DÉVELOPPEMENT FUTUR

Le rapport souligne le fait qu'il existe de nombreuses options, en particulier au niveau national, pour améliorer la perméabilité verticale, horizontale et internationale dans l'EFP en alternance. Les pays de l'Espace alpin peuvent tirer des enseignements de chaque expérience pour étudier la faisabilité et les mesures de perméabilité à adopter dans leur situation / contexte national.

Premièrement, il existe des **mesures qui peuvent être prises au sein d'un pays** et du système national d'éducation et de formation correspondant. Les domaines d'action prometteurs sont un degré plus élevé de modularisation de l'EFP en alternance avec la création de nouvelles filières d'EFP en alternance qui combinent la formation en apprentissage et un diplôme d'entrée à l'enseignement supérieur, la possibilité d'accéder à l'enseignement supérieur pour les diplômés existants et la mise en place d'un système complet de reconnaissance et de valorisation des acquis et de l'expérience professionnelle.

Deuxièmement, les initiatives internationales pourraient avoir une portée plus large, c'est-à-dire **impliquer deux ou plusieurs pays**. En normalisant et en systématisant les processus d'évaluation et d'accréditation des diplômes d'EFP en alternance, le cadre bilatéral traditionnel de la reconnaissance internationale pourrait être étendu. Une autre approche est basée sur la coopération transfrontalière, comme la définition conjointe des programmes et des résultats d'apprentissage formant une "région commune de formation en apprentissage".

Le rapport met également en lumière les zones (au sein des pays et/ou entre les pays) où

<https://www.jobstarter.de/de/projektland-karte.php?D=321&F=18&M=137&S=M%C3%BClheimer%20Ausbildungsservice&V=list>

aucune option de perméabilité n'existe jusqu'à présent. Ces **"points vides"** peuvent servir de point de départ pour élaborer quelques idées de base sur la perméabilité.

Un domaine d'action pourrait consister à utiliser des examens ou des formations externes supplémentaires pour favoriser la mobilité horizontale et internationale. Des passerelles et/ou des formations (c'est-à-dire qui pourraient combler les lacunes en matière de qualification) pourraient être mises en place pour faciliter les déplacements entre les filières d'EFP et/ou les pays de l'Espace alpin.

De même, des modifications internes de l'EFP en alternance (c'est-à-dire combinant l'EFP en alternance et les programmes d'EFP scolaires à temps plein) pourraient être une option pour favoriser la perméabilité horizontale.

SUMMARY (IT)

L'istruzione e la formazione professionale duale⁸ svolge un ruolo importante all'interno dei paesi dello Spazio Alpino, poiché è uno dei percorsi principali per iniziare una carriera professionale.

Il concetto "tradizionale" di formazione in apprendistato è stato inizialmente concepito come una sorta di "strada a senso unico" sistemica, con il solo e unico scopo di fornire una qualificazione professionale agli apprendisti e la transizione immediata nel mercato del lavoro. Di conseguenza, questo percorso finora non ha consentito l'accesso all'istruzione superiore (formazione terziaria). Grazie al Processo di Bologna⁹ la permeabilità ha guadagnato una maggiore attenzione da parte della società dell'istruzione e da allora molto è cambiato.

Questo rapporto fa luce sullo stato attuale della permeabilità all'interno dei sistemi educativi nello Spazio Alpino. A tal fine, vengono esaminate la permeabilità verticale, ovvero il cambio tra i livelli in entrambe le direzioni, e l'orizzontale, ovvero il passaggio da formazione professionale e istruzione secondaria a parità di livello, nonché la permeabilità internazionale tra i sistemi educativi dei diversi paesi. Inoltre, il rapporto fornisce raccomandazioni per azioni volte a migliorare l'attrattività del sistema duale di istruzione e formazione professionale.

A causa del rapido cambiamento nel mercato del lavoro moderno e del numero costantemente crescente di persone che intende impegnarsi nell'istruzione superiore, una maggiore permeabilità sia in termini verticali che orizzontali è urgentemente necessaria. Il sistema duale di istruzione e formazione professionale deve fornire opzioni che diano accesso all'istruzione superiore per mantenere la sua attrattiva, soprattutto rispetto ai percorsi accademici e/o ai programmi di istruzione e formazione professionale a tempo pieno che offrono doppi diplomi.

L'attuale analisi mostra che ci sono diverse possibilità per una transizione verticale o orizzontale in tutti i paesi dello Spazio Alpino. Per quanto riguarda la **permeabilità verticale**, esami o corsi speciali consentono ai qualificati in apprendistato di ottenere una qualifica di ingresso per l'istruzione superiore. Inoltre, ci sono programmi in cui gli studenti possono acquisire contemporaneamente una qualifica professionale in apprendistato e una qualifica di ingresso per l'istruzione superiore. Il riconoscimento dell'apprendimento precedente (RAP) (apprendimento formale, non formale o informale) è anche un elemento importante nelle iniziative di permeabilità. Tuttavia, oggi questi metodi non sono stabiliti in modo sistematico in nessuno dei paesi alpini - ad eccezione della Francia con la sua lunga tradizione di utilizzo di procedure di riconoscimento¹⁰ per consentire la mobilità dell'apprendimento, indipendentemente dal contesto delle conoscenze acquisite.

⁸ formazione professionale duale; in questo report, i termini "apprendistato" e "formazione" sono utilizzati intercambiabilmente.

⁹ <https://www.miur.gov.it/processo-di-bologna>

¹⁰ Riconoscimento dell'esperienza professionale (REP) e validazione dell'esperienza acquisita (VAE)

Anche le misure relative alla **permeabilità orizzontale** possono essere analizzate sulla base delle tre categorie menzionate (esami esterni aggiuntivi, modifiche interne di VET e RAP). E' interessante notare che non sono state identificate iniziative o approcci per ulteriori esami esterni per consentire un accesso orizzontale ad altri percorsi/programmi di leFP. Attualmente in nessuno dei paesi alpini sono state stabilite modifiche interne al sistema duale della formazione professionale in modo sistematico, tranne in Austria dove sono implementate come concetti di formazione di apprendistato modulare o come combinazione di diversi programmi di formazione professionale. Al contrario, il RAP è l'approccio utilizzato da molti paesi della regione alpina per consentire la permeabilità orizzontale. Un esempio di ciò è la riduzione della durata della formazione per gli studenti che hanno già acquisito una qualifica con risultati di apprendimento simili.

Per quanto riguarda la **permeabilità internazionale**, RAP è l'approccio più diffuso. Esistono anche altre forme di accordi bilaterali o multilaterali sul riconoscimento reciproco delle qualifiche professionali in quasi tutti i paesi dello Spazio Alpino. Anche le procedure ufficialmente regolamentate per il riconoscimento formale delle professioni e/o dei diplomi sono abbastanza comuni. Al contrario, non sono diffusi ulteriori esami esterni alle istituzioni formative per consentire la permeabilità nella formazione professionale duale tra i paesi delle regioni alpine, fino ad ora. Al di fuori delle Alpi c'è solo un esempio di Istruzione e Formazione Professionale transnazionale: nell'area di confine tedesco-olandese, vengono sviluppati gli standard per un curriculum transfrontaliero¹¹.

Una delle principali sfide per la permeabilità è la diversità nella terminologia e nei concetti delle singole professioni, nei paesi delle regioni alpine. La definizione di una professione in genere è realizzata in stretta cooperazione con gli stakeholder interessati del settore professionale pertinente. La sua descrizione è quindi fortemente influenzata dai fattori contestuali del rispettivo paese (struttura economica, dimensione delle imprese, ecc.). Per questo motivo, più sono diversi i sistemi di Istruzione e Formazione Professionale duale e le relative infrastrutture economiche, maggiore è la sfida di promuovere la permeabilità internazionale.

PROSPETTIVE PER LO SVILUPPO FUTURO DELLA PERMEABILITA' NELLA FORMAZIONE DUALE

Il rapporto evidenzia che ci sono molte opzioni, soprattutto a livello nazionale, per migliorare permeabilità verticale, orizzontale e internazionale nella formazione professionale duale. I paesi dello Spazio Alpino possono imparare tra loro e dalle proprie esperienze per scoprire se e come adottare misure di permeabilità per la loro situazione / contesto nazionale.

In primo luogo, ci sono misure che possono essere prese all'interno di un singolo paese e del rispettivo sistema nazionale di istruzione e formazione. I campi d'azione promettenti sono un grado più elevato di modularizzazione per la formazione professionale duale, creando dei percorsi di Istruzione e Formazione Professionale che combinano la formazione in apprendistato con una qualifica/titolo di ingresso nella formazione terziaria, che consentirebbe l'ammissione a livelli superiori di istruzione per qualifiche e diplomi esistenti e la creazione di un sistema com-

¹¹ Transnationale Berufsausbildung im deutsch-niederländischen Grenzgebiet (TraBbi); BÖTTCHER ET. AL.

2013; <https://www.jobstar-ter.de/de/projektland-karte.php?D=321&F=18&M=137&S=M%C3%BClheimer%20Ausbildungsservice&V=list>

pleto per il riconoscimento dell'apprendimento precedente e dell'esperienza professionale.

In secondo luogo, le iniziative di permeabilità internazionale potrebbero essere di portata più ampia, vale a dire **coinvolgendo più di due paesi**. Attraverso la standardizzazione e la sistematizzazione dei processi di valutazione e accreditamento per le qualifiche e i diplomi nella formazione professionale duale, si potrebbero attivare dei riconoscimenti bilaterali dei titoli a livello internazionale, su più paesi. Un altro approccio si basa sul concetto di cooperazione transfrontaliera, che prevede la definizione congiunta di percorsi di studio e apprendimento che andrebbero a formare una o più "regioni comuni" per l'apprendistato in formazione duale.

Il rapporto fa luce anche sulle aree (all'interno e / o tra i singoli paesi) in cui non esistono opzioni di permeabilità allo stato attuale. Queste **"masse mancanti"** possono essere utilizzate come punti di partenza per

elaborare alcune idee di base sulla permeabilità. Un campo d'azione potrebbe essere quello di utilizzare esami / corsi di formazione aggiuntivi esterni alle Istituzioni Formative per promuovere la permeabilità orizzontale, così come la mobilità internazionale. Potrebbero essere attivati strumenti di collegamento come le cosiddette "passerelle" e/o corsi di formazione successivi (che potrebbero colmare le lacune eventuali delle qualificazioni), per facilitare le transizioni tra i percorsi di Istruzione e Formazione Professionale tra i paesi dello Spazio Alpino.

Allo stesso modo, le modifiche interne alla formazione duale (ad es. combinando la formazione duale e la formazione professionale tradizionale a tempo pieno) potrebbero essere un'opzione per promuovere la permeabilità orizzontale.

SUMMARY (SL)

Dualno poklicno izobraževanje in usposabljanje (PIU)¹² ima pomembno vlogo v sistemih poklicnega izobraževanja in usposabljanja v državah alpskega področja, saj je to ena glavnih poti za začetek lastne poklicne kariere.

"Tradicionalni" koncept vajeništva je bil prvotno zasnovan po sistemu »enosmerne ulice« z edinim namenom, zagotavljanja poklicne usposobljenosti za vajence in takojšnje prehod na trg dela. Kot rezultat, ta pot doslej ni omogočala dostopa do višješolskega izobraževanja. Zaradi prepustnosti, ki ga bolonjski proces omogoča je vajeništvo pridobilo večjo veljavo v družbi saj se je od začetka pa do sedaj veliko spremenilo. To poročilo osvetljuje trenutno stanje prepustnosti v izobraževalnem sistemu na alpskem področja. V ta namen predstavlja vertikala spremembo med ravnmi v obe smeri, horizontala, pa preučuje mednarodno prepustnost med izobraževalnimi sistemi v različnih državah. Poleg tega poročilo vsebuje priporočila za ukrepe za izboljšanje privlačnosti dualnega poklicnega izobraževanja.

Zaradi hitrih sprememb na sodobnih trgih dela in dejstva, da je vedno več ljudi, ki si prizadevajo za vstop v višješolsko izobraževanje, je v vertikalni in horizontali nujno potrebna večja prepustnost. V dualne sistemu poklicnega izobraževanja je potrebno zagotoviti možnosti, ki omogočajo dostop do višješolskega izobraževanja tudi z namenom večje privlačnosti, še posebej v primerjavi z akademskim in / ali programi poklicnega izobraževanja v redni šolski obliki. Trenutna analiza kaže, da obstaja več možnosti za navpični ali vodoravni prehod v

vseh državah alpskega prostora. Glede vertikalne prepustnosti posebni izpiti ali tečaji vodijo diplomante vajeništva na visokošolsko kvalifikacijo. Poleg tega obstajajo programi, v katerih lahko učenci pridobiti oboje, dvojno kvalifikacijo za poklicno izobraževanje in vstop v visokošolsko izobraževanje istočasno. Priznanje predhodnega učenja (RPL) (formalno, neformalno ali neformalno učenje) je tudi pomemben element pri pobudah za prepustnost. Vendar te metode trenutno niso še v veljavi v nobeni alpski državi, razen v Franciji z dolgoletno tradicijo uporabe postopkov priznavanja za omogočanje učne mobilnosti ne glede na kontekst pridobljenega znanja.

Ukrepe v zvezi z vodoravno prepustnostjo je dobro analizirati na podlagi treh omenjenih kategorij (zunanji dodatni pregledi, notranji spremembe poklicnega izobraževanja in priznavanja pridobljenih kompetenc). Najbolj zanimivo je, da ni bilo identificirane pobude ali pristopa za zunanje dodatne preglede, da bi zagotovili horizontalno dostop do drugih poti / programov srednjega poklicnega izobraževanja. Notranje spremembe dualnega poklicnega izobraževanja trenutno niso sistematično opredeljene v nobeni alpski državi – razen v Avstriji, kjer se izvajajo kot koncept usposabljanja modularnega vajeništva ali kot kombinacija različnih programov poklicnega izobraževanja in usposabljanja. Nasprotno pa pristop RPL uporabljajo številne države v alpski regiji, da zagotavljajo vodoravno prepustnost. Primer tega je zmanjšanje trajanja usposabljanja za učence, ki so že pridobili kvalifikacijo s podobnimi učnimi rezultati.

¹² Dual VET; izraz vajeništvo (usposabljanje) se bo v nadaljevanju poročila uporabljal sinonimno

Glede mednarodne prepustnosti je tudi RPL najpogosteje uporabljen pristop. Obstajajo celo nekateri dvostranski ali večstranski sporazumi o vzajemnem priznavanju poklicnih kvalifikacij v skoraj vseh državah alpskega prostora. Uradno urejeni postopki za formalno priznavanje poklicev in / ali diplom so prav tako pogosti. V nasprotju s tem do sedaj za omogočanje prepustnosti dualnega poklicnega izobraževanja in usposabljanja med državami alpskega prostora niso bili uporabljeni dodatni pregledi. Pa tudi zunaj alpskega področja poznamo samo en primer notranje spremembe dualnega poklicnega izobraževanja v obliki mednacionalnega poklicnega izobraževanja in usposabljanja: v nemško-nizozemsko obmejnem območju so razviti standardi za priznavanje čezmejnega življenjepisa.

Eden glavnih izzivov za prepustnost je raznolikost poklicnih konceptov v državah alpskega področja. Poklic je običajno opredeljen natančno v sodelovanju z zainteresiranimi stranmi iz ustreznih poklicnih dejavnosti. Na njegovo sestavo imajo torej velik vpliv kontekstni dejavniki posamezne države (gospodarska struktura, velikost podjetij itd.). Zaradi tega, bolj kot so raznoliki dualni sistemi in gospodarske strukture med državami, večji je izziv spodbujanja mednarodne prepustnosti.

OPCIJE ZA NADALJNI RAZVOJ

Poročilo poudarja dejstvo, da obstaja veliko možnosti, zlasti na nacionalni ravni za povečanje vertikalne, horizontalna in mednarodna prepustnost pri dualnem poklicnem izobraževanju in usposabljanju. Države alpskega prostora se lahko učijo iz izkušnje drugih, da bi ugotovile, ali in kako sprejeti ukrepe prepustnosti za njihov nacionalni položaj / kontekst.

Prvič, obstajajo ukrepi, ki jih je mogoče sprejeti v okviru nacionalnega izobraževanja in usposabljanja. Obetavna področja delovanja so višja modulacija za dualno poklicno izobraževanje in usposabljanje, ki ustvarja nove dodatne kvalifikacije za poklicno izobraževanje in usposabljanje, ki kombinira vajeniško usposabljanje z vpisno kvalifikacijo za HE, le ta pa omogoča sprejem na višje izobraževanje za obstoječe diplomante in vzpostavitev celovitega sistema za priznavanje predhodnega učenja in priznavanje pridobljenih poklicnih izkušenj.

Drugič, mednarodne pobude bi lahko bile v širšem sklopu, vključno z dvema ali več državami. Skozi standardizacijo in sistematizacijo ocenjevanja in akreditacije za pridobivanje druge stopnje poklicnega izobraževanja in usposabljanja so podaljšani tudi postopki za tradicionalno dvostransko določitev mednarodnega priznanja. Drugi pristop temelji na čezmejnem pristopu sodelovanja, kot je usposabljanje za skupno določanje učnih načrtov in učenja "skupna regija vajeništva".

Poročilo osvetljuje tudi področja (znotraj in / ali med državami), kjer niso obstajale možnosti prepustnosti kot obstajajo zdaj. Te "pomanjkljivosti" se lahko uporabljajo kot izhodišča za pripravo nekaterih osnovnih idej o prepustnosti. Eno od področij delovanja je lahko uporaba zunanjih dodatnih izpitov oziroma usposabljanja za pospeševanje horizontalne prepustnosti in mednarodne mobilnosti. Mobilnost bi se olajšala tudi s premostitvenimi pobudami kot so "pasarele" in / ali treningi (tj. ki bi lahko izpolnili kvalifikacije vrzeli). Podobno lahko notranje spremembe dualnega poklicnega izobraževanja in usposabljanja (tj. združevanje dvojnega poklicnega programa in šolskega izobraževanja) spodbujajo horizontalno prepustnost.

