



Employer Engagement in the Design and Development of Vocational Education and Training

Evaluative report

ED2VET Partnership

“A search for good practice in the involvement of employers in the design and development of Vocational Education and Training (VET)”

Introduction

The project "Employer Engagement in Design and Development of VET" (ED2VET) aims to investigate the factors that determine the extent and impact of employer involvement in VET design, and identify good practices for sharing.

The project's two main outputs are an online portfolio of good practices, including company case studies from across Europe and a report. The portfolio aims to present transferable models of good practice and include tips for employer involvement in the design and development of sector-relevant VET programmes. The portfolio is presented on the [ED2VET website](#), where online versions of each case study can also be found. An evaluative report on employer involvement in VET design and development has also been completed. This report describes the work of the ED2VET project team and discusses the main findings from the project.

The project is led by [UK NARIC](#), in partnership with:

- [Pisces Learning Innovations](#)
- [DIMITRA Education & Consulting](#)
- [Bulgarian Development Agency](#)

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1. Executive summary

There are many examples of effective employer involvement in the 'design and development of vocational education and training (VET)' in those countries partaking in the ED2VET study. How this is achieved varies country to country and sector to sector, according to differences in culture, the structure of the economy, political environment and VET regulatory policies and practices. The role of three main actors in VET design and development has been carefully considered throughout, namely; the VET regulators, employers and the VET providers.

Whilst it is widely believed that VET should be employer led to remain current and 'fit for purpose', it has been found that partnerships between VET providers and employers forged within a conducive VET regulatory environment that supports the communication process, are the principle to success. It is more accurate to say that VET design and development should be informed by employers as opposed to having to be led by them, and that this can be achieved in many ways. In some of the most striking examples the VET provider is clearly the leader and initiator of the entire process, not the employer, whilst in others, sophisticated formalised partnerships between leading progressive companies and their most proactive and committed VET providers is the most significant success factor with sector wide ramifications and benefits.

In all good practice examples the employer is engaged and their involvement and interest sustained throughout the process. Whilst the establishment of labour market needs, occupational profiles and standards is a central part of the employers' role in VET design, it is apparent that their involvement in other aspects of VET is very beneficial. The provision of work placements, workplace mentors and an involvement in the assessment and quality assurance process all demonstrates a level of commitment and cohesion with their VET providers that is more likely to culminate in a relevant, and responsive high-quality VET provision.

2. Defining good practice parameters

An extensive desk-study into 'employer involvement within VET design' was undertaken to inform the development of 'good practice parameters' required to guide subsequent field work. In general, the published literature focussing specifically on the project's core theme - 'employer involvement in VET development' was limited. However, some published information was found and included useful chapters, passages or specific references, that were informative and of some value.

This work confirmed that a diversity of approaches to VET development existed within Europe. Good practice is relative and not absolute and the way it is originated varies, country to country, sector to sector or even within sectors, (large company to SME). It was accepted at the outset that what works in one country, sector or size of organisation may not work in another. Culture, the legislature and the state of development of each national VET system can all have a bearing on what is and isn't possible. The project team concluded that good practice identified within a specified country, VET environment and set of circumstances, would not necessarily transfer to another, where the conditions essential to employer involvement in VET development may not exist or there may be inhibitors. However, despite this, attempts have been made to define the conditions necessary to transferring the good practices identified and highlighted within the specific case studies described in Section 4.

2.1 The underlying rationale and assumptions underpinning the development of good practice criteria

Although a wide range of opinions and attitudes towards employer involvement within VET development were revealed by the desk study, commonly upheld good practice parameters eventually crystallised.

There is an overwhelming consensus that VET development should be 'employer led' to ensure it remains fit for purpose. There are many ways that this can be achieved, but a high dependency on the relationship that employers have with their VET sector and providers and the effectiveness of employer representation at local, regional, national and international levels appeared to be key factors according to the published literature and anecdotal evidence. A distinction was made between employers and industry early in the project, with employers interested in developing the skills of their individual employees, and industry, through their employer representatives, more concerned with workforce development within the sector. Therefore, the terms 'employers' and 'industry' have not been interchangeable. In addition, anecdotally, the project team were alerted to the danger of the industry representation process being hijacked by large company interests to the detriment of SMEs. This was confirmed as a problem at times in the published literature.

