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Changing conceptions of Vocational Education and Training – Results of a survey among European VET experts

Cedefop project 'Changing nature and role of vocational education and
training in Europe' – Working paper 2

DRAFT

The changing nature and role of VET in Europe

This working paper forms part of the Cedefop project 'The changing nature and role of vocational education and training (VET) in Europe'.

The purpose of the project is to improve our understanding of how VET is changing in the countries belonging to the European Union (as well as Iceland and Norway). The project will, over a 3-year period (2016-2018) analyse how vocationally oriented education and training has developed and changed in the last two decades (1995-2015) and on this basis point to the main challenges and opportunities facing the sector today and in the future. Work is divided into six separate but interlinked assignments:

1. The changing definition and conceptualisation of VET.
2. The external drivers influencing VET developments.
3. The role of traditional VET at upper secondary level.
4. VET from a lifelong learning perspective.
5. The role of VET at higher education levels.
6. Scenarios outlining alternative development paths for European VET in the 21st century.

The study takes as its starting point that vocationally oriented education and training is something more than the traditional VET delivered at upper secondary level (in the form of school based education or training, apprenticeships, or combinations of these). Due to the requirements of lifelong learning we can in many countries observe a diversification of VET where new institutions and stakeholders become involved. We furthermore observe an expansion of VET to higher education areas, partly through a reform of existing institutions, partly through the emergence of new institutions. Caused by factors internal to the education and training system as well as by external pressures linked to demographic, technological and economic changes.

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This is a draft, not to be quoted

Changing conceptions of Vocational Education and Training – Results of a survey among European VET experts

1. Introduction

This paper discusses national definitions and conceptions of vocational education and training (VET) in European Union Member States, Iceland and Norway, describes how these definitions and conceptions have changed over the last two decades and speculates about possible future trends.

Why is it actually important to study national definitions of VET? Isn't it like studying an artifact rather than the fact? There are at least four good reasons why this is worth the effort, in particular at the beginning of a large comparative project about the changing nature of VET. Firstly, when we speak about VET in international contexts, compare countries or provide recommendations for new VET policies or practices, we need to be clear about differences in the scope and meaning of VET. Using the same term does not guarantee that we are talking about the same concept. Secondly, commonly agreed international definitions tend to downplay national differences, as they necessarily either restrict or widen the national understandings of VET. This becomes obvious when national reports about VET are compared to country reports from international organisations: they are rarely identical in the scope of the subject. Knowing about the differences between national and international definitions helps to avoid misunderstandings and conflicts. Thirdly, the way we understand VET influences practical and political decisions regarding VET. Fourthly, and following from the previous point, changes in the definition or understanding of VET can be indicative of factual changes, and therefore can guide our hypotheses for further analysis.

There are abundant studies, at least since the 1960s when education became a policy field for international organisations that examine the differences in VET. Numerous typologies of VET systems have also been developed. However, there is little comparative research on the ideas and concepts underlying different VET systems and the terms used. Clark and Winch (2007) provide a rare attempt. They remind us that terminology in one country cannot easily be translated from the language of that country into another language without losing the distinct meaning attached to it. For instance, 'the term "occupation" if used as the translation of the German Beruf misses not only the social status and significance of that term within German society, but also the application of theoretical knowledge to practices and the responsibility that it implies'⁽¹⁾. A proper analysis of such concepts requires both an analysis of the historical discourse using the concept and an analysis of the different social, historical, institutional and political roots of the respective national VET systems. Clark and Winch were able to do this for only a small set of countries. But even if insightful country case studies could be achieved, the questions of how they could be compared remains open. The approach we took was modest in terms of the country details, but extensive in terms of the number of countries covered (see details in Chapter 2).

VET takes many forms, and is certainly the least unitary of educational sectors, if it can be regarded as an educational sector at all. Therefore it is difficult to grasp VET as a single

⁽¹⁾ Clarke, L., & Winch, C. (Eds.). (2007). *Vocational Education - International approaches, developments systems*. Oxon: Routledge, p. 7.

entity and it consistently escapes attempts to be defined as such. Even worse, features traditionally associated with VET are at risk of losing their capacity to define VET. General education usually aims to enhance skills (e.g. literacy or numeracy) that are useful in all occupations, whereas VET aims to develop skills for a particular set of occupations, a specific occupation or even a single enterprise. However, this distinction between generic and specific skills is much contested ⁽²⁾. Often VET includes both general/academic and occupation-specific competences, and many countries have moved towards broader forms of vocational education. General education typically does not intend to prepare individuals for a particular occupation or occupational group, whereas VET clearly does. However, this perspective neither acknowledges the various forms of pre-vocational education nor the number of academic programmes providing access to a limited set of occupations (e.g. in music, art, law, medicine, and other professions). The argument that runs 'If it is university education it can't be VET' is also losing ground, when we think of the increase of 'professional' bachelor, master and doctoral degrees, dual study programmes, and the 'vocational drift' in higher education. Still, one could argue that even though the conceptual distinction between (general) education and (vocational) training is blurring, it lives on in the institutional distinctions that have developed in many countries. For example general education tends to last longer, provides a relatively standardized form of class-room teaching and usually takes place in well-established institutions such as secondary schools or universities ⁽³⁾. However, this is a view that might have been the case until the 1990s. Today's variety of vocational education and training includes conceptual and institutional formats corresponding to what we are used to in general education – in addition to its primal variety. It is probably this diversity together with a nuanced though often diffuse reference to working life, which remains as a common denominator for VET.

VET in Europe covers a huge range. In France it may include a two-year apprenticeship for a master degree in corporate finance at a Grand École with highly selective access as well as the sort of in-company training of a few hours needed to become a housekeeper in a budget hotel chain. VET is considered to include most of the many years of alternating training and work experience needed to become a cruise ship captain as well as a course lasting a few days leading to a forklift driver license as offered by private training organisations. In Finland, VET includes an apprenticeship to become a practical nurse at the age of 50 ⁽⁴⁾, and in Scotland it includes the 'get ready to work' programme which helps young people be better prepared for entering the world of work or further training by, for instance, improving their C.V. and letter writing and interview skills (which can be considered generic skills).

Differences are not only remarkable in terms of types of provisions, but also within supposedly similar types. To take just one example: what is commonly termed 'apprenticeship' differs tremendously between, for instance, Finland, Italy, Germany or the UK. These differences, which have their origin in different social, historical and political backgrounds, sum up to more complex differences at system level, a complexity, which is impossible to explain satisfactorily in a single paper. Given this diversity it is not surprising

⁽²⁾ Streeck, W. (2012). Skill and Politics: General and Specific. In M. R. Busemeyer & C. Trampusch (Eds.), *The Political Economy of Collective Skill Formation* (pp. 317-352). New York: Oxford University Press.

⁽³⁾ Grubb, W. Norton, and Paul Ryan. *The roles of evaluation for vocational education and training: Plain talk on the field of dreams*. International Labour Organization, 1999, p. 11.

⁽⁴⁾ Roughly 80 per cent of all apprenticeship training students in Finland are 25 years or older.

that there are also large differences between what countries perceive as VET in general. Naturally, what one understands as VET in a particular country will certainly depend on how the system is regarded, the parts of the system considered and individuals' particular VET experiences. This describes as much the challenge for international comparisons in the area of VET as the methodological limits of our approach.

As we are interested in an overview on national definitions and conceptions of VET in Europe there is no way around simplifying and modeling. The key restrictions we made were: Firstly, we focused on the prevalent national conception of VET rather than its full diversity and, secondly, we used pre-determined descriptors to characterize VET (see below). Consequently, the results presented here, although they confirm the assumed variety within Europe, only show a limited picture as regards the diversity within countries. In other words, one can always and easily find particular counter examples to the national VET conceptions as categorized in this paper.

After providing some details on the methodological approach in Chapter 2, the paper starts with a discussion about the national terms used for VET and how they influence our understanding of VET (Chapter 3). Chapter 4 compares legal definitions of VET, where they exist. The main part of the paper, Chapter 5, is dedicated to an analysis of differences in national VET conceptions and how they have changed in the last 20 years. The concluding Chapter 6 dares to look into the future of VET.

2. Methods and Data

Between September and November 2016 we asked national VET experts in all European Union Member States as well as Iceland and Norway to respond to a questionnaire with closed and open questions such as 'What is the common term used for VET in your country? Is there a single legal definition or mission statement of VET in your country?' Furthermore, we provided the experts with a pre-structured framework of what we believe are key features of any VET conception (see working paper 1 and Table 4 in the Annex) and asked them to discuss these features for the VET systems in their countries.

The approach could be compared with the sort of tool the police use to put together an identikit picture: we assembled national pictures of VET by using a standard set of components. It might come down to the same result as traditional modeling, but certainly differs in the approach. Traditional modeling takes differences in VET systems (usually focusing on two or three countries) as a starting point, and then presents these as potential models for other countries, whereas we produced 'identikit pictures' (based on a limited set of components) for each country and then looked for similarities among them

The timeframe we examined, 1995 to 2015, was the same as for the other parts of the project, although we realized that for some countries this was too short. The experts we selected for this task were required to have in-depth knowledge about their country's VET system, to have followed the domestic policy discourse on VET for a considerable time and have experience of working comparatively. They came from universities, public and private research organisations and national agencies dealing with VET. Filling in the questionnaire took the experts on average one, but occasionally two full working days. Experts were also

asked to consult peers to review their assessments. In several cases we conducted additional interviews with the experts to better understand the answers provided in the survey. Unless otherwise stated, all the country information presented in this paper comes from this survey. We also consulted 'VET in Europe' country reports from Cedefop to complement the information collected and conducted further research on national level where needed. The authors of this paper carried out the analysis collectively by topics (for all countries) and groups of countries (for all topics). SPSS was used for the cluster analysis.

3. National terms used for VET and how they shape our understanding

It may look odd to ask people 'What is the common term used for VET in your country?' when there is a widely used official translation for VET in almost all European languages as provided and continuously updated by Cedefop for many years (5). But there is an essential difference between the work of international terminologists in this regard and our interest here. International terminologists usually start with an internationally agreed concept and its definition in one or another language and then translate this concept into other languages. Their intention – and also the benefit of their work – is the standardisation of terminology and the harmonisation of national concepts or systems of concepts. As regards translation, they aim for the best fit of the international concept in the national language. In contrast, we are interested here in national concepts broadly associated with VET and the terms commonly used for these concepts at national level (6). Hence, we address here the main discourses in the countries that shape these 'national terms', such as the discourse of policy makers, the legal discourse, the discourse of researchers, VET teachers and trainers and other VET practitioners.

As a starting point we have deliberately chosen the term VET, because it is the term most frequently used by Cedefop and the European Commission as well as in the dialogue between European countries. In this respect our survey might have been biased as we did not 'test' related terms such as TVET – Technical Vocational Education and Training (used by UNESCO) or CET – Career and Technical Education commonly used in the US. While it is clear that TVET is frequently used in international development contexts, we have no evidence that TVET or CET are terms officially used at national level in Europe.

The difference between the international concept and the national concept is often revealed when terms are being retranslated (a common method to check the quality of translations). For instance, Cedefop translates vocational education and training into *Berufsbildung* (7) (in German) or *Yrkesutbildning* (in Swedish), which are also the most common terms used in

(5) Cedefop (2014). *Terminology of European Education and Training Policy. Second edition. A Selection of 130 Key Terms*. Luxembourg: Publications Office of the European Union. http://www.cedefop.europa.eu/EN/Files/4117_en.pdf.

(6) Nevertheless it is also worth studying both the differences in approaches of international agencies (for instance UNESCO's use of *TVET* – Technical Vocational Education and Training and Cedefop's or OECD's use of *VET*) and the historical changes in the definitions provided (see also working paper 1).

(7) A previous version of Cedefop's Glossary used the more literal translation 'Berufliche Aus- und Weiterbildung' which actually comes closer to the meaning of VET, but is less frequently used.

Austria (and Germany) and Sweden and thus the best match one can get. However, ministries of education in Austria and Sweden translate *Berufsbildung* and *Yrkesutbildning* on their official English websites as Vocational Education—accidentally or intentionally – omitting the extension ‘and Training’. This could either be dismissed as quibbling or bad translation or it could be interpreted as an indication that the Austrian and Swedish concepts of VET underline more clearly the educational aspect of VET. The consulted country experts confirmed our interpretation and provided even further evidence that this was exactly how these terms are being used at national level. A similar situation we find for the terms *Erhvervsuddannelse* (Danish), *Kutseharidus* (Estonian), *Kształcenie zawodowe* (Polish), *poklicno izobraževanje* (Slovenian) or *Szakképzés* (Hungarian). But while the common Danish and Hungarian terms are correctly ‘retranslated’ into vocational education and training (at least on the websites of the ministries in charge) they also emphasise initial VET in the national context. The term *Szakképzés* is clearly associated with the Hungarian apprenticeship systems and *Erhvervsuddannelse* usually refers to three different paths of IVET in Denmark (CVET is referred to as *Arbejdsmarkedsuddannelser* – AMU in Denmark). Again, it could be argued that these are just inaccurate translations, and that in many European national languages it is impossible to accurately express the international concept of VET. However, our survey provides clear evidence that the common national terms used for VET in many countries denote a concept of VET which differs from the internationally intended meaning accentuating ‘initial education’ rather than a more comprehensive notion of ‘initial and continuing education and training’ (see also Table 1 in the Annex).