2 INTRODUCTION

Policy makers and stakeholders at national and EU level have recognised the important role of dual vocational education in ensuring a smooth transition to work and in promoting entrepreneurship and innovation.

However, countries in the Alpine Space are in very different starting positions. Even long-established dual education systems face challenges such as attracting employers, inclusion of marginalised groups, demographic change and the transformation of work by increasing digitalisation.

The aim of the project is to meet these challenges and to increase the attractiveness of dual vocational education, especially in the craft trades in the Alpine region. The project would like to implement this in three sub-areas: A better orientation, a better training for the trainers and more permeability within and between the educational systems.

Both the vertical permeability to the university system and the horizontal permeability between the countries of the Alpine Space are important for the attractiveness of dual vocational education. The present study considers these two dimensions and gives recommendations for action to improve permeability. Furthermore the aspect of international mobility in form of recognition of formal degrees and non-formal certificates will also be addressed.

The study was commissioned by the Technical University of Rosenheim in cooperation with eight project partners from the six Alpine states and the EUSALP Action Group 3. The report "Dual Systems in the regions of the alpine space", which was carried out by INAPP in cooperation with Action Group 3, was used as a basis for the present study. The expertise of the EUSALP Action Group 3 also contributed to the finalisation of this report.

On the basis of the present study, policy suggestions for improving permeability in the individual Alpine states and internationally were developed in a joint process of the project partners. Based on the recommendations for action in the report, strategic partners for cooperation agreements between educational institutions were identified. Finally, agreements were made between these partners to promote horizontal and vertical permeability. In addition, measures were developed specifically for a smoother transition between vocational education and training and the higher education sector.

The study presents an overview of the current state and the barriers regarding horizontal and vertical permeability within dual vocational education and training in the Alpine Space. In order to reduce such barriers and hindrances it will make suggestions for collaboration options.

Methodically the study is based on an extensive review of the relevant national and international research literature as well as EU policy documents. A fundamental resource within this research context is the CEDEFOP Refernet information on national settings.

In the following chapter three an overview of the current status of the vocational education and training systems – and especially about the apprenticeship systems - in the countries of the Alpine Space is presented.

Chapter four deals with national mechanisms in place to enhance the vertical permeability path in regard of apprenticeship training; chapter five centers around the respective horizontal aspects of permeability. In section six the international facets of permeability are described. In the final chapter conclusions and recommendations are formulated based on the research results.

On a technical note regarding Italy only the autonomous provinces of Trento and Bolzano will be considered as the Italian project partners are located in these regions.

3 DUAL VOCATIONAL EDUCATION AND TRAINING: COUNTRY OVERVIEW

3.1 AUSTRIA

The dual apprenticeship system in Austria is a well established scheme at the upper secondary level of vocational education and training (VET). It exists for a very long period of time and is well regarded among employers and employees. The social partners work together within the system very closely: The Federal Advisory Board on Apprenticeship¹³ for example is an essential body within the apprenticeship system and is composed of representatives from the Austrian Economic Chambers, the Chamber of Labour etc. The main legal basis can be found in the Vocational Training Act¹⁴.

Austria is a country with one of the highest shares of IVET-students at upper secondary level in Europe: about 80 percent of all students are in IVET, half of them in full-time VET schools and colleges, the other half enrolls in dual apprenticeships. At the end of 2018 in total about 108.000 people were enrolled in an apprenticeship in Austria; currently there are about 200 different apprenticeship programmes.

The regular apprenticeship training takes place in the company and the vocational school, whereby the company-based training comprises approx. 80 percent of the training period, the school-based training approx. 20 percent. The usual duration of an apprenticeship is between two and four

years. There are some special forms for specific target groups like the supra-company apprenticeships¹⁵ for unemployed young people having difficulties finding a training company or apprenticeship training in so-called training alliances¹⁶.

The scheme is financed through the enterprises (costs of company-based training and remuneration of apprentices) as well as public funds (school-based education in part-time vocational schools).¹⁷ There are financial incentives for companies looking to become a training enterprise. Companies who want to train apprentices are obliged to provide a suitable learning environment as well as an authorised IVET trainer. There is a contractual agreement between the training company and the apprentice. In regard of the legal status of the apprentice he/she is considered an employee as well as a learner.

The regular form of dual apprenticeship training is open to everyone who has completed the 9-year compulsory education. The minimum age for enrolment is 14 years whereas more than half of the beginners are between 15 and 16 years old; there is no maximum age defined.

¹³ Bundes-Berufsausbildungsbeirat

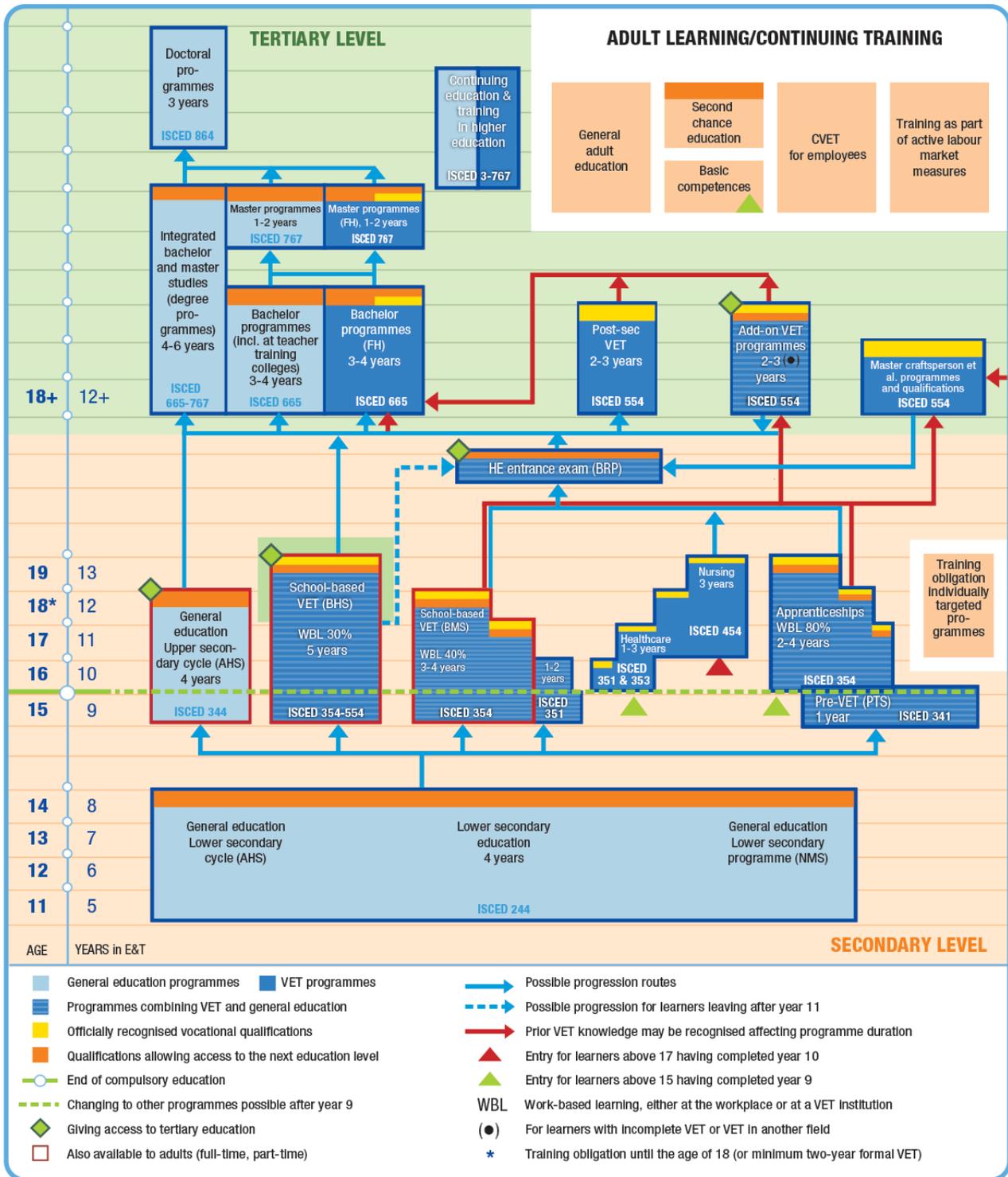
¹⁴ Berufsausbildungsgesetz

¹⁵ Überbetriebliche Lehrlingsausbildung

¹⁶ Ausbildungsverbünde

¹⁷ On the general aspects of financial incentives within the apprenticeship system see e.g. SCHMID 2019

Figure 3-1: Education and training system in Austria



NB: Simplified. ISCED-P2011.
Source: Cedefop and ReferNet Austria, 2019.

3.2 GERMANY

In Germany the apprenticeship scheme is also well embedded within the VET system and can look back on a long tradition. As the case in Austria and Switzerland the social partners are strongly involved in both the design and the offer of vocational training.¹⁸ They for example are involved in the preparation and updating of the training regulations and determine the training remuneration in the context of collective bargaining. Main legal basis is the Vocational Training Act¹⁹.

About 70 percent of the learners in the VET system belong to the dual apprenticeship system. In 2018 about 1.3 million people were enrolled in an apprenticeship, and there are about 325 different apprenticeship programmes available.

The regular dual vocational training takes place in the company and the vocational school, with the company share accounting for around 60 to 80 percent, the school-based part 20 to 40 percent. The training period in most occupations lasts three to three and a half years. There are also some specialised forms of apprenticeship training like the inter-company vocational training centres²⁰ of various forms of training alliances.

The scheme is financed through the companies (costs of company-based training and remuneration of apprentices) as well as public funds (school-based education in part-time vocational schools covered by the Länder governments from their education budgets). Basically there are no financial incentives for potential training companies; yet the training of apprentices offers quite some intangible benefits such as the possibility for enterprises to recruit new and custom-fit employees, an enhancement of the corporate

image as well as social commitment of the training companies.

A contractual agreement between the training company and the apprentice is required. The apprentice is considered in principle an employee; the Vocational Training Act however assigns some specific rights and duties to the apprentices (e.g. the duty to develop their professional competence, performing training tasks as instructed etc.). Training companies must either be personally fit and technically competent to train on their own, or designate a qualified trainer to do so.

The regular dual apprenticeship system is open to anyone who has completed compulsory schooling. Legally there are no specific target groups defined and there is no statutory age limit. About 30 percent of the apprentices are between 15 and 18, around 61 percent

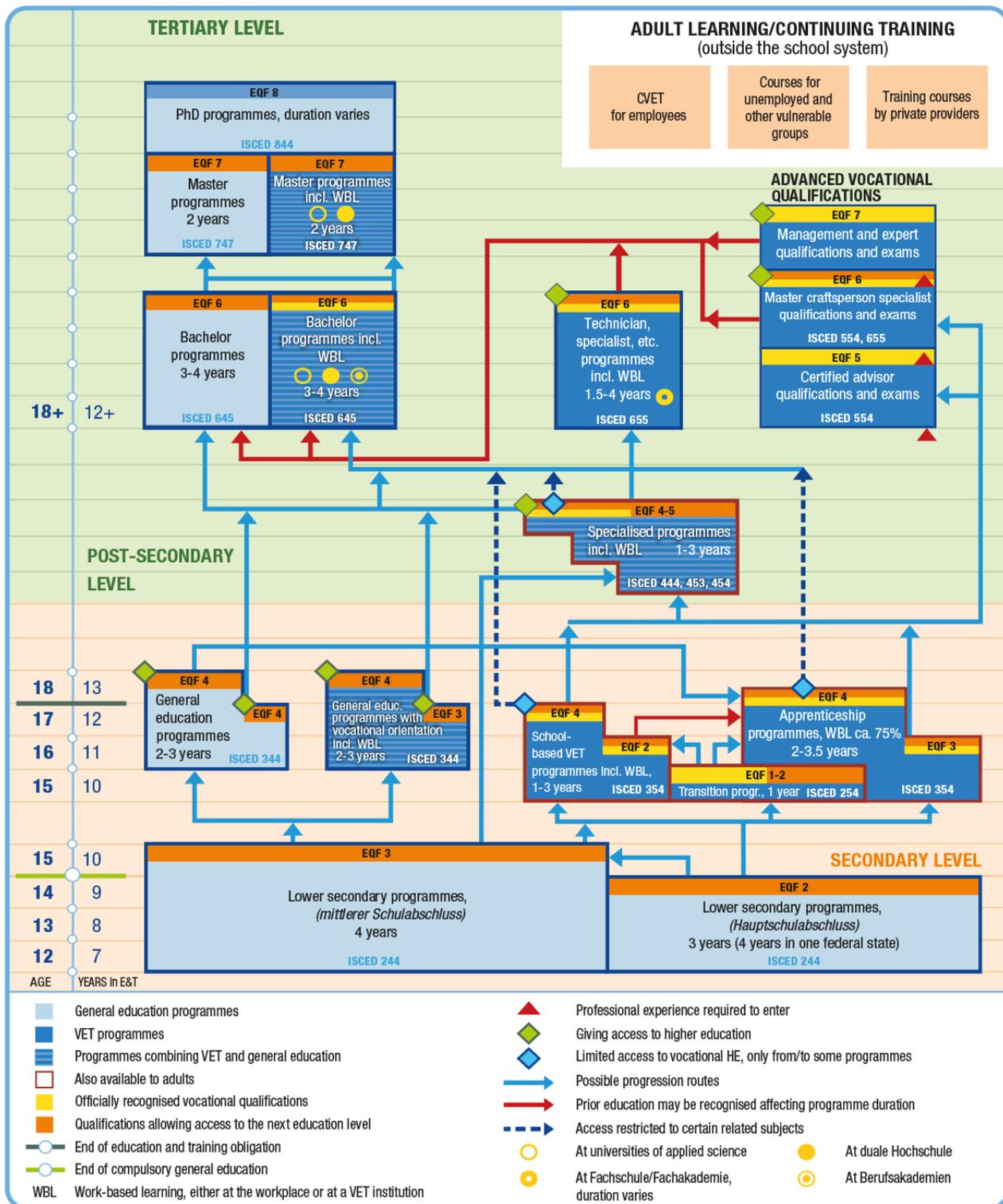
between 19 and 24 and roughly ten percent older than 24.

¹⁸ Regarding recent studies on comparisons of apprenticeships systems and the different approaches within the German-speaking countries see for example BLIEM ET. AL. 2014 and 2016.

¹⁹ Berufsbildungsgesetz

²⁰ Überbetriebliche Berufsbildungsstätten

Figure 3-2: Education and training system in Germany



NB: ISCED-P 2011. This is a simplified chart, based on the unified approach used for the spotlights on VET in all EU-28 countries plus Iceland and Norway. Source: Cedefop and ReferNet Germany, 2019.

3.3 FRANCE

The situation in France is special insofar as apprenticeships basically give access to all levels of professional certification, from upper secondary to higher education. With regard to the “traditional” apprenticeship schemes like the ones in Austria, Germany and Switzerland in France there are two main apprenticeship schemes: the apprenticeship contract²¹ and the professionalisation contract²². The CDA belongs to the initial vocational education and training sector whereas the CDP is part of continuing vocational education and training. The following table 3-3 shows the main differences between the two schemes.

Figure 3-3: Differences between apprenticeship schemes in France

Characteristic	Differences between	
	Contrat d'apprentissage	Contrat de professionnalisation
Age	16 to 30	16 to 26 (and older in case of unemployment)
Area/Aim	IVET (diploma)	CVET (qualification)
Duration in total	Can be an open-ended contract or a fixed-term contract	Can be an open-ended contract or a fixed-term contract
Duration of learning	Varies according to the level of qualification prepared	150 hours per year
Remuneration	Between 27 and 100 percent of the minimum wage depending on age and level of education	Between 55 and 100 percent of the minimum wage depending on age and level of education
Costs for the employer	There is a unique hiring aid (“aide unique à l'embauche pour un contrat d'apprentissage”)	Training and tutoring actions supported by the employer

Source: Own Research

As the other national apprenticeship schemes discussed in this report belong to the VET sector the following information refers to the CDA. Generally speaking the target group of the CDA are young people between 16 to 25 years. The learning process alternates between learning in training centres²³ and stages of work based learning. The main laws regarding apprenticeship are laid out in the sixth part of the French Labour Code.

Funding of in-company training is provided by the businesses, which, in addition to the salary, pay the apprentice and participate directly by paying a lifelong learning tax. The Regions provide financial means for the training centres. There are financial incentives in form of various regional or government subsidies to encourage apprenticeship contracts.

As of 2019 there were about 485,000 individuals enrolled in this scheme whereby there are major regional differences in the numbers of apprentices in France. The CDA obviously represents a minor track regarding the share of this scheme in relation to all VET students. It has been estimated that this percentage is around 10 and 30 percent of all VET students. Depending on the qualification the duration of the CDA generally varies from one to three years.