Industry's opinions regarding the role of VET vary greatly as exemplified by the UK where a growing VET focus at national level on generic, transferable and soft skills has been cited by some as a concern. This has provided the motivation for many local and regional VET development initiatives and is a contributory cause of national qualification (NQ) abandonment by some companies in the UK, allegedly and is an important motivator behind the UK government's recent 'Trailblazer' initiative in England. For local and regional VET initiatives, technical specifics are commonly the chosen focus, moving beyond the generic and transferable competences seen as superfluous by some employers. However, by contrast, some UK employer surveys have cited general and transferable competences as being of the utmost importance. The point is made that 'so called' employer led VET provision (specific and localised) can operate independently of the 'official' national VET structures and industry representatives. This occurs in the UK, despite a mature and competent VET development infrastructure and system and the phenomena appear widespread within the EU according to anecdotal evidence.

Others point out that the 'employer led' concept is a misnomer, as collaborative partnerships between VET providers and employers are the norm. They are the most fruitful and responsive when VET providers are listened to and respected. They provide the opportunity for the development of positive working relationships between VET practitioners and employers, enabling staff turnover and the loss of key advocates by either party, to be withstood, without destabilising the partnership. It is recognised that formal service agreements are generally advisable, bolstering continuity between a VET provider and employer, and may also help to strengthen senior management buy in, which is sometimes said to be lacking. There is some debate as to the relative merits of 'bottom up' and 'top down' VET adoption by a company.

Conversely, some employers believe VET providers should be dealing with VET, as opposed to them. In the UK, constant change and the growing complexity of a plethora of National Qualifications since the 1990s, is a commonly referred to reason for this disaffection. However, even the most reticent employers, once pressed usually admit that they must have some level of involvement for a relevant and high-quality VET provision to be possible.

Regardless of the national regulatory environment and infrastructure governing VET, the quality of the partnership between VET providers and employers and the effectiveness of employer representation are referred to most frequently as the factors determining whether VET provision is fit for purpose. Therefore, a close examination as to how the most positive and productive VET provider and

employer partnerships have been formed and nurtured was accepted as a central strand of the field work and selection of case studies.

In addition, the ED2VET project team recognised that those partnerships that have triumphed over significant deficiencies in their VET system/regulatory environment may be of the greatest value to some other EU member states, industry sectors and employers within Europe, looking for practical VET solutions within an imperfect VET regulatory environment.

2.2 Development of good practice parameters and matrix to support field-work

Bearing in mind the irregular VET landscape across Europe and other national variables, such as the legislature and company learning cultures, the approach to be taken towards good practice 'classification' was given considerable thought by the partnership. Some factors although important were recognised as nebulous, such as the quality of the working relationship between the VET provider and employer. This was identified as one of the major determinants of success but can be difficult to define systemically. To avoid derailing the search for good practice, the identification of 'success factors' was agreed to be a more appropriate philosophy underpinning the field work than a restrictive 'systems focus', avoiding the risk of a 'tidy shop window' resulting from smart and comprehensive VET systems at national level, obscuring a less than healthy VET culture and reality.

The multiple levels at which an industry can engage with VET, none of which are mutually exclusive, provided another complication that the project team became aware of, as illustrated by the following fictional scenario described below.

"A small company seeks the assistance of a local VET provider to design VET to meet their immediate needs. A group of employers in the same sector cooperate with a VET provider consortium, to develop consistent VET provision, as operatives need the same competences when they move between employers. Representatives of the sector work with the VET regulators to develop National Occupational Standards (NOS) and National Qualifications (NQs)."

Underlying this description, the reality may be anything from dysfunctional, with next to no communication between the various vested interests, to representing a very healthy and diverse picture, with consistency and full cooperation between large companies and SMEs, well-orchestrated by the agencies representing them. The "devil is in the detail" and the role of the ED2VET fieldwork was to delve beneath any superficial descriptions to reveal the real strengths and weaknesses.

Therefore, any attempt to 'classify good practice' must be mindful of the hierarchy of levels within which different forms of 'employer involvement in VET development' can coexist.