The distinction between *education* and *training* ⁽⁸⁾ is pervasive in many languages, yet with different nuances, for instance *Bildung* and *Ausbildung* in German or *Kutseharidus* and *Kutseõp* in Estonian. However, it is most notably countries with Romance languages that use constructions that come closest to the syntax of the English expression: *Enseignement et formation professionnels* in France and Luxembourg, *Ensino e Formação Profissional* in Portuguese, *Educație și formare profesională* in Romanian or *istruzione e formazione professionale* in Italian. An interesting exception is Spain. The common term used for VET in Spain (and also Cedefop’s translation) is *formación profesional*. The term accentuates initial VET, and is clearly associated with the English term ‘Training’ in Spanish rather than with ‘Education’ (*Educación* in Spanish) (see Table 2 in the Annex for more examples and details).

Another exceptional case is Ireland. No one would assume that the international concept of vocational education and training needs to be translated for an English speaking country. But the established term in Ireland for vocational education and training, is not ‘vocational education and training’, but *further education and training (FET)*. Certainly, this reflects as much the emphasis on further education within the Irish VET system as it shapes the Irish understanding of the international notion of VET. In a professional or political discourse, that makes use of specialized terminology, it seems bizarre to translate from English to English. Yet, in everyday life this is a commonly occurring phenomenon causing misunderstandings. For instance, ‘first floor’ in the US means ground floor, whereas in Britain it *means* first floor. In interlinguistics the phenomenon is known as ‘false friends’. The point we would like to make here is that we cannot exclude the occurrence of partial false friends when it comes to

⁽⁸⁾ It needs to be kept in mind that the terms *education* and *training* are traditionally and still widely used as shortcuts to distinguish between general and vocational as well as between initial and further learning.

what is understood by VET at the international or national level. Consequently, we need to be aware throughout the project that besides system differences, there are essential differences in the national meanings of VET. VET in Europe through the eyes of a German VET expert is quite different from a French or British expert.

Clarke and Winch give the example of at least three different interpretations of the English verb 'to train', for which other languages, for instance German, use separate terms: To train a dog (in German *abrichten*), to train someone to carry out a specific job or activity (in German *anlernen*), or to train in the sense of education for an occupation like carpentry (in German *ausbilden*)⁽⁹⁾. *Training* is nowadays also a widespread Anglicism in German as in many other languages, but one cannot assume that it has the same meaning as in English⁽¹⁰⁾. The key terms used for VET in Europe, for instance, *vocational* (in English), *professional* (in many Romance languages), or *beruflich* (in German) all have their specific connotations not surviving reliably in one-to-one translations. What looks like tiny shifts in meaning can have major consequences in national conceptions of VET, and VET systems, and is the subject of ongoing debates. For instance, there is in some countries and languages clear resistance on the side of practice-oriented higher education institutions and associations to be associated with the term 'vocational', while this is not the case for the term 'professional' – a problem which is completely non-existent in other countries and their respective languages. In this context we find it worth mentioning how Switzerland, which is not part of this study, solved the problem. The Swiss government officially translates *Berufsbildung* (respectively *formation professionnelle* and *formazione professionale*) into 'Vocational and Professional Education and Training' (VPET)⁽¹¹⁾. In the US the term 'vocational education' has fallen out of favour with most educators and has been more and more replaced by 'career and technical education'⁽¹²⁾.

To sum up: technical, standardized terms used at national level for VET do not always seem able to free themselves completely from their everyday-language origins with their particular connotations. At the same time, they reflect particular shadings of VET systems (e.g. focus on IVET, CVET, education or training), and for their part imply different conceptions of VET (see Chapter 5).

4. Legal and other official definitions of VET

When talking about 'definitions of VET', we refer to the sort of short paragraphs describing or explaining VET in government documents such as various forms of legislation, government reports, white papers and similar official strategy papers or national statistics. Definitions are clearly identifiable phrases aiming at explaining what is meant by VET and what its mission is. Today, most European countries have established legal acts addressing VET. However, these legislations differ strongly in terms of their historical and institutional backgrounds and therefore we assumed to find great variety and diversity among them.

⁽⁹⁾ Clarke, L., & Winch, C. (Eds.). (2007). *Vocational Education - International approaches, developments systems*. Oxon: Routledge, p. 7.

⁽¹⁰⁾ The German term training, if not used in sports, denotes short-term further training strongly associated with a behaviorist learning approach.

⁽¹¹⁾ <https://www.sbf.admin.ch>

⁽¹²⁾ <http://edglossary.org/career-and-technical-education/>

The specific development of VET legislation in Europe is an open field that still has to be explored. While recent literature on the history of VET provides interesting insights into VET legislation for some individual countries, no comparative perspective has developed so far⁽¹³⁾. In the absence of a theory we can only make some general remarks regarding the possible backgrounds for the existing diversity of legal situations. Besides forerunners in the 19th century, a period during which important legislation regards VET were introduced was the 1930s (e.g. Ireland, Switzerland), followed by the late 1960s (e.g. Austria, Germany), while many other countries (e.g. those having experienced significant changes of the political system like the transition from a communist regime to a democratic order⁽¹⁴⁾ or the entry into the European Union) show a much shorter history of legal VET regulations. Current legal regulations also differ regarding the policy field from which they grew. Specifically, longer existing laws on VET have their roots in labour or trade laws and not in education policy. We can assume different rationales for introducing definitions of more general concepts, such as VET, into legislation. However, going more into detail on this topic would require in-depth research on the relation between governance of and legislation regarding VET.

In a majority of countries under investigation the national concept of vocational education and training is not explicitly defined by a legal act (compare also Table 3 in the Annex). Instead, most countries refer to an implicit understanding of VET. For instance, in Sweden the term *yrkesutbildning* is used in several legal documents (see for example the National Education Act – *Skollag* or the Higher Vocational Education Act), but often implicitly and with varying meaning in different contexts depending on the level of education (e.g. IVET or CVET). Even within these laws, there is no clearly demarcated definition of the term – instead the implicit understanding of VET is conveyed through the whole text: as schemes aimed at providing vocational training adapted to the requirements of the labour market while simultaneously guaranteeing eligibility for further studies (i.e. providing a combination of theoretical and practical education). While no universal definition exists, certain legal documents regulating specific parts of the VET systems are more explicit than others. Interestingly the term *yrkesutbildning* is most clearly defined in the Higher Vocational Education Act 2009:128 (*Lag om Yrkeshögskolan*) as a type of education that ‘should be based on knowledge generated both in the production of goods and services, and in science, designed to ensure that a high quality and professional relevance is reached, and give such theoretical, practical and experiential knowledge required to work independently and in teams to perform advanced tasks at work, characterized by both a strong relationship to practical work whilst also maintaining a theoretical anchoring, developed and conducted in collaboration between work and education [...]’ (SFS 2009:128, 6 §)⁽¹⁵⁾.

As a particular form of these implicit definitions we can also regard the case of Norway and Austria, where instead of VET another key term, namely ‘apprentice’, is defined instead. In both countries this could be explained by the fact that the law on Vocational Training emanated from previous trade and labour regulations for apprentices rather than from

⁽¹³⁾ E.g. Berner, E., Gonon, P. (eds.) (2016). *History of Vocational Education and Training in Europe. Cases, Concepts and Challenges*, Peter Lang: Bern

⁽¹⁴⁾ Gandini, F. (1999). Vocational education and training legislation in Central and Eastern European countries, the New Independent States and Mongolia (the partner countries). Experience of the European Training Foundation. In: *European Journal for Education Law and Policy* (1999) 3: 37. doi:10.1023/A:1022932924765

⁽¹⁵⁾ Translated by the national expert.

legislation on education. In Norway, the absence of a precise definition of VET in the Act on Education, which instead concentrates on individual rights to access various educational trajectories, probably reflects a ‘judicialization’ of learners’ interaction with the education and training system ⁽¹⁶⁾. In this way, the definition is taken for granted, and the Act details the ensuing individual rights, as well as how decisions being appealed should be handled.

In those countries where a legal definition of VET exists, it can take different forms: (1) a comprehensive and integrated definition of VET, where VET is explained as a process of the acquisition of knowledge, skills and competence or the like; (2) a comprehensive definition of VET which defines VET by naming the single sub-parts of VET (like IVET, CVET); or (3) partial definitions of sub-parts of VET which can be found not in one all-including document but in several related or non-related documents (see examples in Table 1).

Table 1 **Examples of national definitions of VET**

Comprehensive and holistic definition of VET	<p>Croatian Vocational Education and Training Act ⁽¹⁷⁾ Vocational education is a process of acquiring competences (knowledge, skills and competences) insofar the results of that process are evaluated and confirmed in a procedure carried out by VET institutions.</p>	<p>Latvian Education Law ⁽¹⁸⁾ Professional education – practical and theoretical preparation for the practice of a particular profession, and for the acquisition of professional qualification and improvement of professional competence</p>
Comprehensive definition of VET defining VET by its sub-parts	<p>German Vocational Education and Training Act (Extract) ⁽¹⁹⁾ For the purposes of this Act, the term ‘vocational training’ shall mean vocational training preparation, initial training, further training and retraining. [...] Initial training shall, through a systematic training programme, impart the vocational skills, knowledge and qualifications (vocational competence) necessary to engage in a form of skilled occupational activity in a changing working world. Initial training shall also enable trainees to acquire the necessary occupational experience [...]</p>	<p>Hungarian Act on Vocational Education and Training ⁽²⁰⁾ Vocational training is training within or outside the school system with the aim to acquire qualification recognized by the state, listed in National Vocational Qualifications Register (§3)... School-based vocational education and training: vocational education and training provided in the framework of public education, as defined by the Act on National Public Education and in the vocational schools defined under the Act, the participants of which are in student legal relationship with the school. (§2).</p>
One or more partial definitions of sub-parts of VET	<p><i>Examples for sub-parts of VET for which definitions exist:</i> Portugese Decree Law nr. 396/2007 ⁽²¹⁾ ‘<i>Formação inicial</i>’ (Covering IVET) ‘<i>Formação Contínua</i>’ (Covering higher VET and CVET) ‘<i>Educação e Formação de Adultos</i>’ (CVET)</p>	

Source: Authors.

⁽¹⁶⁾ Ure, Odd Bjørn (2015). Länderstudie Norwegen. In: Bertelsmann Stiftung (Eds.): *Kompetenzen anerkennen. Was Deutschland von anderen Staaten lernen kann*, Bertelsmann Verlag: Gütersloh.

⁽¹⁷⁾ Translation provided by the Croatian Parliament:
http://www.asoo.hr/UserDocsImages/dokumenti/VET%20Act_Croatia_Official%20Gazette%2030_2009.pdf

⁽¹⁸⁾ Translation provided by the Latvian Parliament:
http://www.vvc.gov.lv/export/sites/default/docs/LRTA/Likumi/Education_Law.doc

⁽¹⁹⁾ Translation provided by German Federal Ministry of Education and Research:
https://www.bibb.de/dokumente/pdf/bmbf_berufsbildungsreformgesetz_en.pdf

⁽²⁰⁾ Translation provided by Translation and Terminology Centre.

⁽²¹⁾ As provided by national expert.

Cedefop's definition of VET as 'education and training which aims to equip people with knowledge, know-how, skills and/or competences required in particular occupations or more broadly on the labour market' ⁽²²⁾ is an example of a comprehensive definition. We have found such a comprehensive definition mainly in countries that are trying to adopt a lifelong learning perspective in their legislation and have introduced VET legislations more recently, such as Bulgaria, Croatia, Estonia, Greece or Lithuania. This could be seen as a result of the European Commissions' 'soft power' for which these countries have been more open, but it could also be simply understood as a more contemporary approach to legislation.

Different definitions as explicated above can also exist side-by-side and in different legal documents, thereby making the variety of definitions even more complex. For example in Portugal, alongside the comprehensive definition of '*Formação Profissional*' there are also definitions available for initial education ('*Formação inicial*'), continuing education ('*Formação Contínua*'), the latter containing both higher education (VET and non VET) and CVET ('*Educação e Formação de Adultos*'). These partial definitions are more specific than the comprehensive one. Similarly, coexistence of different definitions can also occur on a regional basis, like in Spain where some regions have developed their own definition of VET in line with the national definition).

Despite their differences, national definitions of VET frequently refer to the same key dimensions:

- (a) **the knowledge base** or sort of knowledge to be acquired: E.g. in the Netherlands, secondary VET (partial definition) refers to 'the theoretical and practical preparation for the practice of professions' ⁽²³⁾; the definition in Croatia refers to 'knowledge, skills and competences'; the one in Latvia to 'professional competence'; and the one in Germany to 'vocational competence'.
- (b) **the destination and outcomes of VET**: E.g. the Estonian VET definition defines VET as 'obtaining certain qualifications and applying for and retaining a certain position, and the acquisition and improvement of that system creates the prerequisites for successful professional activity'; Germany speaks of a 'skilled occupational activity'; Austria in its amendment of the legal definition in 2015 implicitly refers to EQF level 4 of the European Qualifications Framework by using similar descriptors to define required skills of graduates ⁽²⁴⁾.
- (c) **some form of occupational ethos and behaviour**: E.g. again the Estonian VET definition speaks of 'a system of knowledge, skills, experience, *values and behavioural norms* which are required for working in a certain area of specialisation'; The German definition speaks of the engagement 'in a form of skilled occupational activity'.
- (d) **the main purpose and justification of VET**: E.g. in Bulgaria, VET is intended 'to prepare the citizens for realisation in the economy and the other spheres of public life by creating conditions for acquiring professional qualification and for its continuous improvement'; in Estonia, the purpose of VET also refers 'to the attitudes, to the

⁽²²⁾ Cedefop (2014) *Terminology of European Education and Training Policy. Second edition. A Selection of 130 Key Terms*. Luxembourg: Publications Office of the European Union. http://www.cedefop.europa.eu/EN/Files/4117_en.pdf [accessed 05.09.2015].