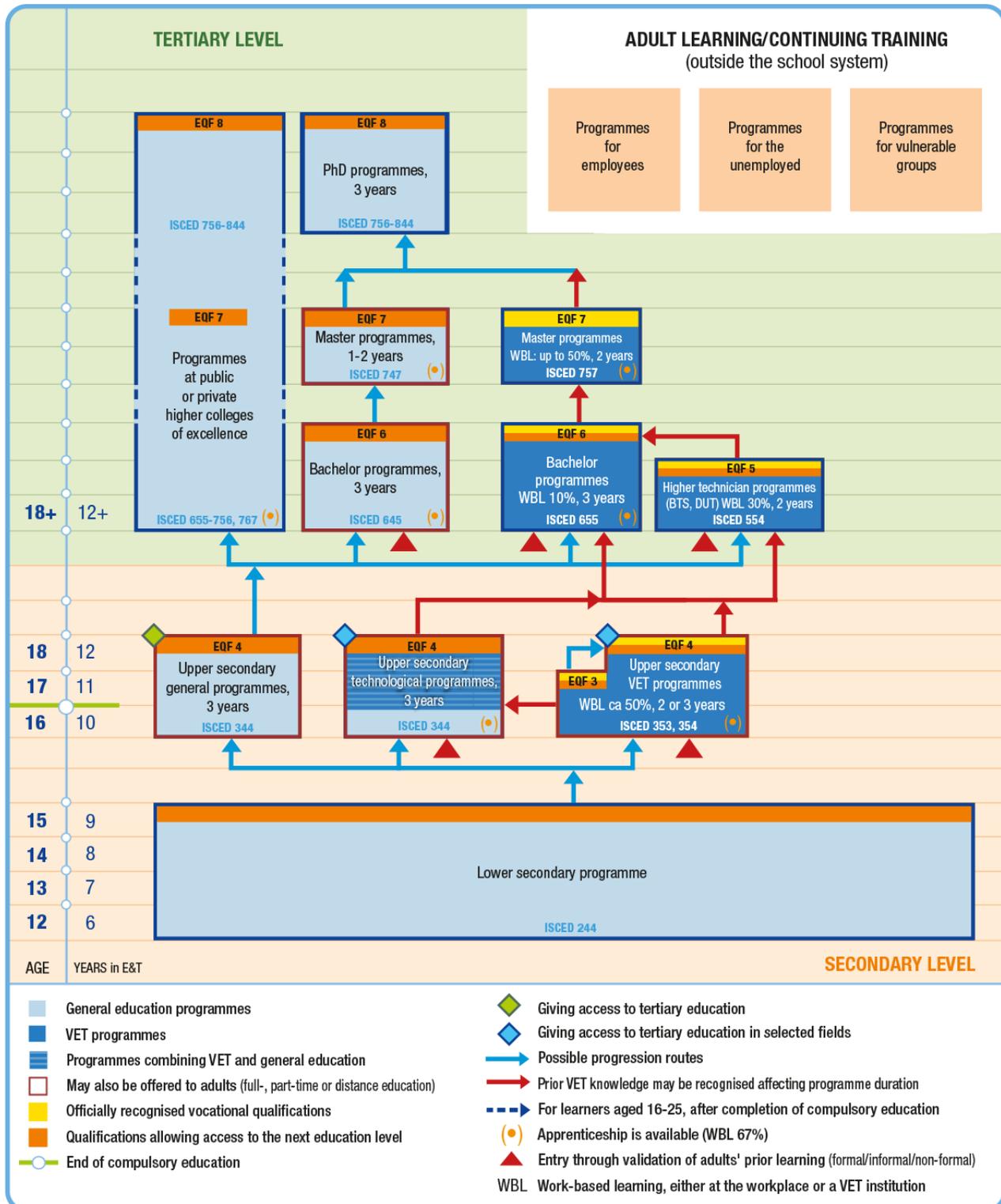
In France the respective qualification/profession defines the amount of learning within a training company: this share can last from about 20 to 25 percent of the total apprenticeship time. A contract between an apprentice and an employer is one of the core principles of the scheme; the apprentices are both employees of a company and students at the CFA and receive remuneration. The training companies have to provide the learning environment as well as learning support.

²¹ Contrat d'apprentissage (CDA)

²² Contrat de professionnalisation (CDP)

²³ Centres de formation par apprentissage (CFA)

Figure 3-4: Education and training system in France



NB: ISCED-P 2011. The French qualification framework is not linked to European qualifications framework levels 1 and 2.

Source: Cedefop and ReferNet France, 2019.

3.4 ITALY: OVERVIEW

In the whole of Italy there are basically three types of apprenticeship schemes in place at the upper secondary VET level²⁴ (Type 1 apprenticeships):

- Apprenticeship for Vocational Qualification and Diploma²⁵ leading to a professional qualification²⁶ or a professional technician diploma²⁷
- Upper Secondary School Diploma²⁸:
- Advanced Technical Specialisation Certificate²⁹

Legally these types of apprenticeship trainings are regulated through Legislative Decree Nr. 81 dated 15 June 2015, Capo V. Another important law at the national level is the interministerial Decree dated 12 October 2015 that defines the training standards and the general criteria for the apprenticeship of type 1 (apprenticeship for vocational qualification and diploma, upper secondary education diploma and high technical specialisation certificate) and type 3 (higher training/education and research apprenticeship).

The apprenticeship schemes are locally regulated by the autonomous provinces through specific State-regions Conference agreements. The amount of theoretical and practical learning content, the specific qualifications offered and the number of training hours are also established by the regions and autonomous provinces according to minimum standards agreed at national level. The duration of the contract is determined by the respective certificate or diploma. These three

schemes are part of the VET system but do not represent the main entry way for young people into the labour market in Italy.

3.4.1 AUTONOMOUS PROVINCE OF BOLZANO

In the autonomous province of Bolzano a well established system of dual VET similar to that in the German-speaking countries exists (in some parts since 1955); apprenticeship training is the predominant vocational training model in this region. The legal basis of (dual) VET can be found in different laws (as for example in Legislative Decree Nr. 81 from 15 June 2015); apprenticeships are supervised by the Provincial Department of Education and Vocational Training. The apprenticeship standards are defined in the training regulations laid down by the provincial government for each apprenticeship profession, including a description of the professional profile, the attainable qualification and the length of the apprenticeship.

The relation of in-company training to learning in the vocational schools is about 80 to 20 percent. The minimum required age for the first type of apprenticeships is 15 years with a maximum age of 25³⁰. There are apprenticeship programmes taking three or four years; the 3-year programmes lead to a certificate of competence³¹, the programmes lasting four years are completed with a professional diploma³². Both program types are concluded with an apprenticeship leave examination.

In some apprenticeship programmes there are too few trainees in the area of South Tyrol

²⁴ Additionally to these apprenticeship schemes on the upper secondary level there are two further schemes in place: Type 2 „occupation-oriented“ apprenticeships (Apprendistato professionalizzante), which are not corresponding to any education level and are leading to an occupational qualification. Then there are the Type 3 or „higher training/education and research“ apprenticeships (Apprendistato di alta formazione e ricerca) leading e.g. to university degrees or other degrees on the tertiary level or are used in the context of research activities. As the subject of this report are only apprenticeship schemes on the upper secondary level, these other

two types of dual qualification routes are not included in the following analysis.

²⁵ Apprendistato per la qualifica e il diploma professionale

²⁶ Qualifica professionale

²⁷ Diploma professionale di tecnico

²⁸ Diploma di istruzione secondaria superiore

²⁹ Certificato di specializzazione tecnica superiore

³⁰ For the other two types of apprenticeship training the age frame is 17 to 29 years.

³¹ Befähigungszeugnis

³² Berufsdiplom

to set up their own apprentice classes³³. The German-speaking South Tyroleans who complete an apprenticeship in these professions are therefore trained in vocational schools in Austria or Germany.

The training companies and the apprentices are legally obliged to sign an apprenticeship contract. The companies must meet certain basic requirements regarding the implementation of in-company training and have a specifically qualified trainer/instructor at their disposal. The apprentices receive financial remuneration during their training. A total of around 3,500 apprentices were registered in South Tyrol in 2016.

3.4.2 AUTONOMOUS PROVINCE OF TRENTO

Regarding apprenticeships based on the dual approach, the Autonomous Province of Trento has only recently started defining the model for attaining a professional qualification and diploma that will come up beside the full-time VET paths, and implemented it for the first time through the so-called “Garanzia giovani”³⁴ project.

This new scheme primarily targets young people aged between 15 and 25 who drop out of training before attaining the final qualification, or who are more hands on, but who would find it hard to find a job without a qualification. Apprenticeships for a diploma or qualification add on to, and do not replace, full-time training paths. It is a new apprenticeship model compared to those designed to date in Trentino.

At the regional legal level there is to mention the the Deliberation Nr. 1398 of 19 August 2019 of the Autonomous Province of Trento that approves the protocol agreement between the province and the trade associations for the adoption of the L.D. n.81 dated 15 June 2015 and the specification of the standards in coherence with the intermi-

nisterial Decree dated 12 October 2015 regarding apprenticeship of type 1 and 3. This agreement regards among other things remuneration, duration of the contracts of apprenticeship, organization of the training, the schemes for the protocol to be signed between the company and the training institution and the individual training plan.

The new apprenticeships last three years for attaining a professional qualification, or four years for attaining a professional diploma. The relation of in-company training to learning in the vocational schools is about 20 to 80 percent.

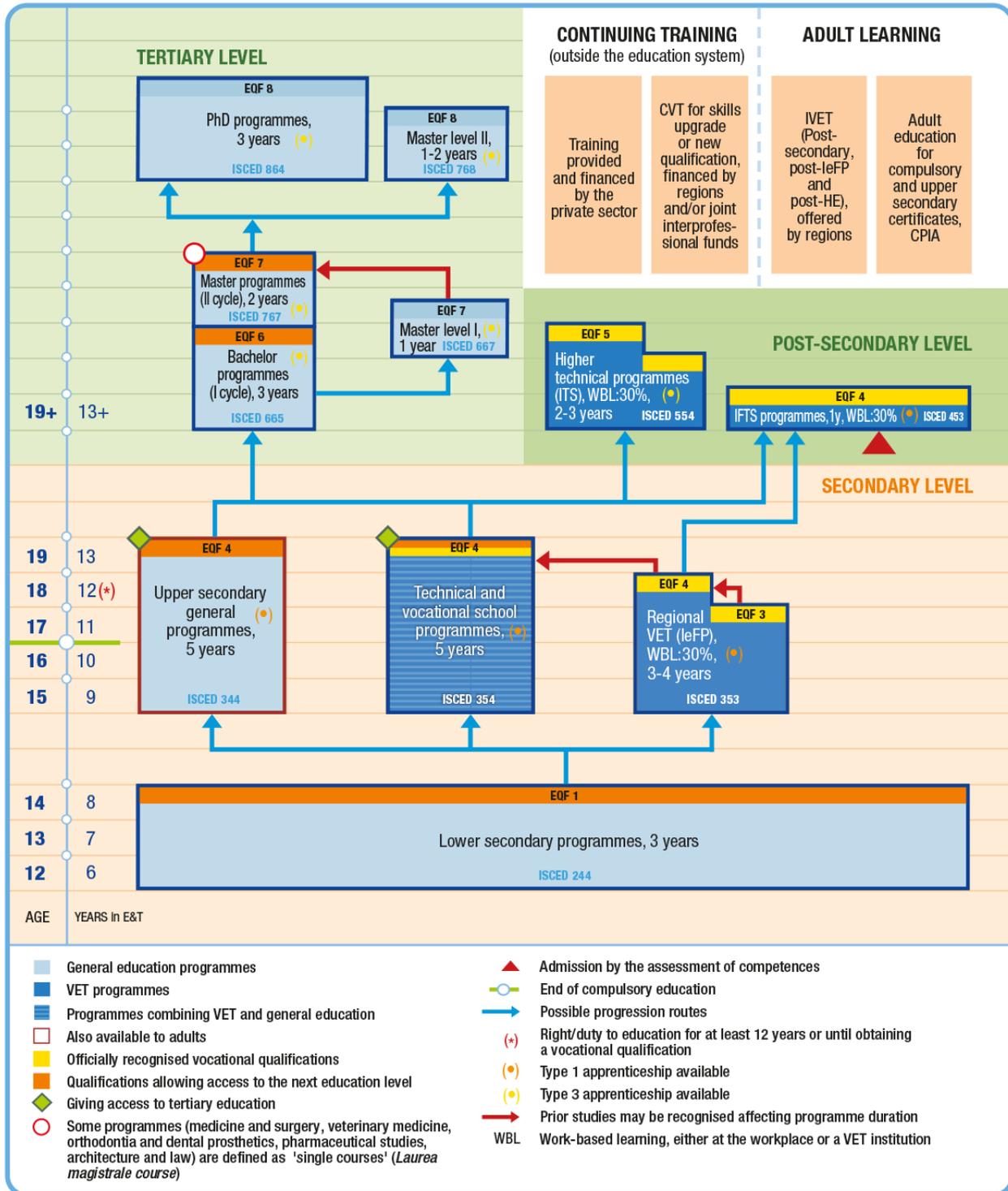
Besides social partners, employers’ associations and training institutions, one of the most important stakeholder within the process is the education department of the Province, which e.g. defines the organisation, specialisations, guidelines and resources involved in the apprenticeship system.

The first dual courses carried out with an apprenticeship contract, according to the aforementioned legislation, were started from the 2016/2017 training year, initially for the acquisition of professional qualifications and diplomas and later also for the achievement of diplomas of Technical education. In the 2018/2019 training year, 73 students attended such dual apprenticeships.

³³ so-called “Splitterberufe”

³⁴ <https://fse.provincia.tn.it/Opportunita-per-le-persone/Garanzia-giovani-nella-Provincia-autonoma-di-Trento>

Figure 3-5: Education and training system in Italy



NB: ISCED-P 2011.
Source: Cedefop and ReferNet Italy, 2019.

3.5 SLOVENIA

It is not possible to make a concluding statement about the current situation of dual VET in Slovenia since a quintessential reform process is currently underway within this sector. This for example concerns the (re)establishment of dual vocational training in the country. The apprenticeship system itself has a long history in Slovenia marked by discontinuance. One can say that it was considered an important training method for young people in craft professions at the beginning of the 20th century, and even retained its position in Yugoslavia after 1946. Due to centralized management however the role of craftsmen, businesses and trade associations decreased.

In 1996 a new dual form of VET was introduced with companies and schools as the provider of VET which included around 50 percent of work based training. As this scheme proved to be not successful these dual programs were abolished in 2001.

Finally in the school year 2017/2018 a new pilot apprenticeship scheme implementation started, based on the Apprenticeship Act. The Apprenticeship Act defines the conditions and regulations for the practical training part in the companies. All the other aspects of the apprenticeship scheme (curricula, schools, assessment, final examination etc.) are regulated by the complementary Organisation and Financing of Education Act.

In November 2019 20 schools and 12 curricula are included in the scheme and approx. 340 students signed an apprenticeship contract (which is less than three percent of all upper-secondary vocational students). Those programmes include the following professional areas: Joiner, Stonemason, Metal Sharper-Toolmaker, Gastronomy and Hotel Services, Painter, Industrial Machinery Mechanic, Paper maker, Glassmaker.

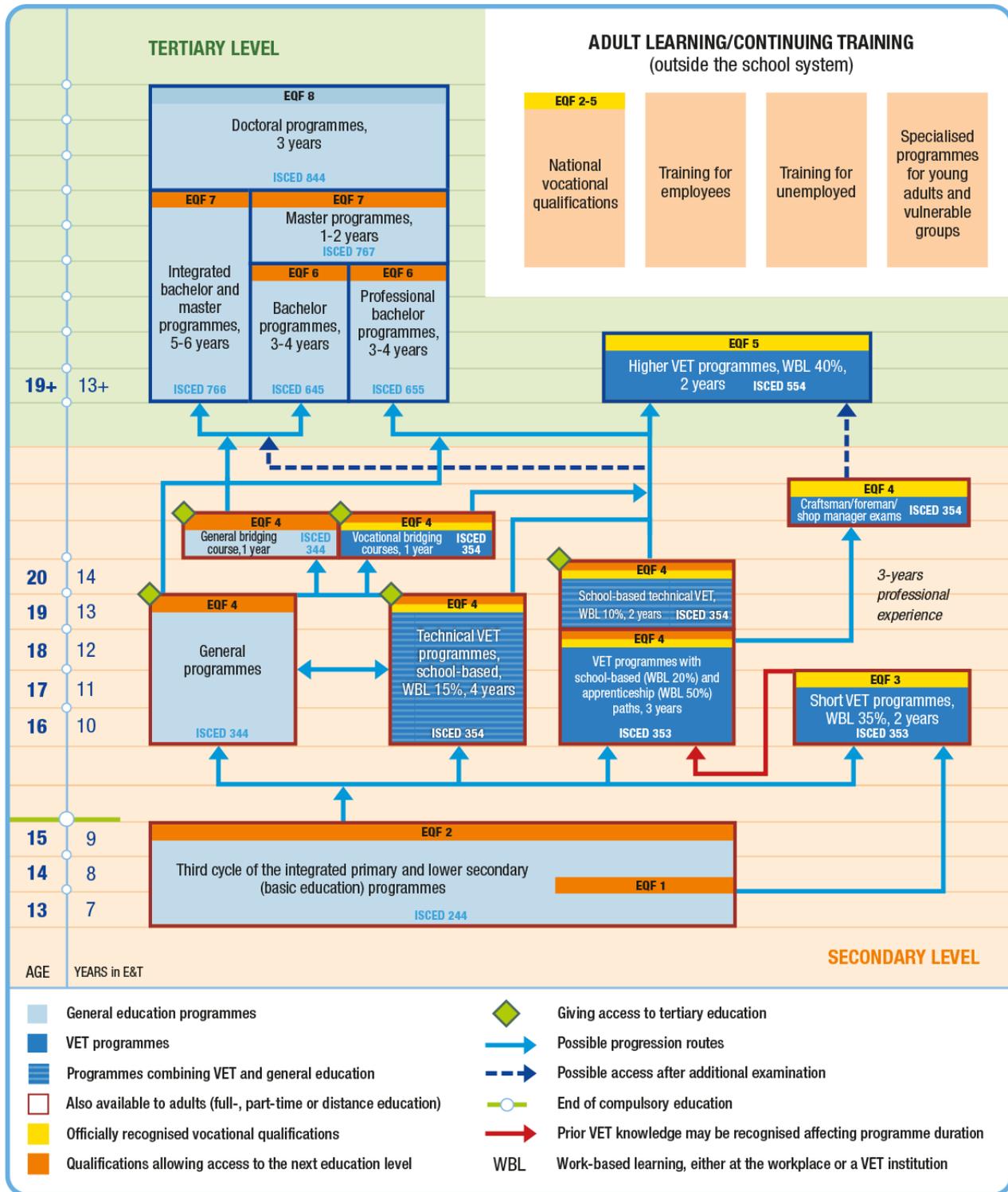
Within the current scheme apprentices must be at least 15 years old. The apprenticeship contracts are not equivalent to employment contracts but apprentices have the same legal status as other students.