2.3 Classification of good practices

Good practices were categorised according to the following hierarchy so as case studies from different countries and VET systems could be compared more objectively and equitably:

- VET systemic level - national and international
- Industry level - sector and company
- VET provision level - sector and provider

A case study may reveal good practice(s) at one or more than one level. It was recognised that whenever good practice was discovered at national VET systemic level, every attempt should be made to source potential sector specific case studies to verify that the VET system was functional and operating effectively, as described.

By applying this categorisation when evaluating potential good practice examples, all perspectives were more clearly revealed. In addition, national VET system limitations did not preclude good practices from being recognised lower down the hierarchy at company and VET provider level.

3. Field-work

During the initial planning stage conducted at the ‘kick off’ meeting potential target countries and sectors were discussed, and a final selection made. The overall aim was to ensure that a range of countries with differing VET regulatory environments were selected, ranging from those that were the mature and functional to others that were still developing or had significant systemic issues to address. This was to ensure that the good practice examples were relevant and transferable to a wider spectrum of EU countries and VET environments during dissemination.

In addition, a range of sectors within the economy were selected to provide diversity and a range of employers with differing learning cultures within their organisations. This included the service sector (tourism and human health), engineering and manufacturing, land-based industries and construction

This allowed some industry sectors selected to be investigated from several perspectives in more than one country. The final selection of countries and sector specific field work is summarised in the table below.

Overview of the sectors and countries targeted for the investigative field work

Sector	Tourism Hospitality	Land Based	Engineering (Energy)	Engineering (Other)	Human Health	Construction	VET system
UK		✓	✓	✓		✓	✓
Greece	✓					✓	✓
Bulgaria	✓			✓			✓
Estonia					✓		✓
Finland		✓					✓
Norway		✓					✓
Netherlands							✓
Sweden							✓
France				✓			✓
Slovenia							✓
Germany							✓

The ED2VET field work was designed to be conducted in several phases, as described below:

- Preparatory desk study leading to the development of a Good Practice Parameters scoring matrix
- Stakeholder analysis - To identify potential interested, well informed and influential parties that may be willing to assist ED2VET
- Initial questionnaires sent to selected stakeholders - To identify potential good practice case studies

- Structured interview - To confirm and define aspects of good practice within potential case studies

By following a common process, the information gathered, and reports generated could be subject to peer review to ensure consistency in the identification and categorisation of good practices within each potential case study.

Although the availability of relevant published information was limited, extensive research using the Google search engine and catalogued Cedefop research reports and previous studies formed the basis of the initial desk study. Each source of information was thoroughly evaluated, and its relevance to the ED2VET mission graded using a colour coding system. Comments made by the reviewer, and in some cases more specific references were documented and shared to guide partners to the most relevant reference sources.

3.1 Stakeholder analysis

A well proven system was adopted for the stakeholder analysis which allowed influential stakeholders likely to be interested in ED2VET to be identified and a strategy for engaging them devised. The system also allowed any who may seek to block the project for any reason to be identified and managed from the outset. Each partner country (UK, Greece and Bulgaria) conducted the stakeholder analysis and submitted the results to the lead partner. The system used classified each stakeholder according to the four categories defined below.

	Low influence	High influence
High importance	<p>Group A: this group will require special initiatives to protect their interests</p> <p><u>Meet their Needs</u></p>	<p>Group B: a good working relationship must be created with this group</p> <p><u>Key Partners</u></p>
Low importance	<p>Group D: this group may have some limited involvement in evaluation but are relatively of low priority</p> <p><u>Least Important</u></p>	<p>Group C: this group may be a source of risk, and will need careful monitoring and management</p> <p><u>Show Consideration</u></p>

3.2 Field work methodology

There was a three-stage process to the investigative work, which started with the identification of potential good practice using a questionnaire, followed by in-depth investigation usually through interviews guided by the good practice parameters scoring matrix and the evaluation of findings by the project team.

- Questionnaire

The questions were derived from the Good Practice Parameters scoring matrix, selecting key topics to reveal potential good practice. Informed by each stakeholder analysis, short questionnaires were sent to selected stakeholders who had some involvement in VET and a knowledge of the core theme – ‘Employer involvement in VET design and development’ (see appendix 1 - Stakeholder survey). In some cases, the questionnaire was completed and returned by email and for others, a verbal discussion ensued from the outset, guided by the questionnaire. The results of this stage of initial screening determined whether there was a potential case study worthy of full investigation using the Good Practice Parameters scoring matrix and in-depth interview

- In-depth interviews and study weeks

A Good Practice Parameters scoring matrix was devised to support the in-depth interview stage and to ensure a consistent approach to interviews. This was particularly important at the evaluation stage when good practices had to be selected, justified and classified. In some cases, good practice examples were also subject to visits by the project team as a part of a study week undertaken in each of the three partner countries. This allowed each partner to ask questions, broadening and adding rigour to the investigative process.