⁽²³⁾ From the Netherlands' questionnaire.

⁽²⁴⁾ Peter Schlögl (2015) *Novellierung des Berufsausbildungsgesetzes - Business as usual?* In: *Wirtschaft und Beruf*, p. 113-115; see also working paper 1.

social readiness for working and to the participation in social life and in the lifelong learning process'; in Germany, reference is made to 'a changing working world'.

When looking at changes in the legal definitions in the last two decades, recurrent topics that have been included are: permeability, access, quality and effectiveness, labour market career guidance, mobility and international cooperation. For instance, in Austria, the update of the Vocational Training Act (BAG, § 1a) in 2015 introduced a reference to the international dimension, permeability and quality assurance. In Greece, the Law 3879/2010 made a serious attempt to relate all forms of vocational education and training under the lifelong learning perspective by identifying alternative paths, networking lifelong learning institutions and ensuring transparency and quality. The Croatian definition of VET also includes a reference to quality when it states 'the results of this process are evaluated and confirmed in a procedure carried out by VET institutions'. The 1998 Education Act in Ireland makes reference on some occasions to 'equality of access' and 'promote opportunities for adults' and in relation to gender.

The Romanian VET Strategy 2016-2020, Art 50, focuses on four key dimensions ⁽²⁵⁾:

- (a) 'Relevance – to ensure improved matching of competences to current and future labour market demands;
- (b) Access and participation – to facilitate access to VET, with a special focus on vulnerable groups and improving their participation in vocational education and training programmes, as result of a guidance and counselling process adapted to individual needs;
- (c) Quality assurance – to ensure the development of a quality culture in all the governance functions of VET: developing qualifications and curriculum, organising learning process, competence evaluation and certification, training of teachers;
- (d) Innovation and cooperation – to capitalise on the innovation and creativity potential and stimulating cooperation, with a focus on mobility in the workforce training and employment process.'

Definitions explicated by law do not necessarily correspond to the public perception of VET. For instance, the law may express a lifelong learning perspective while the actual public perception of VET clearly is focused on upper secondary VET. This is for example the case in Croatia where VET is commonly understood as 'education focused on the acquisition of skills for a particular profession, and not the sort of flexible and adaptive education' ⁽²⁶⁾ that is defined in the legal act. Or as Perin ⁽²⁷⁾ puts it, vocational education in Croatia is understood through its focus on knowledge and skills related to the profession and not to other components that make employability in modern society a basis for lifelong learning and to quickly adapt to changes, that are the only thing that is constant in today's labour market. A similar discrepancy is addressed in Estonia where the public considers VET as practical learning and training to acquire useful knowledge and skills for certain work and not as one particular element of the education system providing learning opportunities on several levels.

⁽²⁵⁾ Romanian Government (2016). *Governmental Decision on the approval of the Romanian VET Strategy for the period 2016-2020*.
https://www.edu.ro/sites/default/files/_fi%C8%99iere/Minister/2016/strategii/Strategia_VET%2027%2004%202016.pdf

⁽²⁶⁾ From the Croatian questionnaire.

⁽²⁷⁾ Perin, V. (2013). *Strukovnoobrazovanje I tržišterada: concept fleksigurnosti (Vocational education and the labor market: The Concept of flexicurity)*. *Odgojai obrazovanja*, LIX, 30:147-154.

Also, the different types of VET (IVET and CVET), the educational levels that exist and the different opportunities that are provided for learning as expressed in the law are not perceived as such by the Estonian public. Although there is some understanding in Estonia that VET is an evolving field in education and provides a good occupational preparation for work, it is not considered as education suitable for one's own relatives ⁽²⁸⁾. Also in Lithuania, training providers and researchers often claim that terms provided in the laws do not reflect reality.

5. Variety and patterns of VET conceptions

5.1 The variety of VET and multiple VET conceptions

For explaining difference and commonalities between VET systems in Europe various models and concepts have been developed and approached from different perspectives (see also working paper 1). For instance, Greinert took a cultural-historical approach focusing on the different roles of the state and distinguished between a liberal market economy model with a marginal role played by the state (England), a state-regulated bureaucratic model (France), and a dual-corporatist model (Germany) ⁽²⁹⁾. Research on labour markets and industrial relations, such as by Maurice, Sellier, and Silvestre ⁽³⁰⁾ emphasized differences in the role of VET due to different work organisation and distinguished between *organisational space* or *internal labour markets* (in France) and *qualificational space* or *occupational labour markets* (in Germany). Differences in VET between countries also became a distinguishing feature in the 'varieties of capitalism' approach, which distinguished between liberal and coordinate market economies ⁽³¹⁾. In liberal market economies (LME, such as the US or UK), firms coordinate their activities primarily via competitive market arrangements, coordination between employers is weak, bargaining is decentralized and the general education system, in particular the higher education system, provides 'generic' human capital assets which can then be developed and shaped through on-the-job training in enterprises. In contrast, in coordinated market economies (CME, such as Germany or Denmark) firms depend more heavily on non-market relationships to coordinate their endeavours among themselves and with other actors. There are strong trade unions and employer organisations, bargaining is coordinated on sectoral or regional levels, and firms invest in vocational training and 'specific' skills.

⁽²⁸⁾ Pärtel, K., Petti, K. (2013). Elanikkonna teadlikkus kutseõppes toimuvast ja kutsehariduse maine aastal 2013. <http://www.innove.ee/et/kutseharidus/programmid-ja-projektid/uuringud/kutsehariduse-maine-2013>

⁽²⁹⁾ Greinert, W.-D. (1999). *Berufsqualifizierung und dritte industrielle Revolution. Eine historisch-vergleichende Studie zur Entwicklung der klassischen Ausbildungssysteme*. Baden-Baden: Nomos Verlagsgesellschaft. Restated in a study conducted on behalf of Cedefop (Greinert, 2005)..

⁽³⁰⁾ Maurice, M., Sellier, F., & Silvestre, J.-J. (1979). La production de la hiérarchie dans l'entreprise: recherche d'un effet sociétal: Comparaison France-Allemagne. *Revue française de sociologie*, 331-365.

⁽³¹⁾ Hall, P. A., & Soskice, D. W. (2001). *Varieties of capitalism. The institutional foundations of comparative advantage*. Oxford: Oxford University Press.

These approaches have inspired more elaborated typologies, but also engendered some criticism⁽³²⁾. Comparisons are built on a very small set of countries (two to five countries), often restricted to IVET and reduced to a single standard of comparison (e.g. role of state, structure of work organisation, firm coordination). Also it has been made clear that countries' institutional make-ups do not stick to fixed patterns, but constantly change along different trajectories⁽³³⁾. Nevertheless, these models are useful in providing insights into the complex matter of comparing VET systems. It would also be quite surprising if we were not to find some aspects of these models reflected in our results. This is one side of the coin. On the other side there are arguments that give little hope for finding strong similarities between countries. National VET systems are not the sort of comprehensive entities that most of the above models would like them to be. VET can have quite different regional traditions (compare for example VET in the German, French and Italian part of Switzerland), but it is also shaped by the different history of various institutions (e.g. in-company training, vocational schools, further education providers, polytechnics, programmes for the unemployed) which make up a country's VET system. Finally, differences in workplaces are tremendous in Europe, from which we can assume also different roles for VET. Lundvall and Lorenz based on an analysis of the EU working condition survey for EU-15, found 'that differences among European member states in terms of organisational learning are dramatic and that the countries in the south of Europe are much more exposed to the competition from emerging economies than the Nordic countries where there are few Taylorist jobs left and where education systems and labour markets have adjusted to the needs of the learning economy'⁽³⁴⁾. Given this difference in the demand for skills, it would be astonishing not to find differences in the provision of VET.

In fact, even though the set of descriptors we offered to describe VET was quite limited, we have not found two countries in Europe with the same conception of VET. As a consequence, the common denominator for VET in Europe is also quite limited. Nevertheless, in almost all European countries VET in terms of its dominant conception is perceived by the national VET experts consulted as *occupations-specific* education and training geared towards *securing supply of skilled labour* and *inferior to general or academic education*. Furthermore, in most countries VET is predominantly addressing young people (IVET), providing qualifications at the middle level of education (ISCED11 levels 3-4), financed from education budgets and coordinated by central governments (compare Table 2 below and Table 4 in the Annex).

⁽³²⁾ For an overview see for example Saar, E., & Ure, O. B. (2013). Lifelong learning systems: overview and extension of different typologies. In E. Saar, O. B. Ure & J. Holford (Eds.), *Lifelong Learning in Europe: National Patterns and Challenges* (pp. 46-81). Cheltenham: Edward Elgar; Gonon, Philip (2016): Zur Dynamik und Typologie von Berufsbildungssystemen – eine internationale Perspektive, *Zeitschrift für Pädagogik*, 62. Jahrgang, Heft 3.

⁽³³⁾ Thelen, K. (2014). *Varieties of liberalization and the new politics of social solidarity*. Cambridge University Press.

⁽³⁴⁾ Lundvall, B.-Å. and E. Lorenz (2012). *Social investment in the globalising learning economy. A European perspective*. In: Morel, N., B. Palier, and J. Palme (eds.) *Towards a social investment welfare state? Ideas, policies and challenges*. Policy Press, 2012, p. 253

Table 2: **The 10 features of VET conceptions most/least frequently referred to**

	Top 10		Lowest 10
30	Occupation-specific (5.1)	4	Low coordination – industry led (15.1)
30	Middle level of education (7.2.)	5	Specific occupational rights (9.4)
30	High coordination – state led (15.3)	5	Funding: Mainly by companies (12.1)
30	Securing supply of skilled labour (17.1)	5	Identity/status: Worker (13.3)
29	Adolescent / young people (8.3)	7	Higher or equal to general education (11.1)
29	Funding: Mainly education budget (12.2)	7	High coordination – led by organized business (15.2)
29	Entry into working life / entry level (16.1)	8	Mainly on the job / work-based learning (4.1)
28	Key providers: Schools (10.2)	8	Specific occupational or/ professional ethos (6.2)
28	Lower than general education (11.2)	8	Mainly lower level (7.1)
28	Identity/status: Student (13.1)	9	Funding: Labour Market / Social budget (12.3)

Source: Authors, n= 37 (some countries reported two dominant conceptions), E.g. '30 out of 37 VET conceptions were characterised as occupation-specific in terms of learning outcomes'

There are interesting exceptions to what might be considered a general rule of VET in Europe (occupation related, lower esteem, securing supply of skilled labour). For instance, nowadays VET in Finland is considered equal to general education and previous dead-ends have ceased to exist. ⁽³⁵⁾ With the introduction of a new law in 1998 the vocational track has given eligibility to access polytechnics and universities. With this reform of upper secondary education, VET has become equal to general upper secondary education as a pathway to higher education ⁽³⁶⁾. School-based VET in Austria, which was described as a separate but equally important conception as company-based VET, is also perceived as equal to or even higher than general education. Although there are different types of vocational schools in Austria, school-based VET is strongly associated with the so-called 'higher technical and vocational colleges' (short form: VET-colleges). VET-colleges are rated higher than academic education because in addition to the school-leaving certificate providing access to higher education (as provided by the general track), graduates obtain a VET-diploma, which is well recognized by industry (although there are differences between occupational fields and industries). Furthermore, VET-college programmes last for five years while academic upper secondary school programmes last only four years and many of these colleges are perceived as more demanding than the academic track due a higher workload. This has also been acknowledged in education statistics. Lower grades (the first three years) of VET-colleges are classified as ISCED level 3, the same as academic schools. But higher grades (years 4 and 5) of VET colleges were classified as level 4 already in ISCED97, and are now classified as level 5 in ISCED11.

Of course, in many European countries there are VET qualifications that are rated higher than general upper secondary education. Furthermore, in many countries education policy

⁽³⁵⁾ Country questionnaire. See also: Stenström, M.-L. and M. Virolainen (2016). Towards the Enhancement of School-based VET in Finland. In Berner, E., Gonon, P. (eds.) *History of Vocational Education and Training in Europe. Cases, Concepts and Challenges*, Peter Lang: Bern

⁽³⁶⁾ In this respect it is worth to note that the Finnish language does not distinguish between 'vocational' and 'professional'. The Finnish word 'ammattilinen' may be understood as professional or vocational. In some educational systems those terms are associated to different educational systems, but the Finnish language does not support that distinction.

stresses the parity of esteem between general and vocational education, although this has not yet resulted in an equal ranking of general and vocational education in most cases. What we would like to highlight here by the example of Finland and school-based VET in Austria is that there are national examples of dominant understandings of VET where VET is regarded as equal or even as higher than general education for the same age cohort.

It also needs to be taken into account that the notion that 'VET is always occupation related' should to be treated with caution when the full variety of VET conceptions in Europe is considered. As already mentioned, VET in Ireland is understood as further education and training (FET). Adult literacy and community education, which is regarded as liberal (adult) education (as opposed to VET) in most countries, forms part of the Irish notion of FET. Thus, the Irish idea of VET does not only range from vocational preparation to occupation-specific awards but also includes non-occupation related forms of education.