On-the-job-trainings can be partially provided by inter-company training centres which are organised by professional schools. These centres are especially important when training companies are not able to provide all the necessary workplace training facilities. Together enterprises and vocational schools design training plans for apprentices and develop methods of cooperation. The ongoing reform also supports the development of flexible and individualised teaching methods and learning pathways.

The Slovenian Institute for Vocational Education and Training (CPI) in cooperation with external experts prepared a training programme for in-company instructors of apprentices. These courses aim to qualify the instructors by imparting knowledge about psychological and pedagogical elements of work based learning and teaching, communication skills, health and safety at work as well as relevant legislation.

The CPI is monitoring and evaluating the whole reform process presented here; whether the apprenticeship scheme will be fully implemented is going to be decided after the evaluation phase in 2021.

Figure 3-6: Education and training system in Slovenia



NB: ISCED-P 2011.
Source: Cedefop and ReferNet Slovenia.

3.6 SWITZERLAND

The dual apprenticeship system is a well established and refined scheme within the Swiss VET system. VET in Switzerland is defined by the Vocational Training Act³⁵ as a “joint task of the Confederation, cantons and organizations in the world of work”. Organizations in the world of work³⁶ include social partners, professional associations, other relevant organizations and providers of vocational education and training.

Within the Swiss VET-system the Swiss Federal Institute for Vocational Training and Education³⁷ has to be mentioned here as a central stakeholder. They offer basic and continuing training to VET professionals, conduct VET research, contribute to the development of occupations and support international cooperation in vocational and professional education and training.

Every year, around two thirds of young people choose to pursue dual vocational training after completing compulsory schooling. In 2019 there have been around 214,000 apprentices in Switzerland with about 250 different apprenticeship programmes offered.

In Switzerland two types of dual VET programmes exist: 2-year courses leading to a federal vocational certificate³⁸ and three to four year courses to be completed with a federal proficiency certificate³⁹. In both cases, completion of compulsory schooling and a minimum age of 15 years are prerequisites for starting training. The proportion of in-company training amounts to between 60 and 80 percent of training duration, the proportion of school-based training between 20 and 40 percent. There are also some special forms of apprenticeship training e.g. in so-called internal training centres⁴⁰, training facilities of a company that are spatially/organizationally separated from the regular area

of production. Some of the professions within the EFZ-system are also organized as exclusively school-based trainings.

In regard to Switzerland, strictly speaking, a “trial” system is in use since in addition to vocational school and training company, there is a third central learning location with the inter-company courses⁴¹ held in industry-specific training institutions. Depending on the profession, these courses last between a few days and several weeks and serve to complement professional practice and school education.

The costs of in-company training are largely borne by the enterprises. In addition, vocational training funds⁴² are an important financing instrument: Organizations in the world of work can create their own funds that transfer financial resources from companies that do not train to training companies. BBFs are typically industry-specific. The public vocational training costs (vocational schools etc.) are financed by the federal government and the cantons, with the cantons accounting for the largest share at about 75 percent of the costs.

Training companies need an education licence⁴³ certified by the cantonal VET office. In order to get such a licence the company must provide a specially qualified trainer and a training schedule. A contractual agreement between the training company and the apprentice is also legally required and the apprentice receives an apprentice remuneration⁴⁴.

³⁵ Berufsbildungsgesetz

³⁶ Organisationen der Arbeitswelt

³⁷ Eidgenössisches Hochschulinstitut für Berufsbildung

³⁸ Eidgenössisches Berufsattest (EBA)

³⁹ Eidgenössisches Fähigkeitszeugnis (EFZ)

⁴⁰ Interne Ausbildungsstätten

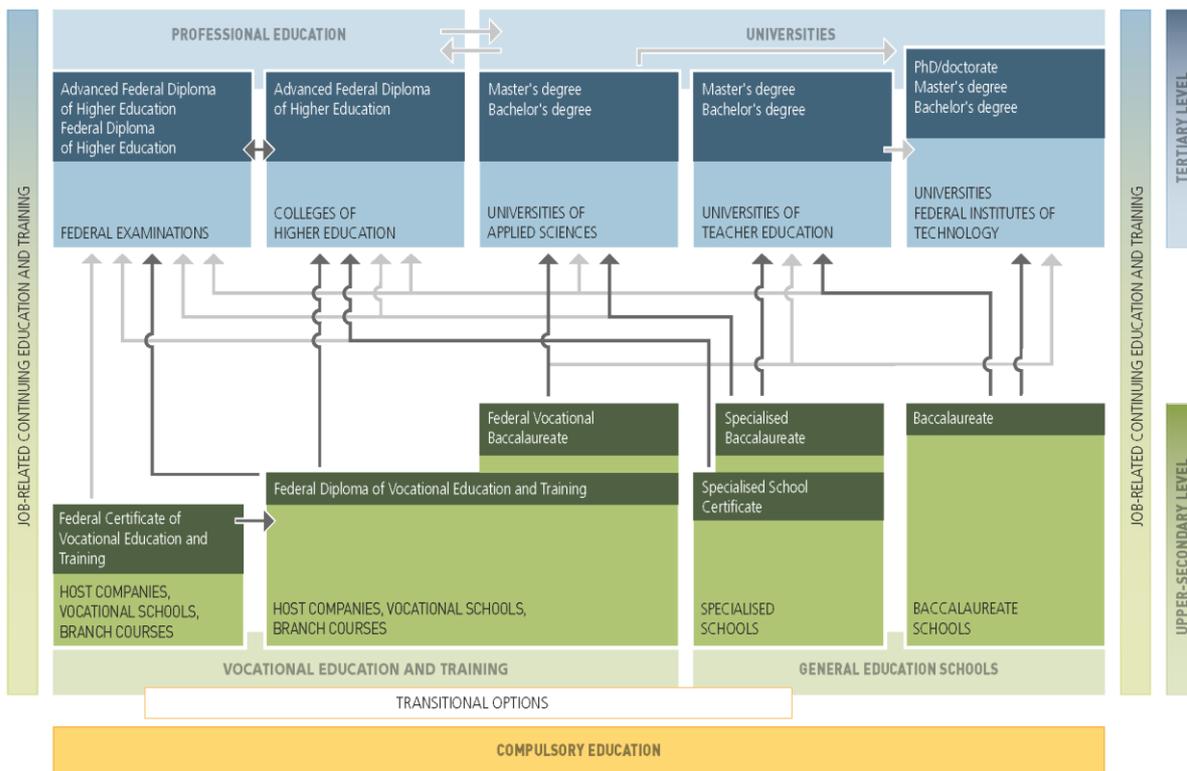
⁴¹ Überbetriebliche Kurse

⁴² Berufsbildungsfonds (BBF)

⁴³ Bildungsbewilligung

⁴⁴ Lehrlingslohn

Figure 3-7: Education and training system in Switzerland



SERI 2016

Source: State Secretariat for Education, Research and Innovation – SERI

4 VERTICAL PERMEABILITY OF DUAL VET REGARDING HIGHER EDUCATION

4.1 AUSTRIA

In Austria access to higher education is available for graduates of apprenticeship training through various options.

4.1.1 VOCATIONAL UNIVERSITY ENTRANCE QUALIFICATION

The vocational university entrance qualification⁴⁵ is a part-time examination that corresponds to a "conventional" university entrance qualification in terms of eligibility and thus gives graduates unrestricted access to universities, colleges, universities of applied sciences, academies and colleges.

A variety of previously completed training paths are envisaged as admission requirements; In addition to completed apprenticeship training this includes, for example, the completion of at least three-year VET course/programme⁴⁶, the completion of the third class of a VET college including three years of professional experience, an agricultural and forestry master craftsman examination. But also people without completed initial vocational training can take up the BRP such as early school leavers with at least three years of professional experience.

The BRP consists of four written and/or oral exams: German, Mathematics, a living foreign language and a professional field. Three of these exams can be taken in parallel to vocational training; the last exam cannot be taken before the candidate reaches the

age of 19, the legally required minimum age for attaining vocational qualification.

The BRP was implemented in 1997; the legal basis is the Federal Law on the Maturity Test.
⁴⁷

4.1.2 UNIVERSITY ENTRANCE QUALIFICATION EXAMINATION

The university entrance qualification examination⁴⁸, which has been in existence since 1985, differs fundamentally from the vocational university entrance qualification, since it only entitles to attend the field of study in which it is taken. It is not possible to switch to another course of study; this would require taking another SBP.

The SBP is available in a total of 16 study groups (e.g. law, social and economic sciences, medical science, technical and natural science studies etc.) and entitles students to study at universities, colleges, universities of applied sciences, colleges or universities of teacher education.

The requirements to participate in this exam include a minimum age of 20 years as well as proof of successful professional or non-professional training beyond the general compulsory education necessary for the desired degree.

Since the SBP is always determined for the respective study subject, the content and

⁴⁵ Berufsreifeprüfung (BRP)

⁴⁶ Berufsbildende Mittlere Schule (BMS)

⁴⁷ Berufsreifeprüfungsgesetz; <https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10010064>

⁴⁸ Studienberechtigungsprüfung (SBP)

procedure can differ from university to university. Basically, however, the SBP is made up of five exams: a written German exam, two or three compulsory subjects depending on the desired field of study and one or two optional subjects that cover the subject areas of the intended degree. Legal basis of the SBP is §64a of the University Act 2002 as well as the University Law Amendment Act 2009. The SBP has lost in importance significantly since the introduction of the BRP.⁴⁹

4.1.3 **RECOGNITION OF VOCATIONAL TRAINING/PREVIOUS KNOWLEDGE AT UNIVERSITIES OF APPLIED SCIENCES**

Admission to a course of study with a relevant professional qualification is a specific feature of universities of applied sciences in Austria. For graduates of apprenticeship training there is therefore, in addition to the two access routes mentioned above (BRP, SBP), another option for studying at a university of applied science: Section 4 (4) and (7) of the University of Applied Sciences Study Act⁵⁰ stipulate that applicants who are professionally qualified can apply to take the admission procedure for the degree program requested without a matriculation examination - if necessary by taking additional examinations.

These additional exams are based on the compulsory subjects of the university entrance qualification examination (SBP); the scope of these additional exams depends on the training or previous professional knowledge as well as the guidelines of the respective university of applied science. The universities of applied sciences mostly offer preparatory courses for the additional exams.

4.1.4 **SUPPORT PROGRAM "APPRENTICESHIP WITH UNIVERSITY ENTRANCE QUALIFICATION"**

Since 2008 there has also been the possibility to complete the university entrance qualification free of charge and parallel to the apprenticeship enabling general university entrance. Preparations for the exam begin during the apprenticeship; the apprentices can attend preparatory courses free of charge and take partial exams. The individual partial examinations correspond to those of the vocational university entrance qualification (see above.)

In order to continue receiving grants (up to three years after completing the apprenticeship), at least one partial exam must be taken before the apprenticeship leave examination. However, a full degree is only possible after successfully completing apprenticeship training and may be completed at the earliest at the age of 19.

A valid apprenticeship contract is a prerequisite for completing an apprenticeship with a university entrance qualification; entry is possible from the first year of apprenticeship, but can also take place later. With the consent of the training company, the preparatory courses for the matriculation examination can be attended within working hours; the apprenticeship period can also be extended in agreement with the training company. If the training company does not agree, the courses can be attended free of charge outside working hours.

Recent data shows that this measure is well regarded amongst apprentices: In May 2019, round about 9.000 apprentices took part in the "Apprenticeship with university entrance qualification" project. This amounts to approximately five percent of all apprentices choosing this form of training model.⁵¹

⁴⁹ According to Statistics Austria in the winter semester of 2017/18 a total of around 2,500 new students at public universities and universities of applied sciences entered their studies via a BRP, while only just under 290 people

entered their studies using an SBP. (STATISTIK AUSTRIA 2019)

⁵⁰ Fachhochschul-Studiengesetz (FHStG)

⁵¹ DORNMAYR/NOWAK 2019

There is also a special program at the „Kremstaler Technische Lehrakademie“ (KTLA) which combines an apprenticeship training together with a college of engineering diploma.⁵² After successfully signing an apprenticeship contract with a training enterprise – and with the approval of the enterprise – the apprentices can make an application at the KTLA. The training at the KTLA combines a college of engineering education, specializing in mechanical engineering & automation technology, in combination with an apprenticeship in the fields of process technology, plastics technology, metal technology or mechatronics. Entry into the KTLA is also possible for apprentices already further into their apprenticeship training. The recognition of completed apprenticeship years can be taken into account here.

4.1.5 VOCATIONAL ACADEMY

For apprenticeship graduates without a university entrance qualification there has been another option available since 2014 to acquire a tertiary qualification: The vocational academy⁵³ is a project initiated by the Austrian Economic Chamber which offers practice-oriented training and further education at university level (Master of Science - MSc), which was specially developed for apprenticeship graduates working in medium skills level jobs and with several years of professional experience. The courses in question last two years and are offered nation-wide.⁵⁴

4.1.6 EXCURSUS: NON-TRADITIONAL ACCESS TO APPRENTICESHIP

On the one hand here is to mention the exceptional authorization to take the apprenticeship leave examination⁵⁵. In such cases the responsible body allows for applicants to

take the examination without the regular legal requirements if

- either the candidate is at least 18 years of age and can demonstrate that he has acquired the skills and knowledge necessary in the respective profession in a non-traditional way (e.g. through sufficiently long and subject related learning activities or other practical activities or by attending learning courses) or
- the applicant has completed at least half of the apprenticeship training period and there is no possibility for him to sign an apprenticeship contract for the pending training period of the apprenticeship.

On the other hand there are options for graduates with a university entrance qualification to enter an apprenticeship. Currently this subject is a topic of discussion: in addition to various educational policy initiatives⁵⁶, dropouts from higher education are increasingly targeted for entering dual apprenticeships. In Styria, for example, numerous high-tech companies formed a network ("Technical Experts after Matura") and are currently offering training opportunities for this specific target group in the fields of metal technology and mechatronics.⁵⁷

In the state of Upper Austria the initiative "Dual academy" offers a special opportunity for graduates of the higher general education schools who do not want to start studying straight away or have dropped out of the higher education system and want to follow a new career path. This training offer includes various economic and technical subject areas, and the apprenticeships are taught in

⁵² <http://www.ktla.at/>

⁵³ Berufsakademie

⁵⁴ <https://www.wko.at/service/bildung-lehre/Berufsakademie-Bildung-auf-Hochschulebene.html>

⁵⁵ Außerordentliche Lehrabschlussprüfung

⁵⁶ See for example: https://www.ots.at/presseaussendung/OTS_20120925_OTS0258/landertshammer-verkuerzte-lehre-nach-matura-kann-auch-tausenden-studienabbrechern-zu-fundierter-berufsausbildung-vehelfen

⁵⁷ <http://technicalexperts.at/technical-experts/>

compact form within one and a half to two and a half years.⁵⁸

In all efforts, the proportion of apprentices with a university entrance qualification in dual vocational training in Austria is still very low. According to current data from Statistics Austria, in the school year 2017/18 only 2.3 percent of newcomers to apprenticeship training belonged to that group.

4.2 GERMANY

4.2.1 ACADEMIC APTITUDE TEST

The Academic Aptitude Test⁵⁹ enables particularly qualified professionals to obtain a certificate of general higher education entrance qualification that is mutually recognized by all German federal states.⁶⁰ This model is based on a decision of the 1982 Conference of Ministers of Education.⁶¹ The federal states are responsible for deciding to offer such a procedure; this is the case currently in Baden-Württemberg, Bavaria, Berlin, Hesse, Mecklenburg-Vorpommern und North Rhine-Westphalia.

In addition to completing vocational training (including dual vocational training), admission requirements are a minimum age of 25 and - depending on the training completed - a five to seven-year professional practice. The examination consists of a written and an oral part containing German, a foreign language, mathematics, scientific subject areas and various other specialist groups (e.g. natural sciences, technology, history, etc.) according to state law.

4.2.2 DOUBLE QUALIFICATION PROGRAM

This model is currently offered in the city of Hamburg as well as in the federal state of Bavaria and offers the possibility to obtain an apprenticeship training in combination with a university entrance qualification regarding universities of applied sciences.⁶² During the first about two and a half years of this program the participants are trained according to the regular dual VET scheme. In the final part of their training period they are specially prepared to successfully pass the university entrance qualification examination for the universities of applied sciences.

4.2.3 DUAL COURSE OF STUDY

This option allows employees without an university entrance qualification to study at institutions of higher education and is called dual course of study⁶³. Basically there are four different types of these kind of programmes; within the context of this study only the two study variants running parallel to a part-time/full-time job⁶⁴ are relevant. These dual models allow participants with a vocational qualification to attend study programmes at higher education institutions without an university entrance qualification; this scheme takes place either via a part-time or a full-time employment and requires the cooperation of the employer, e.g. in the form of a part-time employment contract or periods of release from work.⁶⁵

4.2.4 UPPER VOCATIONAL SCHOOL

Education at upper vocational schools⁶⁶ is currently offered in the federal states of Baden-Württemberg, Bavaria, Berlin, Lower

⁵⁸ <https://www.wko.at/Content.Node/kampagnen/dualeakademie-oe/start.html>

⁵⁹ Begabtenprüfung, also called Begabtenabitur

⁶⁰ <http://www.abi-nachholen.de/begabtenpruefung.html>

⁶¹ https://www.kmk.org/fileadmin/Dateien/veroeffentlichungen_beschluesse/1982/1982_05_28-Pruefung-Hochschulzugang_bes_befaehtig_Berufstaetige.pdf

⁶² In Hamburg this scheme is called „Dual plus Fachhochschulreife“ (<https://hibb.hamburg.de/bildungsan->

[gebote/hoehere-bildungsabschluesse/dual-plus-fachhochschulreife-2/](https://hibb.hamburg.de/bildungsan-gebote/hoehere-bildungsabschluesse/dual-plus-fachhochschulreife-2/)), in Bavaria „Duale Berufsausbildung mit Erwerb der Fachhochschulreife“ (DBFH) (<https://www.bs-kronach.de/index.php?id=163>)

⁶³ Duale Studiengänge

⁶⁴ Berufsintegrierende bzw. berufsbegleitende duale Studiengänge

⁶⁵ <https://www.duales-studium.de/allgemein/formendes-dualen-studiums>

⁶⁶ Berufsoberschule

Saxony, Rhineland-Palatinate and Schleswig-Holstein. Apprentices can obtain a vocational university entrance qualification⁶⁷ after attending one year at such upper vocational schools; this enables studying at universities of applied sciences. It also opens up the possibility of enrolling at a university but only in study programmes related to the vocational contents of the respective professional qualification.