Within the process, the industry sector subject to review was explored and defined, as well as the maturity of the VET regulatory environment. The descriptions of the 'maturity' of the VET sector illustrate how well regulated and quality assured the national VET system is, and any known issues are identified. Cedefop reports, and any other official studies on EU member states progress with VET development were used in the first instance to provide a 'snap shot' of the VET regulatory environment in each country, tempered by the partner's knowledge and experience of their own VET systems.

The Good Practice Parameters scoring matrix was not used as a 'tablet of stone' but a guide open to modification when significant parameters not initially recognised were discovered during the field work, or changes to the emphasis within those parameters initially proposed were needed

A grading system enables the matrix to be used with greater consistency by partners.

The good practice parameters within the matrix have been placed within one of the following four sections which represent recurring themes within the published literature and experience of the partners.

1. Quality of the relationship/trust between the VET sector (public and private), industry representatives and employers
2. Effectiveness of employer and employee representation within occupational standards development and VET design
3. Effectiveness of the application of occupational standards (skills, knowledge and attitudes) to VET design
4. Responsiveness of the VET system to changes in labour market requirements, including occupational standards.

The Good Practice scoring matrix was quality assured internally by the project team and by experienced VET experts from several EU countries before use (see appendix 3 - Good practice parameters). During the project it became apparent that modifications of the statements were needed in some circumstances and these were made. Partners were authorised to amend the matrix but kept a record of those amendments and the scores for each case study.

3.3 Evaluation of the field work process

The initial desk study was useful and provided the project team the opportunity to reflect on published information relevant to the core theme, in relation to their own experience and anecdotal evidence. However, for Greece the desk research was quite demanding, as it was difficult at times to locate the relevant information sources describing the Greek System. Information available only in Greek had to be translated to English when writing reports.

The stakeholder analysis was a detailed time-consuming process but led us to stakeholders willing to partake and who we were able to influence.

The initial questionnaires were effective in the UK whether issues by e mail for completion or used to guide a phone conversation. When translated and adapted to the Greek language most of the Greek stakeholders were more comfortable providing answers. Furthermore, a lot of those interviews took place over the phone as the preferred media and gave a clear picture of the relevance of the project

to the stakeholder and their interest in the intellectual outputs was established. The interviews were also essential for the completion of the stakeholder analysis enabling the most interested, well informed and influential parties to be found. Most of the stakeholders contacted were happy to cooperate and provide information that could be of interest to the project and case studies.

The scoring matrix proved to be an essential tool that when conducting face to face interviews and evaluating potential good practices in more depth. However, as the tool was generic, due to differences between VET systems in each country, adaptations were made when needed. At times it was difficult to locate the right individual who held the information needed and this took some time. The interview phase proved to be fruitful and informative and enabled useful discussions between partners regarding the relative merits of the different practices observed and scored in each country

4. Case studies

Each case study report has been developed by partners with close reference to the Good Practice scoring matrix and their interview notes. Good practices identified have been high-lighted and classified as agreed and are presented in section 5 below. Each case study report has been subject to peer review ensuring that there are clear explanations and that each proposed good practice is validated.

The case studies are available to view on the [ED2VET project website](#) ⁽¹⁾.

5. Main findings

5.1 VET system characteristics in each country

Descriptions of the VET system and the regulatory environment have been provided for each country and in many cases provide the context for each case study. In some cases, the VET system is integral to good practice observations.

5.2 ED2VET findings

The good practices revealed and validated by the ED2VET partnership through the examination of proposed potential good practices have been grouped under four categories according to the main actor(s) within each example:

1. Systems led good practices
2. VET provider led good practices
3. Industry and employer led good practices
4. Good practices involving multiple actors

Whilst some of the examples placed in categories 1-3 have some involvement from other actors they are predominantly the result of a single actor. Whereas the fourth category, 'good practices involving multiple actors', has contributions more evenly shared between actors and cannot be attributed to a single actor.