Besides Ireland a few other countries stated that their idea of VET is not associated with a particular level of occupational specificity, but includes forms of education and training that are both occupation-specific and related to broad occupational fields (e.g. Cyprus, Croatia, France, Italy Luxembourg and the Netherlands). In most countries, however, VET is perceived as occupation-specific (numbers occasionally reported range from 200 to 800 different occupations offered in a country; job-specific training was also mentioned). School-based VET in Austria, Sweden and England, but also VET in Bulgaria and Norway were characterised as being related to broader vocational fields⁽³⁷⁾. This coincides with the fact that VET in these conceptions is viewed as broad preparation for individuals for the changing requirements of working life rather than as a means to secure the supply of labour (or at least in addition to the latter).

Even though we asked for the most dominant conception of VET⁽³⁸⁾ it was appreciated that often there is no unitary understanding, but multiple conceptions of VET exist within a country. For instance, in Cyprus, Ireland, Portugal and Sweden, IVET and CVET were seen as falling into two equally dominant conceptions. Similarly, for Austria and England two divergent, but equally important conceptions, were reported, one associated with apprenticeship and another one with school-based VET. In these cases, two 'VET identikit pictures' were produced and analysed separately. In other cases, VET was often described as fragmented. In this case we followed the dominant part, disregarding the other parts, such as in Italy. 'In Italy, the term VET tends to be 'reserved' for programmes primarily under the Ministry of Labour's and the regions' and autonomous provinces' remit, while technical and vocational school programmes are considered to be part of the 'education system' under the Ministry of Education's remit'⁽³⁹⁾.

In quite some cases, in particular in smaller countries and countries where enrolment figures in VET are low, one dominant and unitary conception of VET was reported. With the exception of England (and maybe Ireland) in most European countries VET is understood as a particular sub-sector of the education system, comprised of a particular set of (formal)

⁽³⁷⁾WA3 will provide systematic information about the increase/decrease of occupation specificity in the last two decades. Information in WA1 is scarce: Norway and Germany reduced number of occupations/fields of programmes, Hungary increased them.

⁽³⁸⁾We did not further specify 'dominant', but made clear that we are interested in what people think is 'key for VET in their country' rather than 'what VET can also be'.

⁽³⁹⁾Cedefop (2014), Spotlight on VET – Italy, p.4. http://www.cedefop.europa.eu/files/8078_en.pdf

educational programmes provided by respective institutions. Generally speaking the national conceptions of VET are narrower than, for instance, Cedefop's definition of VET suggests.⁽⁴⁰⁾

5.2 Patterns of VET conceptions

Although starting from a completely different point of view and using different methods from the models quoted above, Germany, France and England also stand out in our analysis and show quite distinct conceptions of VET. However, they cannot be regarded as universal country models for VET in Europe. Only a few other countries come close to the conceptions found in these three countries, while the majority of countries show a different conception of VET.

For instance, the dominant German understanding of VET shows similarities to Denmark's understanding and Austria's and Slovakia's work-based conception of VET. There are also some similarities between France on the one hand and Italy and Ireland on the other, while England seems to resemble only Cyprus in this respect. Most European countries are predominantly school-based and state-regulated, as e.g. France, and thus could be placed into one group. Yet our analysis did not single out France for its pronounced state regulation, but for its diversity regards VET and the particular lifelong learning perspective on VET.

We found more than thirty different conceptions of VET in Europe, and if we would have asked not only for the most dominant ones, we probably would have found a substantially higher number. However, within this variety, four patterns became visible which are summarized in Table 3 below: VET understood as (1) work-based or dual initial *training*, (2) initial vocational *education*, (3) further training, and (4) as (part of) lifelong learning. The aim of presenting these patterns is to show some commonalities between countries within this huge diversity. It is not our intention, and we also do not have the means to provide a new typology of VET systems.

1. VET understood as work-based or dual initial training

This is certainly best illustrated by Germany where the main pillar of VET is the dual system (apprenticeship system) despite the pressure under which it has come in the previous decade. This understanding of VET is strongly related to a traditional logic of 'professional education' (where trades organise training for the next generation). VET is considered to be based on practical knowledge and 'learning by doing' for young people who are usually recognized as apprentices (a particular social/legal status). The main reference persons are in-company trainer (masters) and not school teachers. The main goal from the learners' point of view is to become members of an occupation, which often goes hand in hand with occupational rights and the development of occupational ethos. This type of VET conception is further characterised by substantial contributions by companies both financially and as the place of learning (considered often as more important than school). Coordination between employers (and between employer organisations and trade unions) is high and they feel responsible for the system (e.g. chambers being responsible to organize final exams). The key unit of organisation is the 'Beruf', which is often referred to as *Berufsprinzip* ⁽⁴¹⁾ or

⁽⁴⁰⁾ Clear evidence for this is also the fact that Cedefop's country portraits sometimes subsume parts of the education system under VET, which are not conceived as VET in the national understanding as in the case described for Italy above.

⁽⁴¹⁾ Reuling, J. (1998). The German 'Berufsprinzip' as a model for regulating training content and

Berufskonzept ⁽⁴²⁾ (the concept of an occupation/profession). Although VET has, in practice, expanded to lower and higher levels in the last decades as well as opened up, it is mainly associated with the middle level of education (ISCED11 levels 3-4), with restricted access to higher education. In this conception, VET is justified by securing the supply of skilled labour and with promoting business innovation and growth. If reduced to a formula it would be: initial skilled worker training, duality of learning sites and organized around occupations. If personified it would be: *craftsman*.

Although there are some variations within this conception, and some dissolutions at its periphery (e.g. companies as learning sites being replaced by workshops at schools or training centres) it is a relatively well-demarcated and homogenous picture of VET with a distinct identity ⁽⁴³⁾. But despite the growing trend towards work-place learning in Europe (see next chapter) this is the dominant picture of VET only in a very few other countries besides Germany: we find this understanding also in Austria, but only side-by-side with an equally dominant school-based conception of VET. We find it in Denmark, where apprenticeship is the only form of IVET. Although a dual system has been introduced in Slovakia only very recently by the reforming Act 61/2015 on VET, the Slovakian country experts acknowledge it as forming a VET conception of its own: 'Two parallel conceptions of VET are now present in Slovakia: "traditional" VET where theoretical part is realised in school premises and practical training takes place in school-owned or school-managed training sites, and the newly introduced work-based type, where practical training is realised exclusively in employers' premises based on contracts concluded between employer and learner and employer and school'. In Hungary the conception of VET comes close to the one described above, but still shows important differences. Despite growing influence of the chamber of commerce in recent years in Hungary, the VET system is state-led and state financed (by labour market budgets) and learners are regarded as students (only for the periods in a company do they share the rights of employees under the Labour Code). Differences exist also regards the entry age, which is particularly young in Austria and Hungary (at the age of 15/16), moderately higher in Germany (early twenties). The average age for entering IVET in Denmark is at approx. 24 years, with 30% of entrants above the age of 25. Nevertheless, *Erhvervsuddannelser* is considered to be youth education (upper secondary education).

qualification standards. In: Nijhop, W.J.; Streumer, J.N. (eds). Key qualifications in work and education. Dordrecht: Springer, pp. 63-76.

⁽⁴²⁾ Deissinger, T. (1998). Beruflichkeit als organisierendes Prinzip der deutschen Berufsausbildung. Markt Schwaben: Eusl-Verlagsgesellschaft.

⁽⁴³⁾ To complete the picture for Germany, we need to add that programmes based on the dual principle also exist at higher education level, and in parallel to the dual system there is a wide range of school-based programmes (ISCED levels 3-4), which differ in terms of entry requirements, focus, types and levels of qualifications.

Table 3: **Overview on different VET conceptions prevalent in Europe**

<p>1. VET understood as work-based/dual initial training</p> <p>identified in Germany, Austria (apprenticeship), Denmark, Slovakia (apprenticeship) and Hungary</p> <p>and to some degree in Iceland and England (apprenticeship)</p>	<p>VET is considered to be based on practical knowledge and ‘learning by doing’ for young people (recognized as apprentices) to become members of an occupation/profession (initiation) with distinct occupational or professional ethos and occupational rights. Substantial contribution by companies (financially and as place of learning equal or more important than the school) and strong coordination between employers (and trade unions) are presupposed in this conception of VET. VET is clearly associated with middle level of education (ISCED11 levels 3-4) without or with restricted access rights to higher education. An employer perspective is dominant in so far as VET’s main purpose is to secure the supply of skilled labour and to foster business innovation and growth.</p>
<p>2. VET understood as initial vocational education</p> <p>2a. Vocationally oriented school education</p> <p>identified in Austria (school), Bulgaria, Malta, Romania, Slovenia and Spain,</p> <p>and to some degree in Czech Republic, Estonia, Flanders, Latvia, Lithuania, Slovakia (school), Sweden (school)</p> <p>2b. Varied occupation-oriented upper- and post-secondary education</p> <p>identified in Croatia, Cyprus (IVET), Luxembourg, Netherlands, Poland and Portugal</p> <p>and to some degree in Greece, Norway, Sweden (post-sec.), Ireland (VE)</p>	<p>2. VET is understood as a particular part of initial education, where schools financed and governed by the state are the main place of learning and learners are regarded as students. Despite the large variations within this type two patterns can be distinguished.</p> <p>2a. ‘Vocationally oriented school education’ which is discipline-based, mainly takes place in classrooms (although there are work-based elements as well) and teacher-student relations are the normal case. VET is not necessarily occupation-specific, but can also aim at broader vocational fields, is targeted at middle and higher levels (i.e. ISCED11 levels 3-5), addresses young people (15-19), and provides access to higher education. Individual or societal perspectives are more evident, for instance individual progression and personal growth is rated more important than securing supply of skilled labour.</p> <p>2b. A broad range of more occupation-specific education, addressing also young adults (18-24) for which securing the supply of skilled labour and entry into working life is rated higher. It is more diverse than type 2a in many other aspects: levels of education span from low to high, and so do skill levels (semi-skilled workers and skilled-workers); types of providers, instructions and learning approaches can be diverse. School-based and work-based options may form part of one system.</p>
<p>3. VET understood as further training</p> <p>identified in England, Ireland (VT) and Cyprus (CVET)</p>	<p>VET is understood as mainly on-the-job further training for all age groups (but with high shares of older learners) at various levels (including lower levels, such as ISCED11 level 2) to become semi-skilled, skilled workers or professionals (with no specific occupational rights) offered by a wider range of further and higher education providers. Programmes for unemployed or second-chance programmes form part of this understanding. Entry into working life or employability is seen more important than occupational identity. Employers’ views dominate and VET is regard as a means to secure supply of skilled labour and promote innovation and economic growth.</p>
<p>4. VET understood as (part of) lifelong learning</p> <p>identified in France and Finland</p> <p>and to some degree in Croatia, Ireland (VT),Italy, Greece and Luxembourg</p>	<p>VET is understood as the (organized) co-existence of a diverse set of learning approaches (disciplinary or experienced based), learning sites, education and skill levels addressed (semi-skilled, skilled and professional), age groups, status of learners (apprentices or students), types of providers (school, companies, higher education), types of instructors (teachers, trainers, masters), as regards the learning outcomes (both occupation-specific and broader-vocational field oriented, but also pre-vocational) and types of qualifications (occupational, educational). Consequently, VET is associated with various (also more balanced) purposes including equity and inclusion and IVET and CVET form part of one conception of VET – respectively LLL.</p>

Source: Authors, based on expert survey WA1 2016 and cluster analysis ⁽⁴⁴⁾.

⁽⁴⁴⁾ Based on the profiles provided by national VET experts a hierarchical cluster-analysis for binary data was conducted both with linkage between groups and linkage within groups for exploratory purposes. However, the final classification is based on additional qualitative data. See also Table 5 in the Annex.

2. VET understood as initial vocational education

In the majority of European countries VET is understood as a particular part of school-dominated initial education systems. However, within this large group there are notable differences. While we could arbitrarily distinguish diverse sub-groups, our data suggests at least two distinctive patterns within this large group: on the one hand theoretically based education programmes with some practical dimensions at upper-secondary level for young people, which may lead to a job, but more often are used as an alternative to general education to access higher or further education; on the other hand there is a large variety of programmes (both school and work-based), at diverse levels (pre-vocational as well as post-secondary), for a more diverse target group (adolescents and young adults), but which still comes under one umbrella: a state financed school system. Below we describe the two sub-types in more detail.

2a. VET understood as vocationally oriented school education

This conception is well illustrated by Austrian, Bulgarian, Slovenian, Romanian and Swedish school-based VET. VET in these cases is understood as a particular upper-secondary school track forming part of initial education and providing an alternative to general education. Schools are the main place of learning, and are financed and governed by the state. Consequently, learners are exclusively regarded as students, learning is discipline-based, mainly takes place in classrooms (although there are work-based elements as well) and teacher-student relations are the normal case. In other words, VET is conceived as a theoretically based education programme with practical dimensions. VET is associated with middle and higher levels (i.e. ISCED11 level 3-5), the provisions of either educational or occupational qualifications and access rights to higher education. Aiming at broader vocational fields, personal growth and individual advancement is rated more important than securing a supply of skilled labour. The Romanian country experts described VET in Romania as 'IVET, part of the education system, providing pathways between different levels of learning and between VET and more academic tracks and focusing on easing progression and avoiding dead ends. Reflecting the double role of VET in promoting economic as well as social development, IVET's main goals are to ensure students' personal and professional development and equal opportunities to access IVET [...]'. In Bulgaria, the legal basis for VET, the Vocational Education and Training Act (VETA), dates back to 1999. Since then VETA has been changed many times, however, this has not led to significant changes in the conceptualisation of VET. Since its beginning, Bulgarian VET has been predominantly school-based, state-funded (educational budget), highly centralised in terms of governance, characterised by instruction-centred learning, with key providers being vocational secondary schools for IVET and centres for Vocational Education and Training for CVET. In Sweden, there are generally two dominant conceptions of VET, referring to upper secondary school vocational education (IVET) and post-upper secondary school vocational education (CVET). These two conceptions are more or less equally referred to in public discourse. They are in practice independent from each other as they refer to different VET subsystems. Notably, there are multiple other sub-strands, which are part of the overall VET system (such as *Komvux*, *Folkhögskola*, *arbetsmarknadspolitiska* program etc.), but these are generally not referred to by the term VET (*yrkesutbildning*) in public discourse. The dominant discourse revolves around conceptions of VET as theoretically based education programmes with practical dimensions.