After two years of attending upper vocational school a general university entrance qualification can be obtained.

4.2.5 MASTER CRAFTSPERSON EXAMINATION

If certain vocational further education qualifications have been achieved by prospective students, they can also serve as a general university entrance qualification: With the decision University access for professionally qualified applicants without a university entrance qualification⁶⁸ of the Conference of Ministers of Education of 2009, master craftsmen, technicians and business administrators⁶⁹ in Germany are granted such an access qualification.⁷⁰

4.2.6 RECOGNITION OF PRIOR LEARNING OR WORK EXPERIENCES: SUBJECT-SPECIFIC UNIVERSITY ENTRANCE FOR THE PROFESSIONALLY QUALIFIED

Also based on the decision of the Conference of Ministers of Education mentioned above there is an option for professionally qualified prospective students⁷¹ who have at least two years of vocational training and at least three years of professional experience - both "in an area related to the desired course of study" -

to obtain a subject-specific university entrance qualification (valid for universities as well as universities of applied sciences). It is up to the respective higher education institution to check and decide whether the professional qualification corresponds to the desired degree.

After determining the suitability of the professional qualification, an aptitude test must also be successfully carried out, which is organized by a university or government agency and determines general and subject-related knowledge in the form of written and oral examinations. The assessment procedure can be replaced by a "proven successfully completed" one-year trial period of study.⁷²

A good overview of the legal regulations on non-traditional university entrance qualifications on level of the federal provinces can be found (in German only) on <http://www.studieren-ohne-abitur.de/web/laender/>.

4.2.7 VOCATIONAL UNIVERSITY ENTRANCE QUALIFICATION

As part of the "Higher Vocational Training" initiative, which aims to increase the permeability between vocational and academic education, the German Confederation of Skilled Crafts, together with the Conference of Ministers of Education, developed a concept for the implementation of a dual-qualification course in 2016. This offer called vocational university entrance qualification⁷³ provides the acquisition of a recognized professional qualification as well as a general university entrance qualification. In order to meet the respective federal circumstances, three different model variants have been developed; all these models have in common that they legally meet the requirements of

⁶⁷ Fachabitur

⁶⁸ Hochschulzugang für beruflich qualifizierte Bewerber ohne schulische Hochschulzugangsberechtigung

⁶⁹ FachwirtInnen

⁷⁰ http://www.kmk.org/fileadmin/Dateien/veroeffentlichungen_beschluesse/2009/2009_03_06-Hochschulzugang-erfol-qualifizierte-Bewerber.pdf

⁷¹ Fachgebundener Hochschulzugang für beruflich Qualifizierte

⁷² https://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2015/2015_09_08-Hochschulzugang-ueber-berufliche-Bildung.pdf

⁷³ Berufsabitur

dual apprenticeship training (four-year duration, company and vocational school locations, trainees are in a training contract).

Since 2017/18 pilot projects have been started in a total of six federal states (Baden-Württemberg, Bavaria, Hamburg, Lower Saxony, Saxony and North Rhine-Westphalia) to test the practicability of the models.⁷⁴

4.2.8 EXCURSUS: NON-TRADITIONAL ACCESS TO APPRENTICESHIP

For graduates with a university entrance qualification apprenticeship training can be shortened by up to one year.⁷⁵ If the previous course of university study and the chosen apprenticeship are related in terms of content, study course content already completed can also be taken into account within the duration of the apprenticeship. Overall, the recognition options vary on federal state level and therefore have to be clarified in individual cases with the support of the training company and the relevant chamber.

The dual vocational training route has traditionally played an important role for school-leavers holding a university entrance qualification in Germany: in 2017, around 29 percent of apprentices with a newly concluded training contract had such a qualification (among the male apprentices this percentage amounted to 25 percent, among female apprentices the respective figure was almost 36 percent). Compared to the overall value of just over 20 percent in 2009, the proportion of those eligible to study entering the apprenticeship system has increased significantly.⁷⁶ The training sectors in which individuals with a university entrance qualification make up a particularly high proportion

of apprentices are the public sector (56 percent) and industry and trade (36 percent).

The topic of high education drop outs (and the subsequent training opportunities) also plays a quantitative role in Germany as a recent empirical study shows: This study by the German Center for Higher Education Research and Science Studies (DZHW) showed that in 2017 the proportion of Bachelor students who did not complete their studies amounted to around 29 percent. Differentiated by type of university, this percentage reached 32 percent at universities and 27 percent at universities of applied sciences.⁷⁷

In 2014, for example, the Ministry of Education launched the initiative "New Opportunities for Drop-outs" in order to attract dropouts to vocational training and thus to train specialists who are urgently needed for the middle qualification levels.⁷⁸ This includes a wide range of measures, such as the creation of an internet platform with information for dropouts⁷⁹, which presents a wide range of training and qualification options both inside and outside the higher education system. Corresponding advisory services for students are currently being set up at central university locations, and in order to remedy the lack of data, the German Center for Higher Education Research and Science Studies has been commissioned with a corresponding survey study.⁸⁰

The Federal Institute for Vocational Education and Training is currently involved in numerous projects and publications on the topic of permeability between vocational and university education.⁸¹ There are also various initiatives at the federal state level to provide drop-outs for prospects of vocational training, for example via the "Landeskoordinierungsstelle Studienabbruch Bayern"⁸².

⁷⁴ POLLMER/ROSER 2016

⁷⁵ <https://www.bundestag.de/resource/blob/436858/6ecd335ae2f9e045a7fa92bb899c23a7/wd-8-042-16-pdf-data.pdf>; <https://www.azubiyo.de/azubi-wissen/ausbildungsverkuerzung/>

⁷⁶ https://www.bmbf.de/upload_filestore/pub/Berufsbildungsbericht_2019.pdf

⁷⁷ HEUBLEIN ET. AL 2017

⁷⁸ <https://www.bmbf.de/de/neue-chancen-fuer-studienabbrecher-844.html>

⁷⁹ <https://www.studienabbruch-und-dann.de/>

⁸⁰ https://www.bmbf.de/upload_filestore/pub/Berufsbildungsforschung_Band_18.pdf

⁸¹ <https://www.bibb.de/de/687.php>

⁸² <https://studienabbruch.bayern.de/kontakt/>

Within the framework of this initiative, "Acquisitors for dropouts" act as an interface between relevant stakeholders (universities, companies, employment agencies, chambers of commerce and industry, etc.) and dropouts and provide the latter with comprehensive support in regard of their transition from university to vocational training.

In Germany there is also the possibility of an exceptional authorization to take the apprenticeship leave examination⁸³. Individuals with professional experience without VET can be admitted to the examination if certain conditions are met:

They have to prove work experience within the profession in which they want to take the exam for the duration of at least one and a half time the length of the respective apprenticeship training period. The professional experience has to be a highly qualified one or rather the same kind also carried out by corresponding professional specialists. Proof of the minimum time of professional activity can be waived in whole or in part, if the candidate can successfully prove the necessary professional competence through any kind of certificates or otherwise.

Individuals can also be admitted to the examination if they can prove their abilities within the profession in question. This can be achieved through work and school certificates, certificates from educational institutions, certificates of uncompleted vocational training or internships etc.

4.3 SWITZERLAND

In Switzerland, the regulations for access to universities via a non-traditional route are structured somewhat differently according to the type of university. In addition, there is a certain cantonal independence in the design options.

4.3.1 ACCESS TO UNIVERSITIES - GENERAL UNIVERSITY ENTRANCE QUALIFICATION FOR ADULTS

The university entrance qualification can be obtained via the "second chance" educational path and enables direct access to universities and – with study field related relevant professional experience - also to universities of applied sciences. The admission to the general university entrance qualification for adults⁸⁴ is very different at cantonal level depending on the private or public school institution offering it and often requires an entrance examination.⁸⁵ For example, the admission requirements for the entrance exam in the canton of Zurich include the following criteria: completed apprenticeship training or at least three years of regulated work, good knowledge of the German language and a maximum age of 40.⁸⁶

The examination in its basic form at regular schools consists of ten basic subjects, one special subject and one additional subject. The scope of the examination for adults varies depending on the provider, but takes at least three years to complete. In addition to the regular format a thesis must be written. The general legal basis is the Regulation on the Swiss university entrance qualification⁸⁷ from 1998, the second chance educational path is legally regulated at the cantonal level.

4.3.2 VOCATIONAL UNIVERSITY ENTRANCE QUALIFICATION AND PASSERELLE

Graduates of a dual apprenticeship who also have a vocational university entrance qualification (whether it is obtained via regular or second chance educational pathways) can take another exam, the so-called "Passerelle" and therefore gain general access to university studies (in regard of the regulation on universities of applied sciences see section

⁸³Zulassung in besonderen Fällen; http://www.gesetze-im-internet.de/bbig_2005/_L_45.html

⁸⁴ Gymnasiale Maturität für Erwachsene

⁸⁵ <https://www.berufsberatung.ch/dyn/show/10549>

⁸⁶ <https://kme.ch/angebot/gymnasiale-maturitaet/#aufnahmeverfahren>

⁸⁷ Verordnung über die schweizerische Maturitätsprüfung

below). The Passerelle examinations are organized by the State Secretariat for Education, Research and Innovation⁸⁸, the legal basis is formed by the guidelines on examination content and procedures published by the Swiss Maturity Commission⁸⁹ as part of the Federal Department of Economic Affairs, Education and Research.⁹⁰

The Passerelle exam is available to everyone with a vocational university entrance qualification; it is made up of two examinations, one part including sciences as well as humanities and social sciences and a second examination in two national languages and mathematics. From a legal point of view it should be noted that the Passerelle-certificate does not legally conform to a university entrance qualification-certificate.

4.3.3 ENTRANCE EXAMINATIONS/SPECIAL ADMISSION PROCEDURES

At some federal universities, in addition to the non-traditional access routes mentioned, there are two further admission procedures for people without regular entry qualifications: These are entrance examinations and special admissions.⁹¹ The universities can autonomously decide on admission requirements with regard to these two admission routes. Target groups for these special admission procedures are people who do not have a Matura or any other regular entry qualification like a Passerelle, a bachelor's degree from a university of applied sciences or teacher training college.

Entrance examinations are currently offered by the University of Zurich, the ETH Zurich, EPF Lausanne and the FernUni Switzerland; these consist of written and oral exams in several high school subjects and are based on

the level of the Swiss university entrance qualification. In principle, everyone without a regular university entrance qualification is admitted to the entrance exams.

Special admission procedures are in place currently at the universities of Bern, Freiburg, Geneva, Lausanne, Lucerne, Neuchâtel and Italian-speaking Switzerland. These procedures are different depending on the faculty and degree program. Minimum requirement is an application dossier and/or an admission interview. In most cases, written and oral exams must also be taken, which may include fields of general education, but can also include contents in regard of the aspired study course. The special admission procedures may be linked to special admission requirements (minimum age, years of professional experience). For example, the University of Bern and the University of Freiburg offer special admission procedures for prospective students aged 30 years or older.⁹²

4.3.4 ACCESS TO UNIVERSITIES OF APPLIED SCIENCES – UNIVERSITY ENTRANCE QUALIFICATION IN COMBINATION WITH PROFESSIONAL EXPERIENCE

Students who have a university entrance qualification and additionally at least one year of professional experience (usually study field related) can be accepted at a university of applied science, taking into account any "Numerus Clausus" regulations. This admission option is legally regulated in the Federal Law on Universities of Applied Sciences⁹³ and is called general university entrance qualification in combination with professional experience⁹⁴.

Depending on the field of study additional admission requirements such as a suitability

⁸⁸ Staatssekretariat für Bildung, Forschung und Innovation

⁸⁹ Schweizerische Maturitätskommission

⁹⁰ Eidgenössisches Department für Wirtschaft, Bildung und Forschung; https://www.sbfid.admin.ch/dam/sbfid/de/dokumente/2017/01/passerelle-richtlinien.pdf.download.pdf/2017_Richtlinien-Passerelle-2012.pdf

⁹¹ Spezielle Aufnahmen; <https://www.berufsberatung.ch/dyn/show/6736>

⁹² https://www.berufsberatung.ch/dyn/get?f=6581-75548-1-spezielle_zulassung_oktober_2019.pdf

⁹³ Fachhochschulgesetz (FHSG)

⁹⁴ Gymnasiale Maturität mit Berufserfahrung

assessment can be necessary. Only in a few fields of study either professional experience is either not required (e.g. applied languages) or this aspect is integrated into the structure of the course (e.g. work-study Bachelor's degree programmes at the Zurich University of Applied Sciences).

4.3.5 **RECOGNITION OF PRIOR PROFESSIONAL TRAINING/EXPERIENCE: ADMISSION SUR DOSSIER**

In Switzerland, sur Dossier procedures describe the admission of qualified persons who have been granted an individual admission procedure and who do not meet the formal admission requirements. It is the responsibility of the universities of applied sciences to approve applications for these kinds of admissions.

The assessment is usually based on a detailed portfolio in which the candidates document their non-formally acquired skills and knowledge. It is then examined whether the applicant commands the necessary skills to successfully complete the study program in question. The basis and prerequisite for this examination is the skills profile of the degree program. The legal regulations regarding sur Dossier procedures are contained in the individual examination and study regulations of the respective university of applied sciences.

4.3.6 **VOCATIONAL UNIVERSITY ENTRANCE QUALIFICATION**

The vocational university entrance qualification⁹⁵ is a federally recognized qualification that combines professional knowledge with a deepening of general knowledge. The training can be completed during or after obtaining the Swiss Federal Certificate of Competence⁹⁶, which corresponds e.g. to the Austrian apprenticeship qualification.

Individuals having a vocational university entrance qualification together with an EFZ in a subject related to the field of study or with at least one year of work experience in a profession related to the field of study are admitted to a Bachelor's degree program at a university of applied sciences. Depending on the field of study, additional admission requirements may be necessary (e.g. aptitude test, internships etc.).

The vocational university entrance qualification is offered in five subject areas: technology, architecture and life sciences; Nature, landscape and food; Economy and services; Design and art; Health and social affairs.⁹⁷ Each of these subject-specific examinations leads to relevant fields of study. The examination consists of a basic part (two national languages, a third language, mathematics) as well as a specific subject-related part. The legal basis can be found in the ordinance on the federal vocational university entrance qualification⁹⁸.

The vocational university entrance qualification is usually acquired in parallel with the apprenticeship (variant 1). However it can also be obtained after completion of the apprenticeship, lasting one year in a full-time variant and one and a half to two years in a part-time form (variant 2). In case of variant 2 admission is granted to anyone who has successfully completed an apprenticeship with a certificate of competence (EFZ) and who has passed an entrance examination.

4.3.7 **EXCURSUS: NON-TRADITIONAL ACCESS TO APPRENTICESHIP**

The so-called "Way-up apprenticeship"⁹⁹ is an option for individuals with a university entrance qualification who want to complete an apprenticeship.¹⁰⁰ This training variant takes only two years instead of the usual four

⁹⁵ Berufsmaturität

⁹⁶ Eidgenössische Fähigkeitszeugnis (EFZ)

⁹⁷ <https://www.berufsberatung.ch/dyn/show/3309>

⁹⁸ Berufsmaturitätsverordnung; <https://www.admin.ch/opc/de/classified-compilation/20080844/index.html>

⁹⁹ "Way-up-Lehre"

¹⁰⁰ <https://www.berufsberatung.ch/dyn/show/65131>

and is currently available for some technical occupational fields (e.g. automation technician, electronics technician, computer scientist etc.), with additional professional options being offered in different cantons. The “way-up” model recognizes and credits the learning achievements at the Gymnasium, extends them with professional practice and subject theory and in this way enables a vocational qualification via a federal certificate of competence¹⁰¹.