Specific good practices are cited for every example given and can be explored more fully by reference to the appropriate case study. A follow up discussion regarding the practices cited can be organised and facilitated by the appropriate ED2VET partner, as a part of the ongoing dissemination process.

¹ <http://www.ed2vet.eu/Portfolio.aspx>

5.2.1 Systems led good practices

This category is largely the result of effective national level structures, processes and/or a conducive VET regulatory environment that supports employer involvement in VET design and/or development.

(a) Netherlands: SBB accredited organisations for work placements

The Cooperation Organisation for Vocational Education, Training and the Labour Market (SBB) in the Netherlands is an example of a high level public sector VET regulatory body created to bring together VET providers and employers to provide relevant, high quality practical training in the workplace. Through the accreditation procedure, the SBB can ensure organisations provide ‘on the job training’ up to a prescribed standard and gather feedback to inform the future redesign or development of future curricula. Moreover, through the accreditation of the organisations the SBB can assure that the training that the learners are receiving meets national and European standards as well as the needs of the employers.

Specific good practice highlights

No	Good practice	Highlighted impacts	Main actors
1	Developing competences on the job according to NOS	Quality assured work placements for learners through the accreditation of companies	VET system
2	Relationship building and mediation	Formal representation of employers and VET providers through well-regulated high level national structures.	VET system, employer
3	Quality assurance - evaluation and assessment	Objective, quality assured assessment of learners’ progress using approved tools	VET system, employer

(b) Sweden: Folkuniversitetet (FU) – Development of Higher Vocational Education Programmes depends on the regular communication and strong relationships between VET institutions, employers, and other relevant stakeholders with reference to the current needs of the labour market. This is accomplished through close liaison with employers’ representatives predominantly, who in turn support and recommend new curriculum according to the current needs of the labour market. Furthermore, business representatives on the FU Management Board are directly involved in quality assurance. The employers are heavily dependent on the cooperation of VET providers to ensure learners develop those competences essential to the Swedish labour market.

Specific good practice highlights

No	Good practice title	Highlighted impacts	Main actors
1	Development of Vocational Education programmes	Higher Vocational Education delivered through cooperation between education providers and employers, with a high emphasis on work placement.	VET system, employers
2	Assessment of qualifications and Quality Assurance (QA)	Learning Outcomes that are assessed and recognised by a certificate/diploma that reliably validates the learners’ skills for employment.	VET system

(c) Greece: Training and certification for painters

The National Operational Programme for the Development of Human Resource, Training and Life Long Learning, has funded the development of a training programme for the certification of skills in several sectors, including painting that is a sector within the construction industry. Representative structures and mechanisms have been developed to foster collaboration between VET providers and employers, culminating in quality assured VET for painters that is recognised nationally and internationally, thereby improving labour mobility. Currently the national programme targets the unemployed as a measure towards helping to resolve the national unemployment crisis.

Specific good practice highlights

No	Good practice	Highlighted impacts	Main actors
1	Development of training and certification for painters in collaboration with industry	A national training programme for painters with accompanying standardised tutor support packs and learning materials for learners	VET system, industry, employers
2	Internationally recognised qualifications for painters	A fully accredited VET programme expressed as competences and learning outcomes leading to a qualification recognised nationally, within Europe and internationally.	VET system
3	Quality Assurance of assessment	Adoption of the EQAVET cycle of quality assurance, ensuring that feedback is received from VET providers and stakeholders is responded to.	VET system

(d) Greece: LAEK – Vocational training for employees working in small and micro enterprises

The LAEK is an initiative of the Greek Manpower Employment Agency which allows companies with 30 employees or less to register. This long-standing public sector institution providing a holistic programme of support to the customisation and delivery of continued Vocational Education and Training (cVET) for businesses that qualify. Consequently, small and micro companies can keep their employee's competences updated and can actively be involved in the design of their training and qualifications.