2b. Varied occupation-oriented upper- and post-secondary education

As in the previous category, the key characteristics of this type are: state-financed, state-regulated and school-oriented. However, there are also some differences that justify distinguishing between the two types. It is more likely to be occupation-specific and to address young adults (18-24 years old); it is provided also by institutions other than schools; securing the supply of skilled labour and the entry into working life is rated higher than individual growth; levels of education span from low to high, and so do skill levels (semi-skilled workers and skilled workers); also learning approaches can be diverse, work-based (if they exist) and school-based programmes form part of the same system and are conceived as one conception. In the Netherlands, pedagogical and didactical approaches and methods are diverse; VET schools provide both school- (mainly class-room based) and work-based pathways (mainly on-the-job training), the focus can either be on a specific profession or on the chosen broader vocational field. In Norway there is also a work-based and school-based VET track. But the fact that both variations of VET are subsumed under the same paragraphs of the educational law and are integrated in officially recognised upper secondary education, speaks against their constituting two distinct conceptions of VET. However, an apprenticeship certificate is for example often perceived more relevant for a specific job than a 'leaving certificate of upper secondary vocational education'. Yet, such perceptions of differences do not add up to two distinct conceptions of VET. Moreover, when some vocational programmes are not able to offer apprenticeship training to all students, those who cannot start such enterprise training will follow a school-based VET trajectory towards the cited 'leaving certificate'. This fluidity within VET programmes of upper secondary education further sustains the appreciation that one single conception of VET prevails. Still, the Norwegian perception of VET has shifted towards considering it strongly related to the public education system and less a realm structured by the social partners (sparked by a VET reform in 1994 which for the first time integrated apprenticeship training in the public education system). In Cyprus, where enrolment in VET is particularly low, the secondary technical and vocational education offers two orientations: practical and theoretical where, accordingly, learning outcomes can be both occupation-specific (practical) and oriented towards a broader occupational field. In Greece, initial vocational education is provided (1) within the formal education system in the second cycle of secondary education at Vocational Lyceum (EPAL) and Vocational Schools (EPAS), and (2) outside the formal education system in vocational training schools (SEK), vocational training institutes (IEK) and centres for lifelong learning and colleges. Vocational *education* in Ireland includes PLC (Post Leaving Certificate, Leaving Certificate Vocational Programme, Leaving Certificate Applied) awards and qualifications, second-chance education, adult learning, community education, and can be both vocational and academic.

Croatia has a high share of VET students at upper-secondary level (comparable to Austria, Belgium, Czech Republic or Slovakia), with the majority of learners in four-year programmes. According to the public, VET is thus predominantly perceived as a programme for secondary (high) school. However, the actual VET provision is quite diverse including study programmes at colleges and professional studies (i.e. for continuing education after graduating from vocational schools), and ranges from EQF level 2 to 7. All VET programmes combine professional and general competences, to varying degrees; most include mandatory work experience (duration varies among different types of VET programmes).⁽⁴⁵⁾ During the past 10-15 years VET has become less specialized, more adapted to the needs of students

⁽⁴⁵⁾ Cedefop (2015). Spotlight on VET. Croatia.

and the labour market (also by better including more chambers and companies). Also VET and adult education moved closer together, for instance by establishing the *Agency for Vocational Education and Training and Adult Education*.

3. VET understood as (further) training

VET predominantly understood as (further) training seems to be a special case, which we only found in England and, to some degree, in Cyprus and partly also Ireland. In all three countries a conception of VET as *training* was described in addition to one interpreting VET as (school-based) education. In Cyprus the notion of CVET includes two distinct categories of target groups: on the one hand the employed and vulnerable groups, on the other hand the economically inactive and unemployed. This distinction between the two concepts is reflected in both the 1974 and 1999 Laws establishing the Human Resources Authority as a non-governmental organisation and the main dominant provider of (non school-based) VET for adults. In Ireland the notion of vocational *training* includes apprenticeships⁽⁴⁶⁾, on-the-job training, CPD (Continuing Professional Development), internships, training programmes and labour activation schemes⁽⁴⁷⁾. The diversity of Irish VET provision makes it difficult to display a clear identity. The term FET (Further Education & Training) is used as the catch-all conception of VET by society as a whole. The VET sector is regarded by stakeholders as being less clearly defined and of lower status than higher education⁽⁴⁸⁾. This echoes wider social norms but was also seen as relating to the diversity of VET in terms of 'provision and perceptions of current provision'⁽⁴⁹⁾. The distinction in education and training, as separate conceptions, is also visible in England, but with a deliberate blurring of boundaries. What the conception of VET as (further) training shares in these countries is that although VET is open to all age groups it mainly addresses older learners, it includes provision at lower levels (ISCED 2), and progression to higher education is generally low. The emphasis is on employability and entry to or staying in working life.

4. VET understood as (part of) lifelong learning (LLL)

This type of VET can be best illustrated by the case of France and Finland, though there are a number of countries that seem to be moving into the same direction (see also Chapter 6). France, from quite early on, has stretched the idea of apprenticeship from a particular skill level to various levels making it a particular approach rather than a specific programme (which is how it is considered in Germany, Austria or Denmark). Furthermore, a national system of validation of prior learning has gained broad public recognition and together with the qualifications framework is conceived as a 'system' of provision rather than a market of provision, as in the case of the UK. Traditionally, initial VET and continuing VET for adults were seen as separate in France, but due to the new paradigm of lifelong learning are now more often presented together. The French law speaks of 'lifelong learning VET' as if this would be one notion. The peculiarity of this conception is a unified vision of the co-existence of a diverse set of learning approaches, learning sites, education levels or skill levels

⁽⁴⁶⁾ There is a sharp difference between the Irish and English apprenticeship system. The former can be regarded as advanced apprenticeships in a few occupations sharing many features of what we described for Germany. The majority of English apprenticeships (although there are some advanced apprenticeships, e.g. in engineering) are low level.

⁽⁴⁷⁾ The concepts Vocational Education and Vocational Training in Ireland are generally equal in status (and in practice), neither one dominates.

⁽⁴⁸⁾ McGuinness, S. et al. (2014). Further Education and Training in Ireland: Past, Present and Future. ESRI Research Series.

⁽⁴⁹⁾ Ibid.

addressed age groups, status of learners, types of providers, types of instructors, and types of qualifications.

Italy shares with France much of this co-existence of different VET provisions (e.g. also apprenticeships at various levels and forms), but in a fragmented way. In Finland, VET is defined as part of the Finnish educational system and very centrally managed. It could therefore be simply classified as vocationally oriented school education (Type 2). However, there are several features qualifying the Finnish approach also as a 'lifelong learning' conception of VET. Finland distinguishes basic VET and adult VET, but the two areas are well concerted in one system. The main difference is that basic VET is degree-/ school-orientated whereas adult VET is rather based on vocational skills demonstration. This basically means that instead of going to school, a person having acquired vocational skills throughout working life may earn the degree by demonstrating those skills. All in all, both pathways lead to the same qualification and are mostly managed under the same administration, so the difference is not that significant. Finland has also raised the general education component of VET and since 1998 all VET graduates have been eligible to access polytechnics and universities. As a consequence, the status of VET has been raised and has become equal to general upper secondary education (which is probably the most important difference to France in terms of its conception). There are some countries that are working towards the conception of VET as LLL, such as Cyprus, Croatia, Greece, Latvia, Lithuania, Portugal and Romania (see also next chapter further below).

6. Changing patterns and future conceptions of VET

There are various developments that were reported for several European countries, which have the potential to alter the conception of VET both at national level and internationally. Many of these trends are familiar and have been previously discussed under headings such as: vocationalisation, diversification, academisation, individualisation, pluralisation and hybridization. In the following we first discuss major changes as reported by the country experts and try to summarize them. Then we extrapolate these trends and discuss possible future conceptions of VET.

Many southern, south-eastern, but also some northern European countries, have experienced and also expect for the future an increased emphasis on **practical knowledge** in curricula and learning approaches as well as a **strengthening of the work-based** aspect of VET (e.g. Estonia, Greece, Portugal, Slovenia and Spain). This is the case in particular for countries with a school-based conception of VET. At the system level this could take the form of implementing apprenticeship programmes (reported by quite a number of countries) or expanding apprenticeship programmes to higher levels (e.g. France, Italy, Germany). At a governance level this includes a more prominent role given to employers' and/or industry representatives (e.g. England, Hungary), very often in the framework of social partnership (e.g. Lithuania, Croatia, Malta), or the attempt to stronger participation of enterprises in the financing of vocational education and training.

This tendency of increasing the labour market relevance of curricula and enhancing practice orientation has for a long time been described as 'vocational drift' or 'vocationalisation' in the

case of general and higher education (⁵⁰). In our data we also found examples for this classical use of the term. For instance, Malta, which has experienced growth in terms of number of VET students as well as levels of qualifications, reported that in the past five years there has been a successful re-introduction of VET subjects in lower secondary education (ages 13-15 years) and there are currently plans to extend the provision of VET and applied subjects in lower secondary in the near future. However, what we observe is a '(re-) **vocationalisation of VET**', although this may sound paradoxical. What we mean is a strengthening of the profile or the essence of VET, an increased awareness for constituting elements of VET. Or to put it even simpler: VET is apparently becoming more vocational in many European countries.

Many countries reported about **new VET pathways for adults**, e.g. in Denmark (EUV), in Croatia (post-academic employment preparation at universities) or in Malta (on post-compulsory secondary level) or simply an increase in adult learners in existing VET programmes (e.g. Estonia, Finland, Ireland). This often goes hand-in-hand with an increased emphasis on the accreditation of prior learning (e.g. in France, Finland, Norway) and is frequently related to the implementation of European LLL policy (⁵¹). Some country experts reported and anticipated an increase of **targeted VET programmes for labour market retraining** (e.g. in Lithuania where new programmes for unemployed adults have been established). Overall, VET as a means to combat unemployment was quoted quite often. Other examples for the widening of VET include new options for disadvantaged and disabled persons (for instance the 'integrative apprenticeship' in Austria). Examples were also provided for an expansion of VET at lower ages: Portugal reported the introduction of training offers allowing people younger than 16 to choose a VET path. It is clear that in the last 20 years there has been a strong **diversification of VET** regarding its provisions and target groups (e.g. in terms of age, skill levels, special needs). Most remarkable is the simultaneous expansion of VET, which traditionally is still focused on middle skill levels, to higher and lower levels. As a particular form of diversification we could also refer to **modularisation** (e.g. Austria, Slovenia, Luxembourg) and **individualization of VET** (e.g. Finland, Denmark). Again this is not exclusive to VET, as we see modularization and individualization also in general and higher education.

Another particular form of diversification can be observed when it comes to access to higher education ('vertical permeability'). **New pathways into higher education** were frequently reported as major changes that took place in the last two decades. Interestingly, issues of access to higher education through vocational qualifications are specifically addressed in countries that have long-standing traditions of vocational education and training: Austria, Denmark, England, Germany, and France. Most prominently, the German VET now gives access to higher education to vocationally qualified applicants like 'Meister', 'Techniker' or 'Fachwirt', if they have proof of relevant occupational experience, pass an aptitude test or successfully complete a probationary year of studies. In many other countries higher education institutions are already now major providers of vocational education and training

⁵⁰) For vocational drift/vocationalisation in higher education see *Work Assignment 5: VET in higher education*. For Vocationalisation of secondary education see for instance: Lauglo, J., & Maclean, R. (2005). *Vocationalisation of secondary education revisited* (Vol. 1). Springer Science & Business Media.

⁵¹) As counter example, England reports that funding has been withdrawn from VET participants at the age of 24+, but VET in England traditionally addresses adults (see previous chapter above).

anyway. But also in countries where this is traditionally not the case (e.g. France, Germany) the importance of higher education institutions for VET is increasing. In England advanced apprenticeships are strongly promoted and more high level training will probably be subsumed under the apprenticeship banner. Interesting to mention is also the introduction of specific post-academic programmes intended to increase the labour-market chances of graduates from traditional academic programmes in Croatia. Some of these trends may well be described as **academic drift or academisation** ⁽⁵²⁾, others may be better explained as trends towards higher (but not necessarily academic) qualifications.

Increased diversity entails the need for integration or new forms of coherence. This is certainly to be observed when national qualifications frameworks are introduced not only as a tool for improved international comparison, but also as a means for improved coherence at national level. We can see various forms of **coalescence and hybridisation** at system and programme level. For instance, already established in France, or as an ongoing process in Greece and Cyprus, IVET and CVET have been subsumed under the umbrella of lifelong learning, while not denying their particular identity as distinct entities. In Cyprus the fragmented public understanding of VET (in terms of IVET and CVET) is currently also reflected in the absence of comprehensive legislation on VET. However, the LLL Strategies (2007-13 and 2014-20) have the potential to contribute to a more comprehensive concept of VET ⁽⁵³⁾. In Greece, the conception of VET has constantly been based on the two subsystems of IVET and CVET, which were addressed separately by different laws for several years between 1992 and 2010, until the Law 3879/2010 made a serious attempt to integrate all forms of vocational education and training under a lifelong learning perspective by identifying alternative paths, networking lifelong learning institutions and ensuring transparency and quality ⁽⁵⁴⁾. In Wallonia we can currently witness the merging of two historically different forms of alternate training ⁽⁵⁵⁾.