As a further training option for graduates with a university entrance qualification, there are special tailored training programs in Switzerland for companies in the private and service sectors. The training lasts one to two years, does not lead to an EFZ, but to a certificate recognized in the relevant professional sector. Not least because of the fairly good remuneration, this is a very attractive and popular training option. A current study shows the importance of dual vocational training for non-traditional target groups: According to the results of this study, 14 percent of those who completed their basic vocational training in 2015 (and were older than 24 when they started their training) have a university entrance qualification, 17 percent a tertiary degree.¹⁰²

Regarding the option of taking an exceptional final apprenticeship examination without completing a regular apprenticeship program there are two schemes in existence. The first is called professional qualification for adults¹⁰³; admission requirement is professional experience to the extent of five years. The candidates can prepare themselves for the examination by either attending the regular vocational schools or by participating in special educational programmes

for adults; they also can prepare for the examination via self-studying.¹⁰⁴

The second option are the so-called qualification procedures with validation of learning experiences¹⁰⁵ for adults without VET, a form of recognition of prior professional experiences to obtain a professional qualification. Adults with at least five years of professional experience - of which three years usually have to be related to the qualification which is to be obtained - can prove their professional skills in form of a validation dossier and thus obtain a formal degree (apprenticeship). The process is divided into five phases: Information and advice, competence assessment, evaluation, validation and certification. If the skills do not meet the necessary requirements, the candidates can acquire these skills in form of additional courses. The validation process is carried out by specially trained and selected experts.¹⁰⁶

4.4 FRANCE

It should be noted at the outset that in France it is possible to achieve educational qualifications at all levels by means of a dual apprenticeship training¹⁰⁷: This ranges from all qualifications at secondary level (Certificate of Professional Aptitude¹⁰⁸, Certificate of Professional Studies¹⁰⁹, vocational university entrance qualification¹¹⁰ etc.) towards vocational qualifications that are anchored in the French system at the tertiary level, such as Advanced Technician Certificate¹¹¹, Technological University Degree¹¹², engineering degrees and degrees from higher commercial schools, as well as qualifications with a professional orientation, which are included in the the National register of professional certificates.¹¹³

¹⁰¹ Eidgenössisches Fähigkeitszeugnis (EFZ)

¹⁰² SCHMID ET. AL. 2017

¹⁰³ Berufsabschluss für Erwachsene

¹⁰⁴ <https://www.berufsbildung.ch/dyn/9481.aspx>

¹⁰⁵ Qualifikationsverfahren mit Validierung von Bildungsleistungen

¹⁰⁶ BBT 2010

¹⁰⁷ Contrat d'apprentissage

¹⁰⁸ Certificat d'aptitude professionnelle (CAP)

¹⁰⁹ Brevet d'études professionnelles (BEP)

¹¹⁰ Baccalauréat professionnelle (Bac Pro)

¹¹¹ Brevet de technicien supérieur (BTS)

¹¹² Diplôme universitaire de technologie (DUT)

¹¹³ L'espace officiel de la certification professionnelle; CE-DEFOP 2008

4.4.1 VOCATIONAL UNIVERSITY ENTRANCE QUALIFICATION

The vocational university entrance qualification (bac pro) was implemented in 1985 and can be achieved after completing an apprenticeship with a Certificate of Professional Aptitude and two further years of training (dual or full school).¹¹⁴ On the other hand there seems to be the possibility of a one-year shortening of the apprenticeship if the apprentice is directly preparing for a bac pro during his training; the bac pro has to be similar in professional content.¹¹⁵

Formally, the bac pro is on an equal footing with the other two types of university entrance qualification (general education and technology), since it also enables a degree at French level IV and the relatively prestigious title "Bacclauréat" is awarded. Thus, the holders of such a bac pro are also given general university access, i.e. that they can apply to universities and technical colleges. Recently there has also been an offer to prepare graduates with bac pro over three years of preparatory courses¹¹⁶ for studying at certain "Grande Ecole" (for graduates of general and technical university entrance qualifications, these preparatory courses take two years).¹¹⁷

The bac pro can either be achieved in the conventional way via training and a final exam or by crediting previous training, (professional) knowledge and skills etc. as part of the VAE procedure (see below). The formal final examination is a national exam like with the other two university entrance qualifications degrees and comprises seven compulsory examinations and a maximum of two

elective examinations.¹¹⁸ The bac pro is legally anchored in the Education Code.¹¹⁹

In this context, it must be critically mentioned that vocational high school graduates have access to the higher education system, but are much more affected by dropouts and changes in studies than the "traditional" graduates of the technological and general educational high school branches. Only 44 percent of university entrants with a bac pro complete their studies, while the success rates for students with a general or technological university entrance qualification are 91 and 71 percent, respectively. At universities in licence courses, the success rate of vocational high school graduates is only around four to five percent (the "licence" corresponds to the bachelor's degree and is generally acquired in three years).¹²⁰

In addition, vocational high school graduates in France still tend to be viewed as the ones "who have not made it" into the technological or general education sector. For this reason, those interested in studying have a competitive disadvantage compared to graduates from other branches of the university entrance qualification when it comes to the selectively allocated places in professionally oriented courses. In order to counter this problem, a law on Higher Education and Research¹²¹ was introduced in 2013, which limits the autonomy of universities in the selection of students. Very good graduates of the vocational university entrance qualification must now also be accepted in the selective vocational courses.¹²²

¹¹⁴ <https://www.cidj.com/etudes-formations-alternance/avant-le-bac/poursuivre-ses-etudes-apres-un-cap>; <http://www.onisep.fr/Choisir-mes-etudes/Au-lycee-au-CFA/Au-lycee-professionnel-et-au-CFA/Le-CAP-certificat-d-aptitude-professionnelle/Apres-le-CAP-poursuivre-des-etudes-c-est-possible>; https://diplomeo.com/bac_pro

¹¹⁵ <https://www.codes-et-lois.fr/code-du-travail/article-16222-22-1>

¹¹⁶ Classe préparatoire aux grandes écoles

¹¹⁷ <http://www.onisep.fr/Choisir-mes-etudes/Apres-le-bac/Que-faire-apres-le-bac/Que-faire-apres-un-bac-professionnel/Des-classes-prepa-speciales-bac-professionnel>

¹¹⁸ <https://eduscol.education.fr/cid47640/le-baccalaurat-professionnel.html#oral>

¹¹⁹ Code de l'éducation; <https://www.legifrance.gouv.fr/affichCode.do?idArticle=LEGIARTI000006526850&idSectionTA=LEGISCTA000006182537&cidTexte=LEGITEXT000006071191>

¹²⁰ See also for example MAETZ 2015

¹²¹ loi "L'enseignement supérieur et la recherche"

¹²² BERNHARD 2017

4.4.2 DIPLOMA FOR ACCESS TO UNIVERSITY STUDIES

It is also possible to obtain higher education entrance qualifications in France through the Diploma for Access to University Studies¹²³, a university entrance exam existing since the 1950s. The DAEU grants the same authorizations that are associated with a "conventional" university entrance qualification. However, the DAEU's quantitative contribution to university admission is extremely small: in 2012, only around 5,600 people obtained such a degree. However, it must be taken into account that through the process of expansion of education in France more and more people have a high school diploma and therefore the need to go to universities via a DEAU is significantly less common.

Depending on the desired future field of study of the participants, the DAEU is offered in two directions, a variant with a linguistic-literary focus¹²⁴ and a variant with a focus on scientific content¹²⁵. The exam is open to candidates who do not have a high school diploma, whose last participation in training was at least two years ago and who were employed for at least two years.¹²⁶ The legal basis of the DAEU can be found in the Decree of August 3, 1994 relating to the diploma of access to university studies.¹²⁷

4.4.3 RECOGNITION OF PRIOR PROFESSIONAL TRAINING/EXPERIENCE

In contrast to the other countries analyzed here, the recognition and crediting of prior education, skills and abilities has played an important role in the permeability of the educational subsystems in France for several

decades. In this context, mention should be made of the individual skills assessment procedure¹²⁸ which was introduced in 1985, a competency assessment process to which all citizens have a legal right in France and which can be completed in over 600 accredited centers nationwide. Such recognition processes are also firmly rooted in the university sector in the form of the Validation of professional experience¹²⁹ and the Validation of acquired experience¹³⁰.

In the 1980s the opportunity was created to gain access to the university through the validation of professional experience and to recognize parts of university courses. This procedure takes place at the universities and is free of charge. Since 2002, the Validation of acquired experience has also been implemented. Through the VAE, applicants can obtain a full university certificate by recognizing skills acquired through professional and/or non-professional activities (e.g. voluntary, political, or trade union engagement).¹³¹ There are standardized procedures for both the VAP and the VAE.

In the case of the VAE, candidates must use a portfolio to document and demonstrate their knowledge and skills acquired over at least three years in relation to the desired university course. This is followed by a discussion with an examination board, which reviews the specialist knowledge and professional competencies of the candidate. The examination board decides whether the application will be granted in whole or in part.

In 2011, around 4,000 people in France had their experience validated in the higher education sector, around 2,400 of whom received a complete certificate as part of the recognition process. Although the number of

¹²³ Diplôme d'accès aux études universitaires (DAEU)

¹²⁴ Celle à dominante littéraire (DAEU A)

¹²⁵ Celle à dominante scientifique (DAEU B)

¹²⁶ <https://www.enseignementsup-recherche.gouv.fr/cid21053/le-d.a.e.u.html>

¹²⁷ Arrêté du 3 août 1994 relatif au diplôme d'accès aux études universitaires; https://www.legifrance.gouv.fr/affichTexte.do?sessionId=A477D3620C1415C83EDA46247FFF246F.tpdj01lv_3?cidTexte=JORFTEXT000000531454&dateTexte=20131007

¹²⁸ Bilan de compétences

¹²⁹ Validation des acquis professionnels (VAP)

¹³⁰ Validation des acquis de l'expérience (VAE)

¹³¹ Further information on VAP and VAE:

<http://www.vae.gouv.fr/espace-ressources/webographie/>; <http://www.vae.gouv.fr/espace-ressources/toute-la-reglementation/toute-la-reglementation-de-la-vae.html>

validations within the higher education system has increased significantly in the past 20 years, these procedures are still more significant quantitatively within VET.

Figures from 2006 show that the approximately 4,000 applications for validation in the university area at that time were spread over only 15 universities:

„This can serve as an indication that it is not necessary for all universities to implement appropriate crediting models, but that it is sufficient if there are some ‘beacons’ that, in the course of the general positioning towards the Life Long Learning, also make appropriate arrangements for crediting skills.“ (KNUST/HANFT 2009, S. 185)

4.5 ITALY: AUTONOMOUS PROVINCE OF BOLZANO

4.5.1 APPRENTICESHIP AND UNIVERSITY ENTRANCE QUALIFICATION

In Italy the university entrance qualification is a state-organized examination¹³². In Bolzano, after completing an apprenticeship in the fields of industry and handicrafts, administration, trade, tourism and personal services, social services and agriculture, one is able to complete such a school-leaving examination. This scheme is called “Annual course for the state exam”¹³³ (CAPES). It is offered in two models:

- On the one hand, since 2015 it has been possible to start a fifth year of training to prepare for the university entrance qualification immediately after completing the dual training in the form of full-time

tuition. The division of subjects is as follows: 70 percent general subjects (languages, mathematics, science, technology, history, society and commerce), 20 percent job-related technology and ten percent of the respective training focus.¹³⁴ The relevant legal resolution can be found here.¹³⁵

- On the other hand, graduates of an apprenticeship who are already employed and working should also be given the opportunity to obtain such a qualification. For this purpose, a pilot attempt was started in the school year 2017/18 to complete the university entrance qualification part-time in the form of a 2-year course. In contrast to the first model, there is an age limit of at most 24 years.¹³⁶ The legislative basis can be seen here.¹³⁷

4.5.2 RECOGNITION OF PRIOR PROFESSIONAL TRAINING/EXPERIENCE

According to a recent publication by CEDEFOP, due to ongoing reform processes the question of the recognition of previous knowledge is currently not a dominant topic in the Italian higher education area. As both the School and University systems are currently dealing with structural reforms concerning their organisation as well as their strategic alignment validation and accreditation processes have not been addressed. There are however ongoing debates about these issues.¹³⁸

4.5.3 EXCURSUS: NON-TRADITIONAL ACCESS TO APPRENTICESHIP

An exceptional admission to final apprenticeship examination is possible for

¹³² Esame di stato

¹³³ Corso annuale per l'Esame di Stato

¹³⁴ <http://www.bozen.berufsschule.it/ausbildung/1068.asp>

¹³⁵ http://lexbrowser.provinz.bz.it/doc/de/200664/beschluss_vom_18_november_2014_nr_1366.aspx?q=&a=2014&n=&in=5&na=

¹³⁶ <http://www.provinz.bz.it/bildung-sprache/berufsbildung/maturafuehrende-lehrgaenge.asp>

¹³⁷ http://lexbrowser.provinz.bz.it/doc/de/207440/dekret_des_landeshauptmanns_vom_12_april_2017_nr_14.aspx?q=&a=2017&n=14&in=22&na=

¹³⁸ PERULLI 2019

- Individuals who completed a job-related 3- or 4-year vocational school¹³⁹ and have subsequently gained professional experience via a re-spective job for at least 12 months are allowed to directly take the final apprenticeship exam for 3-year apprenticeships¹⁴⁰.
- Individuals who completed a job-related 3-year/4-year vocational school and have subsequently gained professional experience via a respective job for at least 18/12 months are allowed to take the final apprenticeship exam for 4-year apprenticeships¹⁴¹.

If the applicant has already completed an apprenticeship qualification in a profession related to the final apprenticeship examination in question, professional experience as noted above is not re-quired.¹⁴²

Internships and work as an assistant do not count as professional experience; work experience of less than two months is not included in the calculation of the 12 or 18 months. Individuals who have completed a vocational school can also be exempted from the theoretical part of the final apprenticeship examination. To do this, they must submit an application to the Office for Apprenticeships and Master Craftsperson Education¹⁴³.

Individuals who have not attended or completed an apprenticeship can take the final apprenticeship exam if they meet the following requirements:

- completion of compulsory education (i.e. at least 18 years old) and
- at least two years of professional experience in a respective occupation regarding 3-year apprenticeships or

- at least three years of professional experience in a respective occupation regarding 4-year apprenticeships.

This particular target group usually has to take an exam regarding the theoretical subjects of the final class of the vocational school. The principal has the option of exempting the candidates from all or parts of this examination.¹⁴⁴

4.6 ITALY: AUTONOMOUS PROVINCE OF TRENTO

4.6.1 APPRENTICESHIP AND UNIVERSITY ENTRANCE QUALIFICATION

As described in the Bolzano section there is the possibility of the annual course preparing for the state exam (CAPES). After getting a professional diploma after four years of VET training the graduate can attend an annual course in order to take the State Exam. If successful the one has access to any type of university.

In Trento there is also a special option of applying to universities of applied sciences¹⁴⁵. After after getting a professional diploma one can attend a course lasting at least 60 hours after which he/she takes a final examination to assess the key competencies achieved in Italian, maths and english. If successful, the student can apply to a university of applied sciences in a study program similar in content to the professional diploma. The reference regulation is the provincial deliberation Nr. 1611 of 18 october 2019.

¹³⁹ Berufsfachschule

¹⁴⁰ Qualifica

¹⁴¹ Diploma

¹⁴² http://lexbrowser.provincia.bz.it/doc/de/197080/dekret_des_landeshauptmanns_vom_3_juni_2013_nr_15.aspx?view=1

¹⁴³ Amt für Lehrlingswesen und Meisterausbildung

¹⁴⁴ http://www.provinz.bz.it/de/dienstleistungen-az.asp?bnsv_svid=1033684

¹⁴⁵ Alta formazione professionale

4.6.2 RECOGNITION OF PRIOR PROFESSIONAL TRAINING/EXPERIENCE

Only recently has an experiment been started which leads to pairing the documents of the state exams (third grade and high school diploma) with a certification of the competences acquired by the student, based on a framework based on the European one.¹⁴⁶

Otherwise see remarks in section 4.5.2.

4.7 SLOVENIA

At the moment it is difficult to make a conclusive statement regarding the situation in Slovenia, since a fundamental reform process is currently underway within vocational education and training with the goal of increasing youth employment rates. For this purpose the (re)establishment of dual vocational training in the country has also been initiated. As a result, there are only very few participants within apprenticeship training at the present time:

“Since school year 2017/18 onwards, some of the SPI¹⁴⁷ programmes have been implemented in a school based and apprenticeship path. Now, in the second school year of implementation, 150 apprentices are enrolled in the first or second year of the programmes, in 20 schools and 8 SPI programmes.” (KNAVS/ŠLANDER ET. AL. 2019, S. 25)

Newer figures from November 2019 show that 20 schools and 12 curricula are included in the scheme and around 340 students signed an apprenticeship contract.¹⁴⁸

4.7.1 VOCATIONAL UNIVERSITY ENTRANCE QUALIFICATION

Graduates of a so-called SPI apprenticeship program¹⁴⁹ have the opportunity to continue with a two-year vocational technical course. When this course is successfully completed the graduates receive a technical or vocational university entrance qualification¹⁵⁰. This degree provides access to universities of applied sciences; if an additional general examination part is successfully completed, access to university studies is also possible.

4.7.2 RECOGNITION OF PRIOR PROFESSIONAL TRAINING/EXPERIENCE

Little information is available on the recognition of competences and skills in the higher education sector; in addition, the current situation seems to be characterized by great inconsistency as the validation of prior learning experiences is completely decentralised and within the competence of the Higher Education institutions. Therefore the procedures in place can differ significantly between different institutions.

Currently an introduction of a uniformly national validation framework for all levels of education is being planned on the basis of the Slovenian Qualifications Framework. Until this plan come into effect the Higher Education institutions retain their autonomy regarding these matters.

Within the Higher Education system there are commonly options for validation of prior learning experiences for the purpose of (re)enrolment in study programmes. This concerns single courses or parts of courses/ modules which can be obtained through validation (the acquisition of a full degree is not an option within those validation processes).

¹⁴⁶ <https://online.scuola.zanichelli.it/competenze/scuola-secondaria-di-primo-grado/che-cose-la-certificazione-delle-competenze/>

¹⁴⁷ „srednje poklicno izobraževanje“ = one of the four types of IVET programmes at upper secondary level in Slovenia

¹⁴⁸ KNAVS/ŠLANDER ET. AL. 2019

¹⁴⁹ "Srednje poklicno izobraževanje", 3-year vocational training programs at the upper secondary level

¹⁵⁰ Poklicna Matura

The awareness about these opportunities however has to be regarded as rather low.¹⁵¹

4.8 SUMMARY

Along researching the possibilities and issues concerning the permeability of dual vocational education and training within the Alpine Space it was decided to use three main indicators classifying these measures.

First there are **options of external additional exams and/or training building on an apprenticeship** like the various versions of vocational university entrance qualifications which are prevalent in all countries. In this case individuals with a completed apprenticeship training – in most cases independent of the amount of professional experience – can take an exam which grants selective or general admission to the higher education sector.

The second option of horizontal permeability identified consists of **internal modifications respectively extensions of dual VET**. These measures therefore combine a “conventional” apprenticeship training with an university entrance qualification resulting in a training outcome which not only provides a professional qualification readily usable on the labour market but also enabling graduates to take up further university studies.

The third opportunity for individuals with a completed apprenticeship training to gain access to the higher education sector lies within the **recognition of prior learning and/or professional experience**. These measures meanwhile are also quite common within the Alpine Space even though at different levels of emphasis.

This summarising analysis makes it quite clear that a wide variety of models and procedures have emerged to enable vertical mobility for apprentices. On the other hand, the necessity of these measures at the same time show that apprenticeship training in its

original logic has been designed as a systemic “one-way street” with the primary aim of preparing graduates for the direct entry into the labor market. This aim has been successful of course, e.g. if one looks at the youth unemployment figures in countries with a strong dual vocational education and training comparing it with other countries. The fact that apprenticeship graduates show a significantly lower risk of unemployment than people without (initial) vocational training also illustrates the success of dual VET.