Specific good practice highlights

No	Good practice	Highlighted impacts	Main actors
1	LAEK – Customised VET for employees of small and micro enterprises	Tailor made training programmes to train the employees in smaller businesses	VET system, employers
2	Quality assurance of assessment	VET centres certified by the National Organisation for the Certification of Qualifications and Vocational Guidance	VET system

(e) Bulgaria: National Educational Standards for Professional Education (NESPE) and the “DOMINO” project for dual education

National Educational Standards for Professional Education (NESPE) and the “DOMINO” project for dual education are based on the development of close working relationships between VET providers, industry representatives and state representatives, with all parties able to influence the NESPE and VET system. The active participation of local and national stakeholders, including employers, and the support of state authorities within formal organisational structures has enabled the successful German ‘dual system’ to be piloted in Bulgaria, with a view to longer term adoption.

Specific good practice highlights

No	Good practice	Highlighted impacts	Main actors
1	Stakeholder engagement in forum for dual VET	The involvement of different stakeholders is coordinated by a specially organised Forum for Dual Vocational Education.	VET system
2	Collecting labour market information	Information collected to determine the needs of all employers, including SMEs and larger companies from all sectors of machine building and metal casting.	VET system
3	Mentors	One experienced and trained skills mentor provided by employers for every five students.	VET system

(f) UK: Trailblazer apprenticeships

The trailblazer initiative has been introduced by the UK government within England but does not apply to Scotland. The scheme is built on the premise of giving businesses more power to develop qualifications that suit their needs by redirecting funding for apprenticeship through employers as opposed to VET providers. Companies are encouraged to share labour market information and their specific requests for education and training with college providers who can respond. The scheme is founded on the premise that the ability to incorporate bespoke training into apprenticeship provision in colleges requires a flexible system of education that strikes a balance between widely recognised national qualifications and specific local employer demands.

Specific good practice highlights:

No	Good practice	Highlighted impacts	Main actors
1	Quick updates of education and training programmes	Flexibility of employer led consortia and weekly meetings leading to immediate updates	VET system
2	Direct, regular contact between college and local companies	Quicker and more up to date labour market information provided directly by the companies at technological forefront	VET provider, industry

Sector specific good practice example of the trailblazer delivered by Swindon College

No	Good practice	Highlighted impacts	Main actors
1	Swindon College machine maintenance and repair training Relationship between VET provider and employers leading to effective customisation	Apprenticeships are open to young people coming directly out of school and adults. BMW/Mini and Honda use the apprenticeship to train current employees who wish to upskill from machine operators to maintenance technicians and engineers repairing the increasingly automated machines. Apprentices enrol onto a technician level toolmaking programme at Swindon College, but there is flexibility within the new apprenticeship programmes to design and add bespoke 'off the job' raining.	Employers, VET provider

(g) France: Business Campuses

Business Campuses (*les campus des métiers*) comprise a range of education and training providers in a region, which offer both initial work-based qualifications and continuing professional development opportunities. This system was established with the intention to serve local employer, economic and social needs with specific focus on key industry sectors in certain regions. The Business Campus label is obtained by establishing a partnership between VET providers and the local business fabric and research centres to ensure that training provision is consistent with economic and social development needs. Programmes must be diverse in terms of learning types and channels, status of learners and training pathways. They must be innovative, include sustainable development factors in addition to having a European or international dimension.

Specific good practice highlights:

No	Good practice	Highlighted impacts	Main actors
1	Bringing VET and business together	Enabling the education and training sector to react quickly to the skills needs of local and regional companies or an economic sector.	VET system
2	Labour market information communicated directly from employers to VET providers	Business members of Business Campuses directly report industry skills gaps and specific company training requirements to VET providers within the Business Campus framework.	VET system

Sector specific good practice example of the Aerocampus Aquitaine

No	Good practice	Highlighted impacts	Main actors
1	Development of additional training modules for employer needs	If specific needs for complementary skills are only reported by one business, Aerocampus may develop one ad hoc complementary training module to meet that specific demand	Employers, VET provider

		without the need to involve national authorities.	
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(h) Slovenia: VET provision in Slovenia

The Minister for Labour, Family, Social Affairs and Equal Opportunities established ten sector committees for occupational standards development, which are composed of experts and representatives from the chambers, ministries and trade unions. This enables industry representatives to collaborate with educationalists in setting standards and designing VET programmes in addition to approving textbooks and teaching aids for professional modules.