Interestingly enough, in respect of the **parity of esteem between VET and general education** changes also seem to have happened (reported by 16 countries). Countries with a traditionally dominant position of general education have tried to raise the comparably low esteem of VET. In contrast, countries with traditionally well-established dual VET conceptions have tried to stop the ongoing decline of esteem (e.g. Austria, Denmark). However, none of these attempts is reported to have been successful – with a few exceptions, such as Spain. In Spain, several important legislative and societal changes have taken place regards VET in the last 20-25 years and the social perception of VET studies has significantly increased, not only among students but also within Spanish society in general. Yet, the most impressive example in this respect is Finland, which has shown a steady increase in VET enrolments in the last 10 years. Two developments have had a crucial impact on the current status of VET in Finland as Stenström and Virolainen explain: ‘First, the general education component within VET was developed along a continuous pedagogical

⁽⁵²⁾ See work assignment 5 ‘VET in higher education’

⁽⁵³⁾ From the Cypriote questionnaire.

⁽⁵⁴⁾ From the Greek questionnaire.

⁽⁵⁵⁾ Cedefop (forthcoming) *Cross-national overview on apprenticeship*. The Minister of Employment and Training described these tracks now becoming one in 2015 as: ‘These are two worlds and two different philosophies. The pathways, the structures, the apprenticeship contracts, funding or incentives are not identical. This leads to sterile competition between learners, training organisations and even businesses.’ <http://www.lesoir.be/876796/article/actualite/belgique/2015-05-12/un-contrat-unique-pour-formation-en-alternance-en-wallonie-et-bruxelles>

renewal. [...] Second, higher and further education opportunities have also been created from VET.'⁽⁵⁶⁾ They also refer to the following facts to explain the increased parity of esteem of VET with respect to general upper secondary education: 1) IVET has been oriented more clearly toward the world of work during the past decade; 2) skills competitions, like the annual Finnish National Skills Competition, *Taitaja*, have also increased the popularity of VET [...]; and 3) the higher education eligibility provided by VET.⁽⁵⁷⁾

While in almost all countries a **trend towards learning outcomes** for describing VET programmes and qualifications has been visible, there is no unitary trend as regards the specificity of learning outcomes. There are countries where the number of modules and qualifications were or will be reduced, eventually reducing the specificity of learning outcomes in VET (e.g. England, Norway). For other countries an increase in the degree of detail in which learning outcomes are specified was reported. On the one hand this could lead to an assumed convergence (generic programmes become more specific while at the same time occupation-specific programmes become broader), on the other it could just be interpreted as an increased pluralism in VET (i.e. coexistence and increasing variety of specific and generic programmes) as already discussed above. We will have to look more closely whether a decrease in the number of programmes/qualifications is due to a decrease of occupational profiles (occupations disappearing, hybridization of occupations) or the merging of programmes in order to target a broader group of occupations.

If we have to summarize these various developments, we could on the one hand refer to an **expansion and diversification** of VET and on the other hand to a **strengthening or intensification** of VET (in the sense of a re-emphasis or renaissance of values and elements related to VET) taking place simultaneously. We tried to illustrate these developments by making use of the three perspectives introduced and discussed in working paper 1 (see Table 4).

⁽⁵⁶⁾ Stenström, M.-L. and M. Virolainen (2016). Towards the Enhancement of School-based VET in Finland. In Berner, E., Gonon, P. (eds.) *History of Vocational Education and Training in Europe. Cases, Concepts and Challenges*, Peter Lang: Bern, p. 327-347, p. 337.

⁽⁵⁷⁾ Ibid. p. 341

Table 4: **Changes in VET reported for the last 20 years**

	Expansion & Diversification	Strengthening & Intensification
Epistemological / Pedagogical Perspective on VET	<ul style="list-style-type: none"> – increasing pluralism of forms of VET (unified, dual, trial) – increase of third learning sites – individualization (e.g. individualized pathways, heterogenous groups) 	<ul style="list-style-type: none"> – increasing work-based elements (e.g. internships) in school-based VET – more practice-oriented curricula
Education System Perspective on VET	<ul style="list-style-type: none"> – expanding apprenticeships to lower and higher levels – increase of higher VET – new VET providers (e.g. liberal education institutions) – modularisation 	<ul style="list-style-type: none"> – re-emphasis on apprenticeship – decrease in number of profiles / broadening profiles ⁽⁵⁸⁾ – merging of IVET/CVET
Socio-Economic / Labour Market Perspective on VET	<ul style="list-style-type: none"> – VET spreading to lower and higher skill levels – Various new/additional purposes of VET (e.g. equity, combat youth unemployment) 	<ul style="list-style-type: none"> – Fostering employer engagement – strengthening role of social partners

Source: Authors.

We have grounds to believe that patterns of national VET conceptions have been rather stable despite considerable reforms that took place in the last two decades. Many country experts reported major reforms in this period, but at the same time underlined that they have not (yet) changed the overall conception of VET. For instance, in Germany a major reform of the Vocational Training Act facilitated international mobility and recognition of prior learning ⁽⁵⁹⁾, Bulgaria introduced a systematic approach for validation in VET, Cyprus comprehensively reformed the curriculum of secondary technical and vocational education, the Danish VET system experienced several reforms since the 1990s to make VET more attractive, to simplify the structure and to allow for the individualisation of programmes. In none of these cases the overall conception of VET changed. An interesting case in this respect is also England, which following the Leitch Review in 2006 ⁽⁶⁰⁾ introduced reforms to make the system more demand side oriented. Ongoing major reforms in the England include: (i) greater use of labour market intelligence to guide decisions on learning investments; (ii) a preference for using apprenticeships as the main form of IVET; (iii) using employer-routed funding / co-investment to ensure that employers are only willing to invest in training that will yield a return rather than just let training providers get them to consume the available 'free' training; and (iv) the introduction of an apprenticeship levy from 2017 where employers with a wage bill over £3m will pay a levy that they can reclaim if they deliver apprenticeships. Undoubtedly, such reforms may alter the conception of VET in one or another way, but still it remains a particular UK approach to VET – different to many continental approaches.

⁽⁵⁸⁾ This could be regarded either as expansion (making programmes more general) or strengthening (re-shaping the profile of programmes e.g. caused by hybridisation of occupations).

⁽⁵⁹⁾ Sondermann, Thomas (2005) Das Berufsbildungsreformgesetz von 2005: Was ist neu und anders? in: BWP 2/2005

⁽⁶⁰⁾ HM Treasury (2006). *Leitch Review of Skills: Prosperity for all in the global economy - world class skills* - Final Report. London: HM Treasury

A change in the perception of VET due to system reforms was reported for Sweden, but with negative consequences for VET. Sweden removed the requirement for vocational programmes in upper secondary schools to provide basic eligibility for higher education, rather making it voluntary for the students to choose whether or not to obtain the required qualifications to access universities. This reform was undertaken in 2011 to combat the perceived decline in status of vocational education. Curiously, the interest for IVET programmes has declined since the reform, which may be an indication that rather than positioning VET as an alternative to exclusively theoretical education the reform has contributed to a more negative conception of VET. Prior to the 2011 reform, the most significant reform in terms of the conception of VET was the 1994 reform, which transferred IVET programmes from vocational schools to general schools and which led to an emphasis on general vocational skills rather than specific vocational skills. This may have contributed to the development of the relatively negative image of VET programmes as low-status education programmes, which the 2011 reform sought to combat.

Information about such national reforms are certainly important to understand the direction and pace of change. However, *Yrkesutbildning* in Sweden was conceived as vocational oriented school education before and after the reforms (although with changing components, such as the status and occupational specificity of programmes). The question we are particularly interested in is: When do these modifications add up to major changes so that we have to assert a new or different conception of VET? Or in other words: How does a new national VET discourse emerge?

The concurrence of expansion and strengthening of VET makes it difficult to arrive at a consistent European picture of VET development. However, related to the four patterns of conceptions of VET described in Chapter 5, we have reason to assume there are two main trajectories of current VET conceptions. The strengthening of VET points in the direction of VET as work-based training as illustrated by Austria, Denmark or Germany, but without its current focus on initial training. The diversification of VET points in the direction of VET as understood as (part of) lifelong learning as illustrated by France or Finland. It is crucial to see that these are not exclusive developments and countries do not move either in the one or the other direction. On the contrary, both developments can be observed simultaneously. Consequently, convergence of conceptions (and systems) may take place, but only modestly

We can well illustrate this trend towards understanding VET as LLL with the example of Lithuania: 'The biggest change in the conception of VET in Lithuania is related to the introduction of the concept of lifelong learning and implementation of the corresponding reforms: introduction of the Lithuanian Qualifications Framework, occupational standards, national modular VET curricula, alternative pathway of dual apprenticeship, sectoral practical training centres. This reform is currently changing the concept of VET in several directions: a) strengthening the understanding that VET has a lifelong learning dimension; b) intensifying relationships between VET and the world of work (dual apprenticeship, possibility for enterprises to become stakeholders of public VET schools, introduction of sectoral practical training centres, active participation of employers in the development of occupational standards and national modular VET curricula, etc.); 3) increasing 'user-friendliness of VET to learners (expanding choice of VET programmes and pathways through introduction of

apprenticeship and modularisation).’ ⁽⁶¹⁾ Other countries such as Portugal, Greece, Cyprus, Latvia or Romania could equally well illustrate this trend. It seems only a matter of time until national reforms in these countries entail a substantially different conception of VET (as we have identified e.g. for France or Finland).

Indications for the trends discussed above have been traced for the last two decades by the experts consulted, but were frequently extrapolated to the future and also expressed as expected changes. Thus, we can finally try to paint a picture of the changing role of VET in the last two decades and also to look into the future (see Table 5). We can say for sure that some European countries, but not yet all, have bid farewell to vocational education and training conceived as ‘dead-end’ initial training for skilled workers, clearly separated from general education. In the last two decades, we have witnessed a remarkable diversification of VET in terms of providers, levels and target groups, increased horizontal and vertical permeability, a re-emphasis of work-based elements, a coalescence of IVET and CVET, a hybridisation of systems and programmes, and emergence of a new discourse of VET as a means of avoiding youth unemployment in addition to its traditional purpose of securing the supply of skilled labour. The future of European VET is likely to be even more pluralistic than it currently already is. We might expect a future for VET in which a multitude of different learning approaches exist, in which VET is provided at all levels by a variety of different providers and in which VET serves multiple functions. This ongoing transformation of VET may be accompanied by an impending risk of fragmentation and polarization (in terms of conflicting approaches to VET) due to the increased diversity.

Table 5: **The Changing Role of VET**

	PAST (before 1995)	PRESENT (1995-2015)	FUTURE (after 2015)
Epistemological / Pedagogical Perspective on VET	On the job; job-specific; behaviourist; separating general from vocational	Increased WBL; crossing boundaries (general – vocational; school – workplace)	Multitude of learning approaches; co-existence of occupation-specific and broader learning outcomes, increased WBL
Education System Perspective on VET	Dead-end programmes, restricted to medium levels; VET provided by schools and companies; ‘VET as IVET’	Increased permeability; VET also at higher levels; diversification of providers and programmes; geared for work AND education; ‘IVET and CVET’	VET at all levels, but risk of polarisation; variety of providers; ‘VET as LLL’, risk of fragmentation
Socio-Economic / LabourMarket Perspective on VET	Preparing for job entry; serving employer interest; securing skilled labour	Securing skilled labour and promoting innovation and growth; employability / avoiding unemployment	Multi-purpose / pluralist VET (including equity and equality issues)

Source: Authors.

⁽⁶¹⁾ From the Lithuanian questionnaire.

The aim of this paper has been to scrutinize existing national definitions and conceptions of VET and their changes over time, in order to guide our hypothesis for further analysis. It is neither a new typology of VET systems nor a forecast for the role of VET in Europe. The approach taken in this study is not suitable for a comparison of systems, for several reasons. First of all, we are focused on national notions of VET independent of the national education system and its socio-economic context, disregarding also simple comparative indicators as for instance the importance of VET in terms of enrolment figures. Secondly, our approach has been selective and reductionist from the beginning, because we intentionally did not take into account the full diversity of VET at national level, something a serious and comprehensive system comparison would have to do. Finally, we cannot automatically extrapolate from changes of conceptions to changes of systems. The research activities still to come in the Cedefop project 'The changing role and nature of VET' will provide evidence that there is some congruency between discourse and system change and will corroborate some of the hypotheses developed here. For instance, we will look into detail of academic and vocational drift and try to prove the expansion and diversification hypothesis (work assignment 5), explore how VET is understood as LLL and whether a merging of IVET and CVET takes place (work assignment 4), and investigate the trend towards work-based learning and the reasons for increase or decrease of VET programmes (and enrolment in these programmes) at upper-secondary level (work assignment 3).

Apart from the work in the subsequent work assignments, the approach presented here could be further elaborated in at least two ways. On the one hand it would be interesting to follow at national level alternative conceptions to see whether they compete with or complement the dominant conceptions discussed here. On the other hand it would be worth taking a broader view and look at the overall developments of education systems, of which VET is a part of, rather than doing this exclusively for VET.