In times of both professional and educational career-related flexibilization and therefore subsequent lifelong processes of change, this rather “one-dimensional” educational policy concept of apprenticeship however is no longer up-to-date. The number of options for apprenticeship graduates regarding vertical mobility that have now become accessible in the countries of the Alpine region shows that this insight also plays an important role for the responsible actors within the education policy systems.

Especially the validation of prior learning and professional experience presents a wide array of possibilities for moving up within the educational system and providing flexible and individualised educational pathways. These measures certainly can substantially contribute in opening “closed” doors regarding learning mobility. As the example of France with its longstanding tradition of validation processes has shown this methodical approach can be used in a wide range of educational settings whether it is (dual) VET or the higher education sector. Prerequisite for a successful implementation though seems to be a systematic and coordinated course of action involving all the relevant stakeholders. Individualised measures widely differing e.g. between institutions of higher education can make it difficult for learners to successfully keep track and make use of them.

¹⁵¹ <https://vince.eucen.eu/validation-in-europe/slovenia/>

All these three areas of action regarding the vertical permeability of dual VET in addition are a valuable contribution to further enhance the attractiveness of dual apprenticeship trainings and simultaneously strengthen the aspect of equity within the VET system.

Figure 4-1: Aspects of vertical permeability regarding dual VET in the Alpine Space

Country	External additional exams/training	Internal modifications of dual VET	Recognition of prior learning
Austria	<ul style="list-style-type: none"> → Vocational Matura ("Berufsreifeprüfung") → University entrance qualification examination ("Studienberechtigungsprüfung") 	<ul style="list-style-type: none"> → Apprenticeship with Matura ("Lehre mit Matura") 	<ul style="list-style-type: none"> → Entry into universities of applied sciences
Germany	<ul style="list-style-type: none"> → "Begabtenprüfung" 	<ul style="list-style-type: none"> → Vocational Matura ("Berufsabitur") 	<ul style="list-style-type: none"> → Master craftsperson examination ("Meisterprüfung") → Subject-specific university entrance for the professionally qualified ("Fachgebundener Hochschulzugang für beruflich Qualifizierte")
Switzerland	<ul style="list-style-type: none"> → Vocational Matura ("Berufsmaturität") → General Matura for adults ("Gymnasiale Maturität") → Passerelle (in combination with a vocational Matura) 	<ul style="list-style-type: none"> → Vocational Matura ("Berufsmaturität") in combination with an apprenticeship 	<ul style="list-style-type: none"> → Special admission procedures in higher education ("Spezielle Aufnahmen"; "Admission sur Dossier")
France	<ul style="list-style-type: none"> → Baccalauréat professionnel → Diplôme d'Accès aux Etudes Universitaires 	<ul style="list-style-type: none"> → Baccalauréat professionnel in combination with an apprenticeship 	<ul style="list-style-type: none"> → Validation of professional experience ("Validation des acquis professionnels" - VAP) → Validation of acquired experience ("Validation des acquis de l'expérience" - VAE) → Bilan de compétences
Italy	<ul style="list-style-type: none"> → Apprenticeship with Matura 	-	-
Slovenia	<ul style="list-style-type: none"> → Vocational Matura ("poklicna matura") 	-	<ul style="list-style-type: none"> → Possible, but not explicitly systematised (i.e. in competence of HE-institutions)

Source: Own Research

5 HORIZONTAL PERMEABILITY REGARDING DUAL VOCATIONAL EDUCATION AND TRAINING

5.1 AUSTRIA

In Austria there is a legal possibility that people with a certain level of prior education can complete apprenticeship training in a shorter time period. On the one hand there is a general possibility of reducing the training period (regardless whether the completed prior education program is related in professional content to the apprenticeship or not); this option is available for graduates from general secondary school¹⁵², VET college¹⁵³ and VET school¹⁵⁴. If the training company agrees, these graduates can complete an apprenticeship (which has to be at least three years of duration) in a one-year shortened period. This shortening option is also available for someone who has successfully completed an apprenticeship lasting at least three years.¹⁵⁵

Graduates of AHS or BHS can usually skip a school level at the vocational school for apprentices, so that the completion of the vocational school is feasible in the shortened apprenticeship period. In addition, secondary school graduates can be exempted from individual subjects if they already have relevant previous knowledge.¹⁵⁶

An apprenticeship period can also be shortened if job- and training-specific knowledge

relevant for the apprenticeship in question has already been acquired in relevant school-based training or in similar or related apprenticeships. The amount of shortening is specified in the apprenticeship list.

In order to create an even more flexible and permeable apprenticeship system a so-called modular VET¹⁵⁷ was created wherein some apprenticeships are designed as "modular apprenticeships". Candidates attending such modular apprenticeship first complete a basic module before committing themselves to a specific professional field by selecting various main and special modules. Depending on the selection or combination, modular apprenticeships last at least 3 years and a maximum of 4 years.¹⁵⁸

In the five federal provinces Upper Austria, Burgenland, Lower Austria, Salzburg and Vorarlberg there is a scheme installed called "YOU can!"¹⁵⁹. The target group of the program are adults who have several years of professional experience but no formal vocational qualification. It offers a tailor-made route to completing an apprenticeship via recognizing the skills acquired in working life; participants can choose from 23 different vocational fields.¹⁶⁰

¹⁵² Allgemeinbildende Höhere Schulen (AHS)

¹⁵³ Berufsbildende Höhere Schulen (BHS)

¹⁵⁴ Berufsbildende Mittlere Schulen (BMS)

¹⁵⁵ https://www.oesterreich.gv.at/themen/bildung_und_neue_medien/lehre/Seite.333600.html;

https://www.bg-bab.ac.at/formulare/Ausbildungswege_nach_der_Matura.pdf

¹⁵⁶ <https://www.wko.at/service/w/bildung-lehre/lehre-nach-matura.html>

¹⁵⁷ Modulare Berufsbildung

¹⁵⁸ https://www.oesterreich.gv.at/themen/bildung_und_neue_medien/lehre/Seite.333302.html

¹⁵⁹ "DU kannst was!"

¹⁶⁰ https://ooe.arbeiterkammer.at/service/broschuere-nundratgeber/bildung/Projekt_Du_kannst_was_.html

In the region Vorarlberg e.g. there is a training offer called “Host school for the tourist industry”¹⁶¹. After completing the dual four year apprenticeship training graduates receive a regular apprenticeship leaving exam in one of the three optional vocational routes available (“Service and Host Competence”, “Reception and Hotel Management” and “Cuisine and Culinary Competence”) in combination with the degree “Hotel Service Specialist” (a business school degree) as well as certificates for the additional training modules chosen. A vocational university entrance qualification¹⁶² can be added with some extra preparation time.

In Vorarlberg there is also the possibility to attend a “workshop school”¹⁶³: This training option lasts five years and also combines an apprenticeship training with a business school degree further extended by a start-up business examination¹⁶⁴. The project is supported by federal state of Vorarlberg, the Economic Chamber and the Chamber of Labour Vorarlberg as well as the Federal Ministry of Education, Science and Research.¹⁶⁵

The vocational act allows for one apprentice to be simultaneously trained in two apprenticeship training professions. The duration of these types of apprenticeships is calculated as follows: The total duration of both apprenticeships halved plus one year, but not more than four years.¹⁶⁶

The permeability between the different sub-sectors of VET is not easy to track. There is however data provided by Statistics Austria on the educational background of pupils in the first classes of the vocational schools for apprentices.¹⁶⁷ According to this data in the school year 2018/19 about ten percent of the

apprentices attending the first class of a vocational school in Austria have also attended such type of vocational school in the previous school year; these pupils are either repeating a school year or changed their apprenticeship training to a different occupation (a clear distinction between these two groups is not possible on the basis of the available data).

15 percent of the pupils in the first school year changed from a VET school to an apprenticeship, 12 percent are transitioning from a VET college. About seven percent of the new apprentices in 2018/19 have already completed some sort of post-compulsory education; about four percent of this special subgroup has finished a VET school with lasting three to four years.

5.2 GERMANY

In Germany, the specifics of apprenticeships are laid out in the Vocational Training Act; this also regards the duration of the apprenticeship training and any exceptions. For individuals with respective prior learning experiences a reduction of the training duration is possible; if one has already completed some sort of vocational training, the training period can be reduced by up to 12 months.¹⁶⁸

If someone wants to switch from one apprenticeship to a similar or related apprenticeship training and the basic training (usually the first year of training) of the previous and the new apprenticeship is essentially identical, this time - a maximum of 12 months - can be fully taken into account.¹⁶⁹

In the Vocational Training Act there is a paragraph which offers the option of reducing the duration of an apprenticeship without further specification: “At the joint request of

¹⁶¹ Gastgeberschule für Tourismusberufe (GASCHT); <https://www.gascht.at/>

¹⁶² Berufsreifeprüfung

¹⁶³ Werkraumschule

¹⁶⁴ Unternehmerprüfung

¹⁶⁵ <http://werkraum.at/werkraumschule/>

¹⁶⁶ <https://www.bmdw.gv.at/Themen/Lehre-und-Berufsausbildung/Lehrlingsausbildung-Duales-System/LehrberufeinOesterreich.html>

¹⁶⁷ https://www.statistik.at/web_de/statistiken/menschen_und_gesellschaft/bildung/schulen/uebertritte_und_bildungsverlaeuft/index.html; see also LASSNIGG/LAIMER 2013

¹⁶⁸ <https://www.azubiyo.de/azubi-wissen/ausbildungsverkuerzung/>

¹⁶⁹ <https://www.azubiyo.de/azubi-wissen/ausbildungsverkuerzung/>

the apprentices and the trainers, the responsible body has to shorten the duration of the training period if it can be expected that the training objective will be achieved within the shortened period of time.”¹⁷⁰

For graduates with a university entrance qualification or similar qualifications apprenticeship training can be shortened by up to one year.¹⁷¹ If the previous course of university study and the chosen apprenticeship are related in terms of content, study course content already completed can also be taken into account within the duration of the apprenticeship. Overall, the recognition options vary on federal state level and therefore have to be clarified in individual cases with the support of the training company and the relevant chamber.

It was not possible to obtain data on the permeability and exchange within the dual and the school-based VET sector. This task was made difficult by the fact that school-based vocational training is subject to state law provisions and is only uniformly organized nationwide in some areas.

The Federal Institute for Vocational Education and Training was responsible in developing the project DECVET - “Pilot initiative to develop a credit system for vocational training”¹⁷². Its aim is to increase the permeability of the VET system in the form of recognition and crediting of prior professional knowledge, skills and competencies and is tailored especially for the vocational education and training sector. The long-term objective of DECVET is the systematic development and testing of a credit system within the German context. This should enable to record, transfer and credit learning outcomes in a better and more efficient way and help to transfer and credit those outcomes from one part of the VET sector to another. The aim is

ultimately to increase the horizontal as well as the vertical permeability, i.e. both between equivalent educational areas and between educational areas with differing levels. One of the key questions was to identify possible crediting potential at the interfaces regarding the dual apprenticeship system in form of units of learning outcomes.¹⁷³

5.3 SWITZERLAND

In Switzerland it is possible for adults to complete a shortened form of basic vocational training aka apprenticeship training under certain conditions. This is regulated by law in the Federal Act on Vocational Training.¹⁷⁴ A distinction is made between two variants: an individual shortening and an industry-specific shortening.¹⁷⁵ The basic prerequisite for reducing the duration of training is an apprenticeship in a training company that also takes responsibility for the shortened training.

An *individual shortening* of the training period by usually one year is possible for people who already have a first degree (e.g. a Matura) or work experience, whereby the final decision lies within responsibility of the vocational training department in the canton of residence.

The *industry-specific reduction in training duration* is available in individual occupations in the form of special, compressed training courses for adults, which often functions as a second apprenticeship related to an initial professional qualification of the applicant. The necessary prerequisites for these kinds of shortened training options depend on the respective professional field.

In Switzerland there are two different routes of VET: The two year long courses leading to a federal vocational certificate¹⁷⁶ and the

¹⁷⁰ https://www.gesetze-im-inter-net.de/bbig_2005/_8.html

¹⁷¹ <https://www.bundestag.de/re-source/blob/436858/6ecd335ae2f9e045a7fa92bb899c23a7/wd-8-042-16-pdf-data.pdf>

¹⁷² Pilotinitiative zur Entwicklung eines Leistungspunktesystems für die berufliche Bildung

¹⁷³ <https://www.bibb.de/de/4855.php>, BMBF 2010, KÖHLMANN-ECKEL 2012

¹⁷⁴ <https://www.admin.ch/opc/de/classified-compilation/20001860/index.html>

¹⁷⁵ <https://www.berufsberatung.ch/dyn/show/26909>

¹⁷⁶ Eidgenössisches Berufsattest (EBA)

three to four year long courses leading to a federal proficiency certificate¹⁷⁷. There is permeability between these two training courses insofar as individuals who have completed an EBA - depending on the professional field - can enter EFZ-courses in skipping the first year of training.

5.4 FRANCE

As mentioned in the previous chapter in France there is the possibility of accreditation or prior work experience in form of the Validation of acquired experience¹⁷⁸. The VAE allows individuals to obtain all or part of a diploma, drawing on the skills and knowledge acquired during professional and/or extra-professional activity, without necessarily going through a training phase. The diploma or professional title validated is the same as that obtained following a traditional training course; on the diploma it is not mentioned that it was obtained by way of the VAE.

Any member of the workforce (currently employed or not) is eligible to this process. The VAE is a right available to all, with no conditions of age, nationality, status or level of training or qualifications. Only one condition must be met: the applicant wishing to have their skills validated must be able to prove at least three years of activity with a direct connection to the desired qualification. The activities taken into account may be exercised in a continuous or discontinuous fashion, on a full or part time basis. It also takes into account periods of initial or continuing training in the workplace.

All certifications registered on the National Repertory of Vocational Certifications (“Répertoire National des Certifications Professionnelles”) are available through the

VAE-process. The validation decisions regarding VAE are made by a special panel whereby three possible outcomes of the validation process are possible:

- Full validation of the certification: the certification obtained through VAE is the same as the one obtained by other ways (continuing training, initial training or apprenticeship)
- Partial validation: the panel specifies the skills, knowledge and aptitudes to acquire and recommends ways to obtain these skills; guidance may also be offered.
- Refusal of validation¹⁷⁹

Under certain circumstances the duration of the apprenticeship training can be reduced.¹⁸⁰ This change in duration makes it possible, in particular, for young people from general higher education to benefit from a reduction in training duration when they reorient their education towards the vocational path.

5.5 ITALY

5.5.1 AUTONOMOUS PROVINCE OF BOLZANO

In Bolzano there is also the possibility of reducing the duration of apprenticeship training through so-called educational credits¹⁸¹; this option is set forth in the provincial law Nr.12 of 4th July 2012 on the “Regulations for Apprenticeship Training”.¹⁸² Prospective apprentices, for example, who already have relevant professional knowledge or a higher level of general education, can be exempted in whole or in part from compulsory vocational school. This decision is incumbent upon the

¹⁷⁷ Eidgenössisches Fähigkeitszeugnis (EFZ)

¹⁷⁸ Validation des acquis de l'expérience (VAE)

¹⁷⁹ <https://travail-emploi.gouv.fr/formation-professionnelle/certification-competences-pro/vae>

¹⁸⁰ <http://www.ac-clermont.fr/offre-de-formation/lap-prentissage/le-contrat-d-apprentissage/reduction-de-la-duree-du-contrat-d-apprentissage/>; https://www.cci-paris-idf.fr/sites/default/files/dfcta/pdf/documents/fiche_ndeg_7_duree_du_contrat_d_apprentissage.pdf

¹⁸¹ Bildungsguthaben or “crediti formativi”

¹⁸² http://lexbrowser.provinz.bz.it/doc/de/195230%c2%a760%c2%a790/landesgesetz_vom_4_juli_2012_nr_12/ii_abschnitt_span_lehre_zum_erwerb_einer_qualifikation_und_eines_berufsbildungsdiploms_sowie_eines_oberschuldiploms_span/art_7_ber_cksichtigung_individueller_f_higkeiten.aspx

principals of the respective vocational school. Graduates with a università entrance qualification from a 5-year secondary school have to complete only one apprenticeship year and are exempt from the external training. At their own request and in agreement with the employers however, these apprentices can attend the last year of vocational school.¹⁸³

5.5.2 AUTONOMOUS PROVINCE OF TRENTO

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

In professional training it is possible to switch from one path to another through the credit certification system organized by the individual training institutions.

There is also the option of creating individual apprenticeship training plans¹⁸⁴. In this case the training duration can be individually adapted considering the knowledge and competences of the apprenticeship candidate.¹⁸⁵

The "passerelle" is another tool made available to students for permeability not linked to obtaining or immediately recognizing a qualification, but to switch from one path to another for example because of a wrong choice or for reorientation.

5.6 SLOVENIA

As for the ongoing educational reforms and the short period of time the new apprenticeship system has been implemented it was

not possible to obtain any data for Slovenia regarding this specific subject.

5.7 SUMMARY

Analogous to chapter four in this report the same three analytic categories have been used to to classify the options of horizontal permeability within the dual VET systems.

With regard to the use of **additional exams and/or training** to create possibilities of horizontal mobility it was not possible to identify any related schemes. This approach therefore currently seems to be not regarded as a suitable pathway enabling horizontal permeability within dual vocational education and training in the Alpine Space.

The possibility of **internal modifications of dual VET** to enable cross-path mobility was only identified in Austria to some extent. This on the one hand regards the modularization of apprenticeship training. Although this approach has been discussed extensively in the German-speaking countries during the last decade or so the actual implementation of modularized apprenticeship schemes has not really taken place. One of the reasons – and one of the inherent problems of modularization – is the “vocational concept”¹⁸⁶ forming the basis of apprenticeship training in a lot of countries. Although modularization enables, among other things, a quick and flexible consideration of changes in the requirements of the economy, a flexible response to different requirements of learners and the possibility of module sharing there is a risk of weakening the tried-and-tested vocational concept. It is quite widely feared that the level of professional qualification may drop due to modularization processes.