Specific good practice highlights:

No	Good practice	Highlighted impacts	Main actors
1	National Occupational Standards (NOS)	National standards are set by sector committees established by government that include representatives from chambers, ministries and trade unions.	VET system
2	Flexibility	The schools are given the freedom to develop 20% of the programme according to local needs (the “open curriculum”)	VET system, VET provider
3	Employer initiative	In most cases, the initiatives to develop a module within the open curriculum are taken by employers, but schools, museums, and health centres are also eligible.	VET system, employer

(i) Germany: The dual system of VET in Germany

Vocational education and training (VET) in Germany is based on cooperation between government authorities, companies and social partners. The Federal Ministry of Education and Research (BMBF) is responsible for general VET policy issues and has a coordinating and steering role for all training occupations in cooperation with the respective ministries. The apprenticeship programme (dual system) at upper secondary level (EQF level 4) is the main pillar of German VET. Training usually lasts three years and combines the two learning venues, companies and vocational schools with the work-based learning share being approximately 70%.

Specific good practice highlights:

No	Good practice	Highlighted impacts	Main actors
1	Federal legislation	The Vocational Education and Training Act safeguards and improves youth training opportunities for all young people, irrespective of their social or regional origin.	VET system
2	Partnership between employers and unions	The various Chambers are responsible for advising companies, registering trainees, certifying trainers’ specialist aptitude, accepting examinations and conducting	VET system, employers

		social dialogue at regional level.	
3	Structure facilitating effective stakeholder collaboration	In Germany there is a system of recognised training occupations or vocational education and training (VET) standards. Employers and trade unions jointly formulate the employment requirements for each standard.	VET system

5.2.2 VET provider led good practices

The case studies in this category are examples of VET provider proactivity catalysing and/or facilitating a high level of employer engagement and commitment to VET design and /or development.

(a) Greece: iVET Programme for Cooks/Chefs

DIMITRA is an award-winning private Education and Consulting Organisation. It has by working in cooperation with tourism and hospitality industry representatives responded to the current industry demand for VET very effectively, overcoming shortcomings within the national VET regulatory system that is currently undergoing reform. This has been achieved through their pro-activity as a private sector VET provider, engaging comprehensively with the tourism and hospitality sector to develop up to date learning materials and delivery methods, including specialist workshops which effectively update, customise and enhance the national curriculum for cooks and chefs.

Specific good practice highlights

No	Good practice	Highlighted impacts	Main actors
1	Employer input to programme design	Additional professional workshops on new techniques within the chef/cook profession have been developed with employers	VET provider, employers
2	Cooperation between VET and the employers.	Carefully selected trainers and learning materials to be used during the training of apprentices.	VET provider
3	Quality assurance of assessment	Quality assurance driven by the implementation of a pervasive 'PDSA' (Plan, Do, Study, Act) quality cycle'.	VET provider

(b) Bulgaria: Post-secondary private college for tourism, Blagoevgrad

The private college for tourism (PCT) in Blagoevgrad ensures that its training and educational materials meet the current needs of the tourism industry and includes the delivery of sector specific skills through well planned and managed workplace learning. The national authorities have been flexible in supporting the programme which lies out with 'mainstream' nationally recognised qualifications frameworks, as the learning reflects current working practices in the industry. Consequently, the working relationship between PCT and tourist businesses and organisations has thrived to ensure that the PCT programme content reflects the current labour market in the Bulgarian tourism sector.

Specific good practice highlights

No	Good practice	Highlighted impacts	Main actors
1	Freedom to design study programmes	A much higher degree of freedom is permitted in designing and implementing programmes according to market needs and the specific requirements of employers	VET provider
2	Labour market information influencing practical training	Current information on individual employers' needs is collected through questionnaires and sector requirements.	VET provider
3	Company mentors	Each student is appointed a specific company mentor responsible for teaching the specific needs of their tourist business	VET provider, employer

(c) Bulgaria: Professional School for Mechanics and Electricians (PGME) in Sofia

The Professional School for Mechanics and Electricians (PGME) participates in the national DOMINO project, established to pilot the Swiss 'dual system', adopted to improve VET responsiveness to market needs and/or changes. It has developed a close collaborative relationship with industry and the state representatives influencing the VET system. Consequently, relations with local companies committed to provide practical training periods within the structure of the new 'dual system' are very positive and the school is successful in attracting students as it fully implements the 'dual system'.