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Annexes

Table 1 National terms used for VET, literal and official translations

	Common term used for VET	Literal English translation	Official translation*
AT	Berufsbildung	Vocational education	Vocational training
BEf	Beroepsonderwijs	Vocational education	
BG	Професионално образование и обучение	Vocational education and training	Vocational education and training
CY	Επαγγελματική εκπαίδευση και κατάρτιση	Professional education and training	Vocational education and training
CZ	odborné vzdělávání a příprava	Vocational education and preparation	Vocational education and training
DE	Berufsbildung	Vocational education	Vocational education and training
DK	Erhvervsuddannelse	Vocational education	Vocational education and training
EE	Kutseharidus / Kutseõpe	Vocational education / training	Vocational education / training
EL	Επαγγελματική Εκπαίδευση και Κατάρτιση		Vocational raining
EN	Further Education and Training	Further education and training	Further education and training
ES	Formación Profesional	Vocational training	Vocational training
FI	ammattilinen koulutus	Vocational (occupational, professional) education (training, schooling)	Vocational education and training
FR	enseignement et formation professionnels	Vocational education and training	Vocational education and training
HR	Strukovno obrazovanje i osposobljavanje	Vocational education and training	Vocational education and training
HU	Szakképzés	Vocational training	Vocational education and training
IE	Further Education and Training	Further education and training	Further education and training
IS	starfsmenntun/starfsnám	Education for an occupation	Vocational education and training
IT	Istruzione e Formazione Professionale (IeFP).	Vocational education and training	Vocational education and training
LT	Profesinis rengimas / profesinis mokymas	Vocational education and training	No official translation or not provided
LU	enseignement et formation professionnels	vocational education and training	No official translation or not provided
LV	Profesionālā izglītība	Vocational education	Vocational education
MT	L-educazzjoni u t-taħriġ vokazzjonali	Vocational education and training	Vocational education and training
NL	beroepsonderwijs	Vocational education	Vocational education
NO	Fag- og yrkesopplæring	Training for a trade / training for an occupation	Vocational education and training
PL	Kształcenie zawodowe	Professional education	Vocational education
PT	Formação Profissional / Ensino e Formação Profissional	Professional training / professional education and training	No official translation or not provided
RO	Educație și formare profesională	Vocational education and training	Vocational education and training
SE	Yrkesutbildning	Vocational education	Vocational education
SI	poklicno izobraževanje	Vocational education	No official translation or not provided
SK	odborné vzdelávanie a príprava	Vocational education and preparation	Vocational education and training

Source: Authors; *as in law, websites of ministries or the like.

Table 2 **Additional information and explanation for terms used (selected countries)**

	National terms	Explanations
AT	Berufsbildung	The term 'Berufsausbildung' (Vocational Training) emphasizes initial VET and is clearly associated with the apprenticeship systems. The common term 'Berufsbildung' is slightly broader, but still most people would not associated 'Continuing Vocational Training' with the term.
BE-fl	Beroepsonderwijs	Beroepsonderwijs is more often associated with education in secondary education.
CY	Επαγγελματική εκπαίδευση και κατάρτιση	As there are no distinct words in Greek, the term 'vocational' can have three different meanings: professional, vocational and occupational.
CZ	odborné vzdělávání a příprava	The term 'odborné vzdělávání' is literally translated as 'vocational education'. The term 'příprava' is officially translated as 'training' however the literal English translation of the word is 'preparation'. This implies the understanding of VET as a line of learning with a major objective in preparing the learner for a future profession. Also, the term 'příprava'/'preparation' is used to indicate a practice-oriented dimension that is complementary to the concept of 'vzdělávání'/'education' that implies theoretical learning
DE	Berufsbildung	The often used term 'Berufsausbildung' emphasizes initial VET and is clearly associated with the dual system of apprenticeship.
DK	Erhvervsuddannelse	The term 'Erhvervsuddannelse' normally refers to IVET and includes three different paths: EUD for young people, EUV for adults (above 25 years of age) and EUX, which is a combined vocational and general upper secondary education. CVET (in the formal education system) is referred to as 'Arbejdsmarkedsuddannelser (AMU).
EE	Kutseharidus / Kutseõpe	Ministry of Education and Research uses the term 'Kutseharidus' and the English translation 'Vocational education' on this website. Also in the Republic of Estonia Education Act the same term is used. The term 'Kutseõpe' means Vocational Training (Vocational Educational Institutions Act, 2013, §2)
EL	Επαγγελματική Εκπαίδευση και Κατάρτιση	The common term used is Vocational Education and Training (VET), but the legal framework for the provision of VET in Greece is set by the laws regulating Initial vocational training and continuing vocational training. Since the enactment of Law 3879/2010 on Lifelong Learning, these two components of VET, initial and continuing vocational training, have been treated in the framework of the national holistic strategy on lifelong learning.
EN	Further Education and Training	There is no one common term. Vocational skills, further education, skills, all tend to be used interchangeably. The Department for Business Innovation and Skills (BIS) and Department for Education (DfE) refer to 'Further Education and Training'. But the situation tends to be fluid. All skills policy will be transferred to DfE in the near future which may affect the official terminology.
ES	Formación Profesional	The national term 'Formación Profesional' emphasizes initial VET, and it is clearly associated with the English term 'Training' rather than with 'Education' ('Educación' in Spanish). Typically, most people would associate the concept of 'Formación Profesional' to initial VET, and not to CVET.
FI	ammattilinen koulutus	Ammattilinen koulutus refers more to education than training. It also important that in Finnish language the word 'ammattilinen' may be understood as professional or vocational. In the educational system those are divided to different educational systems but the language does not support that distinction.
FR	Enseignement et formation professionnels	Traditionally, initial VET and continuing VET for adults have been presented separately. Because of the new paradigm of LLL they are more and more presented together.
HR	Strukovno obrazovanje i osposobljavanje	The term 'strukovno obrazovanje i osposobljavanje' emphasizes both education and training, but it is obvious that the additional aspects of adult education is usual to add.
HU	Szakképzés	Vocational training is the unambiguous Hungarian equivalent of vocational education and training. The term 'Szakképzés' (Vocational Training) emphasizes initial VET and is clearly associated with the apprenticeship systems.

Source: Authors

Table 2 (contd.)

Additional information and explanation for terms used

IE	Further Education and Training	VET in Ireland is generally referred to as FET (Further Education and Training). In reality this covers <i>Vocational Education</i> (often described as Further Education) which includes PLC (Post Leaving Certificate) awards and qualifications, Second-chance education, adult learning, community education, and <i>Vocational Training</i> , which includes Apprenticeships, On-the-job training, Internships, Training programmes, labour activation schemes.
IT	Istruzione e Formazione Professionale (IeFP)	Before the 2003 reform, the Italian expression for IeFP was FP (that is Vocational Training) but according to the 2001 Constitutional Reform the name was changed to include also the vocational and technical 5-years programmes of upper secondary education). In 2007 the 5-years upper secondary education programmes returned back to the educational system, but the name (IeFP) remained.
LT	Profesinis rengimas / profesinis mokymas	The term 'profesinis rengimas' encompasses all areas of vocational education and training (initial, continuing, higher education) whereas the term 'profesinis mokymas' is more focused on the organisation and didactics of training. However, this dualism is noticed only in discussions of experts. 'Profesinis mokymas' which fully corresponds to 'vocational education and training' is more commonly used.
LV	Profesionālā izglītība	The term 'Profesionālā izglītība' (vocational education) is used to describe vocational education, further and in-service training, and formal education from level two to seven according to the Latvian Qualification Framework, Vocational Education Law (Article 5), Education Law (Article 6) and professional standards.
MT	L-edukazzjoni u t-taħriġ vokazzjonali	Although the Maltese language often tends to be limited in vocabulary and many times one Maltese word tends to cover a wider meaning than the literal translation in another language, this, however, is not the case with the term used for vocational education and training', where both the separate words and phrase as a whole do not reflect any particularly different meaning.
NL	beroepsonderwijs	The general term used for VET is 'beroepsonderwijs'. Vocational education is divided into three types of schools. When spoken about vocational education one refers in most cases to the Mbo (Middelbaar beroepsonderwijs, Secondary Vocational Education)
NO	Fag- og yrkesopplæring	Like the English term, 'vocational education' alludes to VET playing out in an educational context (even school), while 'vocational training' hints at how a vocation (or occupation) is constituted at the workplace.
PL	Kształcenie zawodowe	The Polish understanding of 'kształcenie zawodowe' is close to the English term VET. It includes both initial and continuing stages; the common understanding is connected with the secondary education and post-secondary education at non higher level, although there are also state HEIs dedicated to vocational education (Law on HE of 2005).
PT	Formação Profissional / Ensino e Formação Profissional	Both terms 'Formação Profissional' (Professional Training) or 'Ensino e Formação Profissional' (Vocational Education and Training) have the same meaning in Portugal. However, the term 'Formação Profissional' is the most common due to historical reasons. When the system started to be implemented in Portugal there was a need of distinguishing it from the regular education and that's why it doesn't include the term 'education'.
RO	Educație și formare profesională	The term 'Educație și formare profesională' (EFP) is used in official documents (e.g. VET Strategy 2016-2020) when referring to both initial and continuing VET. In a broader sense, the term is also used when referring to the whole education system (e.g. in the Law of national education). The term 'Formare profesională', translated as 'Vocational training', is also commonly used when referring to both initial and continuing VET (especially because many people would not associate CVET with the term 'Educație și formare profesională').
SE	Yrkesutbildning	The term 'Yrkesutbildning' emphasizes the 'education' aspect more clearly than the 'training' aspect of VET and is most commonly associated with initial and advanced vocational education and training conducted by the public school system at the high-school level, and the post-high school programmes offered by the Agency for Higher Vocational Education (Yrkeshöskolan).
SI	poklicno izobraževanje	In Slovenian it is more common to use term education than training. Term education denotes the formal education system, which also gives the professional qualifications related to the professional standard, the degree of education.

Source: Authors

Table 3: Existence of legal definitions of VET and explanation (selected countries)

AT	N	'Berufsbildung', though commonly used, is not defined by any law. The term 'Berufsausbildung' is implicitly defined as it is the title of the law regulating the apprenticeship system.
BG	Y	The main purpose of VET is to prepare 'the citizens for realisation in the economy and the other spheres of public life by creating conditions for acquiring professional qualification and for its continuous improvement' (Art. 2, VETA). The system of vocational education and training includes vocational orientation, vocational training, vocational education as well as validation of professional knowledge, skills and competences (Art.4, VETA). Vocational training 'shall ensure the acquisition of qualification for a profession or part of a profession, as well as its improvement'. Vocational education 'shall ensure the acquisition of the general education minimum for secondary education and the acquisition of a qualification for a profession (Art.5 (3), VETA).
CY	N	The series of educational laws on pre-primary, primary, secondary general and secondary technical and vocational institutions (Nos: 5/71, 56/83, 123/85 and 154 (I)/99) do not provide a legal definition of VET. A definition is neither provided in the original Apprenticeship Law of 1966 (No 13/66 nor in the reformed new modern apprenticeship (NMA) programme. Finally, no definition was provided in the 2012 establishment of post-secondary VET institutes (MIEEK). The only VET relevant legislation is the 1999 Human Resource Development Law (Law 125(I)/1999, as amended up to 2007) which establishes the Human Resource Development Authority (HRDA) as the only authority with competence and power in training, including continuing VET. This law provides a 'training' definition which explicitly excludes school-based education: 'the planned, systematic process of initial learning, retraining and further training of individuals, leading to effective performance of work through the acquisition, development and improvement of knowledge and skills or to a different way of thinking and understanding, and aimed at improving the efficiency of the economy. Individuals may be employed or intend to be employed in any occupation at any level in order to meet the needs of the economy in human resources.' ⁶²
CZ	N	No legal act provides a direct and explicit definition of the term 'vocational education and training'. Act 561/2004 (see References, no. 1) regulates VET, however the term is not defined within this act. The Act consistently refers to 'secondary education'/'střední vzdělávání', i.e. it refers to a vertical position in initial education pathway rather than to a vocational character of specific type of education.
DE	Y	In the Vocational Education and Training Act the term 'Berufsbildung' is defined as follows: '(1) For the purposes of this Act, the term "vocational training" shall mean vocational training preparation, initial training, further training and retraining. (2) Vocational training preparation shall serve to impart basic skills required for the acquisition of vocational competence and thus facilitate placement in initial training in a recognized training occupation. (3) Initial training shall, through a systematic training programme, impart the vocational skills, knowledge and qualifications (vocational competence) necessary to engage in a form of skilled occupational activity in a changing working world. Initial training shall also enable trainees to acquire the necessary occupational experience. (4) Further training shall enable individuals to maintain and upgrade or broaden their vocational competence and advance their careers. (5) Retraining shall qualify individuals for another form of occupational activity.'
DK	Y	The first section of the 'Consolidation Act for 'Erhvervsuddannelser', describes the mission of Erhvervsuddannelser (⁶³). There is no legal definition of the term 'Erhvervsuddannelse'.
EE	Y	Vocational education is a system of knowledge, skills, experience, values and behavioral norms which are required for working in a certain area of specialisation, for obtaining certain qualifications and for applying for and retaining a certain position, and the acquisition and improvement of that system creates the prerequisites for successful professional activity (Republic of Estonia Education Act, 1992, §12). Vocational training means the aggregate of learning, teaching and organisational activities the purpose of which is to enable the acquisition of vocational education. (Vocational Educational Institutions Act, 2013, §2)
EL	N	There is not a single definition for VET, as it is defined through the provision of separated definitions for initial vocational training and continuing vocational training, placed under the lifelong learning perspective. Law 3879/2010 on the development of lifelong learning distinguishes 'non-formal education' from 'formal' education and defines 'non-formal education' as provided in an organised framework outside the formal education system, which can lead to nationally recognised qualifications and includes initial vocational training, continuous vocational training and adult education. This is also explained by the fact that the provision of VET in Greece is set by different laws regulating IVET and CVET.