In addition, there is also doubt as to whether an entire job can be broken down into indivi-

¹⁸³ http://www.provinz.bz.it/bildung-sprache/berufsbildung/downloads/BS_4189_061120_Kriterien_Bildungsguthaben.pdf

¹⁸⁴ Piano formativo individuale

¹⁸⁵ <https://www.vivoscuola.it/Schede-informative/Il-piano-formativo-individuale-dello-studente-in-apprendistato-duale>

¹⁸⁶ Berufskonzept

dual parts or modules; further possible disadvantages could be dwindling transparency and acceptance on the part of the companies.

The other possibility to modify dual VET in order to enhance the horizontal permeability lies within the combination of different educational routes, e.g. the combination of a dual apprenticeship training and training at a vocational school.

The **recognition of prior learning / experience** is a method used in almost every country of the Alpine Space with respect to enable (and facilitate) horizontal permeability. In many cases these regulations are legally binding especially when changing between apprenticeship trainings which are similar in content. There are also certain options of individual reductions of training periods, e.g. in case the apprenticeships are not quite that much related contentwise.

Figure 5-1: Aspects of horizontal permeability regarding dual VET in the Alpine Space

Country	External additional exams/training	Internal modifications of dual VET	Recognition of prior learning
Austria	-	<ul style="list-style-type: none"> → Individual projects on federal state level (e.g. combination of dual VET and business school education and training, e.g. GASCHT in Vorarlberg) → Modular apprenticeships 	<ul style="list-style-type: none"> → Legally regulated general reduction of training duration if apprenticeships are related in content/ occupational field → Individual reduction of training duration (if apprenticeships are not related content wise) → Accreditation of learning experiences when changing between different VET routes
Germany	-	-	<ul style="list-style-type: none"> → Legally regulated general reduction of training duration if apprenticeships are related in content/ occupational field → Individual reduction of training duration (if apprenticeships are not related content wise)
Switzerland	-	-	<ul style="list-style-type: none"> → Industry-specific reduction of training duration → Individual shortening of training duration
France	-	-	<ul style="list-style-type: none"> → Validation of professional experience ("Validation des acquis professionnels" - VAP) → Validation of acquired experience ("Validation des acquis de l'expérience" - VAE) → Bilan de compétences
Italy	-	-	→ Educational credits ("Bildungsguthaben")
Slovenia	-	-	-

Source: Own Research

6 INTERNATIONAL MOBILITY

6.1 COUNTRY PROFILES

Within the transnational European context questions regarding the mobility of learners and the recognition of degrees, diplomas and qualifications obviously are very important. In **Austria** there are basically three different types of formal recognition procedures¹⁸⁷:

- Recognition of diplomas, titles and professions
- Recognition and crediting of previous periods of training
- Exceptional admission to the final apprenticeship exam¹⁸⁸

In the first case foreign examination certificates are equivalent to the corresponding Austrian certificates if this has been stipulated in state contracts or in ordinances of the Ministry of Economic Affairs. There are such agreements with Germany, Hungary and South Tyrol. In other cases it is possible to determine equivalence individually by applying to the Ministry of Economic Affairs. The foreign certificate can either be deemed fully equivalent to the respective apprenticeship program or – if the certificate is equivalent for most of the part – applicants are granted access to a reduced form of the final apprenticeship examination.

The recognition and crediting of periods of training is also conducted either formalised through transnational agreements or on an individual basis. The exceptional admission to the final apprenticeship exam is possible for individuals over 18 years of age who have

a significant amount of professional practice or learning experiences (at least the equivalent of half the training time of the respective apprenticeship program).

Finally there is also the option of an informal recognition of prior learning or professional experience: Every employer can assess and recognize acquired skills of employees and consider these in regard of their classification and remuneration. There is no official regulation regarding this method of recognition.

There is also a comprehensive website dealing with every aspect of recognition of degrees and professions in Austria.¹⁸⁹

In **Germany** the Federal Recognition Act¹⁹⁰ has been in force since 2012; it standardizes and extends the procedures for assessing foreign professional qualifications at the federal level. It encompasses the dual training professions, master professions, other advanced training degrees and other professions regulated in specialist laws, such as doctors or lawyers. There is an extensive website dedicated to the recognition of foreign qualifications and diplomas called “Recognition in Germany – Information portal of the German government for the recognition of foreign professional qualifications”.¹⁹¹ The portal is operated by the Federal Institute for Vocational Education and Training on behalf of the Federal Ministry of Education and Research.

Regarding the assessment process for foreign qualifications there are basically three different recognition outcomes:

¹⁸⁷ Gleichhaltung

¹⁸⁸ https://www.wko.at/service/bildung-lehre/Gleichhaltung_Ausland_LAP.html; see also <https://www.bmdw.gv.at/Themen/Lehre-und-Berufsausbildung/Gleichhaltungeinerauslaendischen-BerufsausbildungmitderoesterreichischenLehrabschlusspruefung.html>

¹⁸⁹ <https://www.berufsanerkennung.at/>

¹⁹⁰ Anerkennungsgesetz des Bundes

¹⁹¹ <https://www.erkennung-in-deutschland.de/html/de/>

- Full recognition means that a foreign professional qualification is legally equivalent to the German reference occupation.
- Within a partial recognition a foreign professional qualification is only partially equivalent to the German reference occupation due to substantial differences between the foreign and the German professional qualification. In this case, there are two options in order to still achieve full recognition: successful participating in refresher training or in a compensation measure.
- If the differences between the foreign professional qualification and the German reference occupation are too great there will be of course no recognition.

A bilateral agreement between Germany and France regarding the comparability of diplomas in vocational training is also in existence since the year 2004. There are many other examples of cross-border cooperations regarding mobility and permeability within VET for example in the so-called "Großregion" consisting of Lorraine, the two German federal states of Rhineland-Palatinate and Saarland, the national state of Luxembourg, the Belgian region of Wallonia with the French community of Belgium and the German-speaking community of Belgium.¹⁹²

Part of that initiative was the project "Transnational vocational training in the German-Dutch border area"¹⁹³. The aim of the project was to develop standards in the form of a cross-border curriculum in addition to regular, multi-week internships of German retail trainees in the Netherlands. Along a comparative analysis of the curricula in Germany and the Netherlands, instruments of qualification research were used; the partners on the German and Dutch side (social partners,

training companies, teachers etc.) were involved in the development of the cross-border learning outcome units.¹⁹⁴

In **Switzerland** e.g. there is the initiative "International vocational education cooperation"¹⁹⁵: Through the IBBZ the federal government pursues three interconnected goals: Strengthening Swiss VET in an international context, the promotion of the economic and social development in partner countries as well as successfully positioning Switzerland on an international level. A main focus is on the international recognition of VET degrees and the cross-border mobility of VET parties. The international exchange also serves to identify trends and ensure the quality of Swiss vocational training. Other IBBZ activities include the conclusion of bilateral and multilateral agreements for the mutual recognition of vocational qualifications.¹⁹⁶

For the accreditation of foreign professional qualifications acquired by an apprenticeship the formal procedures in Switzerland are based on an individual approach: Each submitted dossier is evaluated taking into account the applicable legal requirements, the special features of the training and professional experience. If the competent authority identifies significant differences between the Swiss and the foreign training content in the course of the recognition procedure, it can determine additional qualification measures before issuing recognition. This professional upgrading can be completed e.g. in the form of an internship or an aptitude test.¹⁹⁷

Traditionally Switzerland and the Principality of Liechtenstein have far reaching bilateral relations and also work closely together in the area of vocational education and training. Based on a treaty from 2008 e.g. it is ensured that specialists and skilled workers from both countries do not have to over-

¹⁹² https://www.tf-grenzgaenger.eu/index.php?id=1&no_cache=1

¹⁹³ Transnationale Berufsausbildung im deutsch-niederländischen Grenzgebiet (TraBbi)

¹⁹⁴ BÖTTCHER ET. AL. 2013

¹⁹⁵ Internationale Berufsbildungszusammenarbeit (IBBZ)

¹⁹⁶ <https://www.sbfi.admin.ch/sbfi/de/home/bildung/internationale-bildungszusammenarbeit/ibbz.html>

¹⁹⁷ <https://www.sbfi.admin.ch/sbfi/de/home/bildung/diploma/anerkenntungsverfahren-bei-niederlassung/faq.html>

come any additional administrative hurdles to get access to the respective labour market and are also free to attend higher education courses in the respective country.¹⁹⁸

In **France** the International Centre of Pedagogical Studies¹⁹⁹, an institution of the French Ministry of National Education, also provides a website dealing with the recognition process of various kinds of certificates, diplomas or professions.²⁰⁰ The legal principle of equivalence does not exist in France.

As mentioned previous there is a bilateral agreement with Germany regarding the recognition and comparability of diplomas in vocational training.

As also mentioned above there is a treaty involving **South Tyrol** and Austria about the equivalence of apprenticeship programmes;²⁰¹ diplomas obtained in Austria (and Germany as well as Switzerland) are only recognized if they correspond to a South Tyrolean apprenticeship program.²⁰²

There are also recognition procedures to accredit foreign vocational diplomas. During such recognition process the duration and content of the foreign training as well as type and scale of prior work experience are reviewed. If the qualification in question is not sufficient to national standards adaptation measures can be taken; in this case the applicant can choose between exams and internships.²⁰³

6.2 SUMMARY

Figure 6-1 clearly depicts that the measures taken to promote the international aspect of permeability of dual VET in the countries of the Alpine Space lie almost primarily in the field of **recognition of prior learning and/or work experience**.

Most of the countries considered in this study use bi- or multilateral agreements on equivalence of professions and training outcomes. This is a well established way of making sure that a training or profession can also be utilized in another national context. In almost all the countries there also are legally and institutionally regulated procedures to recognize foreign vocational degrees and therefore enable the cross-national mobility of apprentices and other vocationally trained professionals. In some of the countries some sort of individual recognition procedures are also in use in addition to official measures ensuring more flexibility within the process.

One of the main problems in cross-national accreditation procedures are the (sometimes very) different historical developments and therefore national traditions and perceptions of what exactly an apprenticeship training – and in a wider sense the underlying professional/vocational concepts – are standing for (which of course also manifests itself within the respective nomenclature in use). Accreditation in this context therefore always contains some sort of “translation process” between two or more different VET systems. To achieve this process properly without getting “lost in translation” is not an easy task.

¹⁹⁸ <https://www.sbf.admin.ch/sbf/de/home/aktuell/meldungen/meldungen/msg-id-55014.html>

¹⁹⁹ Centre International d'Etudes Pédagogiques (CIEP)

²⁰⁰ <https://www.ciep.fr/en/enic-naric-france/the-equivalence-of-qualifications>

²⁰¹ <http://www.provinz.bz.it/de/dienstleistungen-az.asp?bnsvid=1005340>

²⁰² <http://afi-ipl.org/lehrlingskalender/allgemeine-bestimmungen-grundinfos/#dualeberufsbildung>

²⁰³ <http://www.provinz.bz.it/bildung-sprache/ausbildung-studien-berufsberatung/beruf/berufliche-erkennung.asp>

Figure 6-1: Aspects of international permeability regarding dual VET in the Alpine Space

Country	External additional exams/training	Internal modifications of dual VET	Recognition of prior learning
Austria	-	-	<ul style="list-style-type: none"> → Bi-/Multilateral agreements on equivalence (“Gleichhaltung”) → Officially regulated procedures for formal recognition of professions and/or degrees → Individual recognition of prior learning or professional experience by employers
Germany	-	→ Individual projects (e.g. “Transnational vocational training in the German-Dutch border area”)	<ul style="list-style-type: none"> → Bi-/Multilateral agreements on equivalence → Officially regulated procedures for formal recognition of professions and/or degrees
Switzerland	-	-	<ul style="list-style-type: none"> → Bi-/Multilateral agreements on equivalence → Individual recognition of prior learning or professional experience via dossier
France	-	-	<ul style="list-style-type: none"> → Bi-/Multilateral agreements on equivalence → Bilan de compétences → Individual recognition of prior learning or professional experience
Italy	-	-	<ul style="list-style-type: none"> → Bi-/Multilateral agreements on equivalence → Officially regulated procedures for formal recognition of professions and/or degrees
Slovenia	-	-	-

Source: Own Research

According to the occupational concept that stems the backbone of apprenticeship training, an occupation is a specific bundle of typical tasks and therefore a specific bundle of competences, skills and knowledge which is required to perform these tasks.

As an occupation is defined in close cooperation with the relevant economic actors, esp. companies and sector experts, its composition is highly influenced by contextual factors of the country, e.g. the economic structure, company size, composition of similar

occupations in the sector or occupational field etc.

7 CONCLUSIONS AND RECOMMENDATIONS

As the research results presented in this report show there are a lot of different options to enable and further enhance the permeability within dual vocational education and training systems as well as between different national education systems. The idea that learners should be able to move between different types of education such as academic and vocational and between different educational levels meanwhile is a common conception and generally accepted within the (vocational) education and training landscape. This notion is of course further strengthened by the various European integration initiatives regarding education and training which seek to facilitate the mobility of learners and the work force within the region (as stressed for example in the 2010 Bruges communiqué and the Europe 2020 strategy).

In general the following recommendations can be split in two areas of action:

- First there are measures that can be taken *within a country and the respective national education and training system* to enhance the permeability regarding dual VET (whether this refers to the vertical or the horizontal aspect of permeability).
- On a broader spectrum there is the option of developing *bi- or multilateral initiatives and projects* involving two or more countries in the attempt to enable cross-border training schemes or accreditation procedures.

Speaking of feasible **measures within a national education system** a possible way of strengthening the pathways between apprenticeships can be a more modularized

approach in building a dual VET system: The broad basic training increases the professional mobility of young people; at the same time, they can create a more flexible training for themselves through improved specialization and combination options. Yet, one has to be aware of the limits of modularization as it should not lead to giving up the occupational concept as backbone of dual VET.

Another option, already pursued in some countries of the Alpine Space, is a kind of internal modification of dual VET in the form of an apprenticeship training combined with an university entrance qualification. Thus graduates of dual VET can gain either limited or even general access to institutions of higher education raising the attractiveness of apprenticeship training and at the same time enhancing equity within the education and training system.

As one example from Germany in this report has shown there is also the possibility of opening new admission routes for existing degrees, in this case a higher vocational qualification: Since 2009 the master craftsperson examination in Germany provides general entry into the higher education system (universities, universities of applied sciences). In this case an already existing degree was legally provided with a broadened eligibility and therefore “upgraded” within the education and training system.

Another very important building block of a sustainable permeability process (not just within the vocational training system) is the recognition of learning outcomes and professional experience: Learners must be enabled and encouraged to transfer and build on all types of their prior learning experiences – whether this happened in a formal,

non-formal or informal setting – and regardless where that learning process took place. The respective example of France as presented in this report has shown that such accreditation measures can be successfully implemented for a wide range of educational contexts and settings and even become a legal entitlement enjoyed by quite a large share of the population.

Besides measures taken within a national context there is of course also the **option of bilateral and/or multilateral agreements and approaches**. As has been shown for most of the countries of the Alpine space such agreements have already been in existence for quite a while and have proven their value.

Assessment and accreditation processes can be standardized and systematized to facilitate the recognition procedures of foreign qualifications. In the case of Germany the Federal Government has created a number of support offers; most notably the central information internet portal "Recognition in Germany". After a few clicks, this online tool provides the address of the office responsible for the respective profession making the job for applicants way easier and faster. In addition, this internet platform provides important information on the various legal bases, on the recognition procedures in the individual professions and on available advisory services.

But beside such "traditional" and well tried and tested multilateral pathways there is also an example to be found within this report of innovative cross-border cooperation on apprenticeship trainings. This took place in a so-called "Großregion" encompassing four countries. The relevant stakeholders of this region (social partners, training companies, teachers etc.) together developed cross-border apprenticeship trainings and learning outcomes within the sector of retail as part of a transnational VET project. The key research questions of this project were: Is there a way to compare training and further education professions across national and

system borders? How can these comparisons be used to develop a coordinated, joint, cross-border vocational training course?

The results of this project have shown that a systematic comparison of vocational training across national borders is possible and can form the basis for common, cross-border vocational training schemes. Of course knowledge of the languages in which the curricula are written is essential for carrying out a transnational curriculum comparison. However, just as important, if not more important, is knowledge of the vocational training systems and the historically grown training traditions in order to be able to understand how a curriculum is translated into practical training in the participating countries.

Up to now suggestions have been derived on approaches and options already existing in at least one or the other country of the Alpine Space. Additional hints and ideas for ways on how to enhance permeability may be derived by reconsidering figures 4-1, 5-1 and 6-1 that gave an overview of existing options for permeability according to analytical categories (external exams/training; internal modification of dual VET and recognition of prior learning). At the same time these figures also clearly depict areas/fields where no options exist up to now. Therefore these **"blank spots"** may be used as starting points on elaborating some basic ideas for enhancing permeability.

For vertical mobility no "blank spots" exist. Looking at horizontal mobility it is noticeable that up to now external additional exams/training are not used. Therefore, why not create bridging offers like "passerelles" and/or trainings (that might fill missing qualification gaps) to ease movements between VET tracks? Similarly, internal modifications of dual VET (i.e. combining dual VET and business schools) is used only in Austria in some limited innovative approaches. Why not to create more VET offers that combine VET tracks like dual and full-time schoolbased VET with different contents?

Looking at international permeability, again no systemically established options exist with respect to external additional exams/training. Therefore, why not creating bridging offers like “passerelles” and/or trainings (that might fill missing qualification gaps) to ease recognition and permeability between countries (at least in the Alpine Space and for dual VET graduates)?

To make a long story short: Already a lot of options exist (especially at national level) to enhance vertical, horizontal and international permeability in dual VET. Countries of the Alpine Space might learn from each

other’s experiences and figure out if and how to adopt them in and for their national context. Moreover, “blank spots” might serve as starting points for reflecting on how to create new options. Focus might be given to offering additional external exams/trainings especially for horizontal as well as international permeability.

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