Source: Authors

⁶²English translation of the law provided by the Department of Labour, Ministry of Labour, Welfare and Social Insurance, http://www.mlsi.gov.cy/mlsi/dl/dl.nsf/dmllegislation_en/dmllegislation_en?OpenDocument.

⁶³BEK nr 367 af 19/04/2016 - <https://www.retsinformation.dk/Forms/R0710.aspx?id=179825>

Table 3 (contd.) **Existence of legal definitions of VET and explanation**

ES	Y	According to the official definition of 'Formación Profesional' included in the Organic Law 2/2006 of 3rd may of Education and its latest revision by the Organic Law 8/2013 for the Improvement of Education Quality, 'Formación Profesional' includes all training activities that enable the qualified performance of diverse professions, access to employment and active participation in social, cultural and economic life. It includes both the initial vocational training, actions of integration and reintegration of unemployed workers as well as those actions aimed at fostering continuing training activities in companies for the acquisition and updating of skills of workers. These two last categories are usually understood as VET for Employment.
FI	Y	Vocational Education and Training Act (630/1998): definition of vocational upper secondary education and training; Vocational Adult Education Act (631/1998): definition of vocational adult education and training (VET for adults) The legal definitions states that those who have completed the basic degree in vocational education have wide occupational/vocational basic skills to work in different role in their field and more specific skills and working life required know-how at least in one specific task. The vocational basic degree can be completed as vocational basic education defined in the same law or competence-based qualification defined in the law of adult education.
FR	N	There is no single general definition of VET in the legal texts (cf. Code de l'éducation). There are formulations of objectives and descriptions of VET sub-systems.
HR	Y	Vocational education is a process of acquiring competences (knowledge, skills and competences), if the results of this process are evaluated and confirmed in a procedure carried out by VET institutions. Also, vocational training implicates education to acquire competencies to perform simple tasks, and also it means education which acquired additional competences of same or higher level qualification within the education sector for which participant has a recognized qualification. (Vocational Education Act, Art.3.)
HU	Y	Vocational training is training within or outside the school system with the aim to acquire qualification recognized by the state, listed in National Vocational Qualifications Register (Act CLXXXVII of 2011 on vocational education and training §3). 'School-based vocational education and training: vocational education and training provided in the framework of public education, as defined by the Act on National Public Education and in the vocational schools defined under the Act, the participants of which are in student legal relationship with the school.' (Act CLXXXVII of 2011 on vocational education and training '2).
IE	N	There is no single definition for VET in Ireland as VET (FET) has its roots in diverse historical legislative structures. The most important legislation within the vocational education system is the Vocational Education Act, 1930 and respective amendments, which led to the establishment of thirty-three regionally-based Vocational Education Committees (VECs). The Vocational Education (Amendment) Act, 2001, broadened the representative element of VECs to include public representatives, parents, teachers, local businesses and a requirement for the VECs to adopt education plans.
IT	Y	VET (intended as IeFP) has a single legal definition in Italy according to Law 40/2007 and based on the 2001 Constitutional Reform and Law 53/2003. This definition actually includes the regional/aa.pp. IVET 3-4 years courses, Type 1 Apprenticeship out-of-company training (15-25 y.o.), post-secondary level programmes (HTI and IFTS). In legal terms, Istruzione e Formazione Professionale (IeFP) refers only to courses under Regions/AA.PP responsibilities.
LT	Y	The Law on VET (2007) provides the following definition of VET: Vocational education and training (profesinis mokymas)- education and training based on the curricula of vocational education and training that leads to the acquisition of qualification or it's upgrading.
LV	Y	Professional education – practical and theoretical preparation for the practice of a particular profession, and for the acquisition of professional qualification and improvement of professional competence (Education Law of the Republic of Latvia, 1999, Article 1)
MT	N	There is no official definition of VET in the Education Act (2016) which is the key legislation covering education, also VET in Malta. There is also no definition of VET in the Referencing Report in Malta (2016) (references provided in excel sheet) or in the proposed new Education Act – Bringing Education into the 21st Century (2016) or in the National Vocational Education and Training Policy (2015).
NL	N	The Vocational Education Act (WEB) (§ 1.2.1) covers two types of education: secondary vocational education (MBO) and adult education. The purpose of secondary vocational education is described as follows: Vocational education is focused on the theoretical and practical preparation for the practice of professions, for which a vocational qualification is necessary. Vocational education contributes to the further general and personal development of students and contributes to the social functioning. Vocational education is connected to the pre-vocational and general secondary education. Vocational does not include higher education. ⁶⁴

Source: Authors

⁶⁴(Source: <http://wetten.overheid.nl/BWBR0007625/2016-08-01>). Pre-vocational secondary education (vmbo) is covered by the Secondary Education Act.

Table 3 (contd.) **Existence of legal definitions of VET and explanation**

NO	N	VET is not defined but there is a definition of 'apprentice' in the Education Act, § 3-4, 'Chapter 4. Upper secondary education and training in enterprises". It reads that an apprentice is someone who has signed a contract in view of obtaining a trade certificate or a journeyman's certificate within a trade where in-company training is offered. ⁶⁵
PL	N	There is no official definition of VET in Poland. Reports on VET in Poland and elaborations dedicated to the topic uses definitions from pedagogical literature or refers to the common understanding; Bills on National Education System - which provides frameworks for VET excluding VET HEIs do not define the term, neither Law on HE; Ministry of Finances uses the VET definition (which is necessary due to tax free regulations) uses when need the definition from COUNCIL IMPLEMENTING REGULATION (EU) No 282/2011.
PT	Y	The Decree Law nr. 396/2007, of 31st of December (establishes the legal framework of the National Qualification System) defines the 'Formação Profissional' as the training to endow the individual of competences allowing him/her to perform a specific professional job/activity.
RO	N	'Educație și formare profesională' (EFP), though commonly used, is not defined by any official document. The term is implicitly defined, as it is in the title of the Romanian VET Strategy for 2016-2020 (Strategia educației și formării profesionale 2016-2020).
SE	N	The term 'yrkesutbildning' is used in several legal documents (see for example the National Education Act (Skollag) 2010:800, or the Higher Vocational Education Act (Lag om Yrkeshögskolan) 2009:128) but often implicitly and with varying meaning in different context depending on the level of the education (e.g. IVET, AVET etc.). Even within these laws, there is no clearly demarcated definition of the term – instead the implicit understanding of VET is conveyed through the whole text.
SK	Y	Legal Act no. 61/2015 provides in Article 1 Para 2 definitions of basic terms used, where in section a) 'vocational education' is defined as 'a process of education and upbringing that allows for the adoption of the knowledge, skills and abilities needed for the performance of a vocation, group of vocations or vocational activities; it is divided into theoretical education and practical education.' Legal Act no. 61/2015 has introduced the concept of Dual VET into Slovak educational system. ⁶⁶

Source: Authors

⁶⁵Act of 17 July 1998 no. 61 relating to Primary and Secondary Education and Training (the Education Act). With amendments as of 25 June 2010, 31 May 2011, 2012, 2013 and 2014.

⁶⁶National Council of the Slovak Republic, Act No. 61/2015 on Vocational Education and Training, <http://www.zakonypreludi.sk/zz/2015-61>

Table 4 Analytical Framework to analyse national VET conception

VET as seen from the ...	Dimensions	Variants/Features	
	...would in terms ofemphasize the following key features/components....	
Epistemological / pedagogical perspective	1. Knowledge approach	1.1 Practical knowledge / Experience based	
		1.2 Applied knowledge / Disciplinary based	
	2. Pedagogical / didactical approach	2.1 Learning by doing / problem-based learning	
		2.2 Instruction-centered learning	
	3. Teacher-student relationship	3.1 Master-apprenticeship	
		3.2 Teacher-student	
		3.3 Different types of instructors (e.g. teachers & workshop trainers)	
	4. Learning sites	4.1 Mainly on the job / work-based learning	
		4.2 Multiple learning sites (e.g. some form of duality)	
		4.3 Mainly in classrooms with some practical experiences	
	5. Specificity of learning outcomes	5.1 Occupation/profession-specific (e.g. brickmaker, nurse)	
		5.2 Broader vocational field related (e.g. construction, health)	
		5.3 Vocational preparation	
	6. Professional ethos	6.1 Distinct occupational or professional ethos	
		6.2 No specific occupational or/ professional ethos	
	Education system perspective	7. Level of education	7.1 Mainly lower level (i.e. ISCED11 level 2)
			7.2 Middle level of education (i.e. ISCED11 level 3-4)
			7.3 Middle level and some higher VET (i.e. ISCED11 level 3-5)
8. Age		8.1 Adolescent / young people (15 to 19)	
		8.2 Young adult / adults (18-24)	
		8.3 no particular age group	
9. Outcomes / Destination		9.1 Occupational qualifications or rights	
		9.2 Educational qualifications / access rights to higher levels of education	
		9.3 Occupational rights and access rights to higher levels of education	
		9.4 No specific occupational rights / rights for progressing in education	
10. Key providers		10.1 Companies	
		10.2 Schools	
		10.3 Further and/or Higher Education Providers	
11. Parity of esteem between general and vocational education		11.1 Higher or equal compared to general/academic education	
		11.2 Lower than general/academic education	
Socio-Economic/ labour market perspective	12. Sources of funding	12.1 Mainly by companies	
		12.2 Mainly by the state – Education budget	
		12.3 Mainly by the state – Labour Market / Social security budget	
	13. Student identity / Legal status	13.1 Student	
		13.2 Apprentice or novice worker	
		13.3 Worker	
	14. Occupational Hierarchy	14.1 Semi-skilled workers	
		14.2 Skilled workers	
		14.3 Technicians / professionals / para-professionals	
	15. Governance	15.1 Low coordination – industry led	
		15.2 High coordination – led by organized business / trade unions	
		15.3 High coordination – state led	
	16. Focus / purpose	16.1 Entry into working life / entry level	
		16.2 Broad preparation for changing requirements across working life	
		16.3 Becoming a member of an occupation/ (para-)profession	
	17. Context of justification	17.1 Securing supply of skilled labour	
		17.2 Innovation and economic growth	
17.3 Individual progression, work readiness & smooth education work transition			
17.4 Equity and inclusion			

Source: Authors

Table 5: Overview on country clusters and the ten variables with the highest ratings (average scores).

Cluster 1 DE, AT_wbl, DK, SK_wbl, HU		Cluster 2 AT-school, BG, MT, RO, ES, BE, EE, LV, SI		Cluster 5 FR, IR-appr, IT, FI	
1.1. Practical knowledge / experience based	1,0	12.2. Mainly by the state – Education budget	1,0	16.1. Entry into working life / entry level	1,0
2.1. Learning by doing / problem-based	1,0	13.1. Student	1,0	5.1. Occupation-specific	1,0
6.1. Distinct occupational/ professional ethos	1,0	15.3. High coordination – state led	1,0	1.1. Practical knowledge / Experience based	1,0
7.2. Middle level of education	1,0	10.2. Schools	0,9	17.4. Individual progression, ...	1,0
9.1. Occupational qualifications or rights	1,0	4.3. Mainly in classrooms / some practical exp.	0,9	3.3. Different types of instructors	1,0
14.2. Skilled workers	1,0	8.3. Adolescent / young people (15 to 19)	0,8	2.1. Learning by doing / problem-based l.	1,0
17.1. Securing supply of skilled labour	1,0	9.3. Occupational rights & access rights to HE	0,8	9.1. Occupational qualifications or rights	1,0
3.1. Master–apprenticeship	0,8	11.2. Lower than general/academic education	0,8	4.2. Multiple learning sites	1,0
4.2. Multiple learning sites	0,8	3.2. Teacher-student	0,8	17.1. Securing supply of skilled labour	0,8
5.1. Occupation-specific (e.g. brickmaker)	0,8	6.1. Distinct occupational/ professional ethos	0,7	14.2. Skilled workers	0,8
Cluster 3 HR, CY-school, LU, NL, PL, PT		Cluster 4 EN, CY-appr.			
12.2. Mainly by the state – Education budget	1,0	16.1. Entry into working life / entry level	1,0		
15.3. High coordination – state led	1,0	17.1. Securing supply of skilled labour	1,0		
10.2. Schools	1,0	17.2. Innovation and economic growth	1,0		
11.2. Lower than general education	1,0	14.3. Technicians / professionals	1,0		
5.1. Occupation-specific	1,0	14.2. Skilled workers	1,0		
16.1. Entry into working life / entry level	1,0	2.2. Teacher-centered learning	1,0		
7.2. Middle level of education	1,0	8.5. Particular age group	1,0		
17.1. Securing supply of skilled labour	1,0	10.3. Further and/or HE Providers	1,0		
9.2. Educational qualifications	1,0	9.4. No specific occupational rights	1,0		
13.1. Student	0,9	15.3. High coordination – state led	0,7		

Source: Authors

Note: 1= all countries in this cluster emphasised this feature as a key feature.