Specific good practice highlights

No	Good practice	Highlighted impacts	Main actors
1	Flexibility to alter training provision	Practical training is altered to meet specific needs, introducing more flexibility to the state approved educational programme structure	VET provider
2	Monitoring practice periods	Practice periods are organised on a rotational basis and students involved in the DOMINO project are visited weekly.	VET provider

5.2.3 Industry and employer led good practices

This case study is the result of high level of employer proactivity in VET design and/or development and effective representation.

(a) UK: Designing construction qualifications in the UK

The Construction Industry Training Board (CITB) sets National Occupational Standards (NOS) that underpin the design of qualifications for all sectors of a diverse UK construction industry. This is done through a clear and transparent process that involves well-chosen employer representatives to ensure that the standards and qualifications are fit for purpose. The CITB has a diverse role that includes mediating with VET providers, the quality assurance of VET provision and maintaining an inventory

(portfolio) of quality assured specialist short course provision that industry can deliver in house under the auspices of the CITB regulatory QA system.

Specific good practice highlights:

No	Good practice	Highlighted impacts	Main actors
1	Pervasive National Occupational Standards (NOS)	By selecting employer representatives with the appropriate trade skills knowledge for sector specific standards setting meetings, the CITB determines the labour skills requirements and NOS for all sectors	Industry
2	Relationship building and mediation	Whilst determining employers' labour skill requirements, the CITB remain sensitive to the VET provider perspective, reconciling industry demand with the practicalities of VET design and delivery	Industry
3	Quality assurance of assessment	The CITB is involved in the quality assurance of the assessment process, directly, within work-based training (VQs) and short courses to ensure that the levy raised for workforce development is allocated responsibly	Employer, VET provider

5.2.4 Good practices involving multiple actors

These case studies are the result of multiple actors and effective collaboration between employers and VET providers in many cases, positively assisted by the VET system in some cases.

(a) Greece: European Reference Framework (ERF) Key Competence 7 - Sense of initiative and entrepreneurship

DIMITRA, the award-winning private Education and Consulting Organisation led consultation activities with employers and a certification body to design and deliver high quality certified training, informed by employers and VET providers working collaboratively. Focus groups were organised for employers leading to programmes designed to meet employers' current needs. The employers themselves directly benefit from contact with a well-connected VET provider, allowing them to widen their experience and networks.

Specific good practice highlights:

No	Good practice	Highlighted impacts	Main actors
1 & 2	Programme for (ERF) Key Competence 7 - Sense of initiative and entrepreneurship	A training programme and certification scheme resulting from cooperation with a certification body, employers (SMEs and larger companies), cultural organisations and consultancy firms.	VET provider, employers
3	Quality assurance of assessment	An ISO 17024:2009 accredited certification body to review and quality assure the scheme	VET system

(b) Finland: Working with employers to deliver standardised forestry operative skills

SEDU, a Finnish college providing land-based education and training has invested heavily in machinery and equipment to support the delivery of its comprehensive forestry VET programmes. SEDU engages with employers at national and regional level to ensure it delivers basic forestry skills and advanced machine operator training that meets the needs of employers. Employers work closely with SEDU to develop, update and assess VET to ensure the supply of graduates they receive are 'work ready'

Specific good practice highlights:

No	Good practice	Highlighted impacts	Main actors
1	Employer representation (national and regional)	Employers are involved in the establishment of national occupational standards and local customisation, through effective representation at national and regional level	VET provider, industry, employer
3	Employer involvement in quality assured assessment	Employers are involved in the quality assurance of assessment within a tripartite process that includes VET tutor, learner and employer.	VET provider, employer

(c) UK: Engineering Energy Sector VET

Forth-Valley College in the central belt of Scotland are well-equipped to serve the engineering energy sector within a conducive Scottish VET regulatory environment and funding mechanism and are very responsive to employer needs. They have an exceptionally strong working relationship with their employers, based on a mature, high trust, working partnership under the dynamic leadership of their Head of Department.

The college has been heavily involved with industry National Occupational Standards (NOS) development whilst remaining responsive to the additional bespoke training needs of specific organisations. This has led to the creation of effective curriculum pathways, assisted by the Scottish Curriculum and Qualifications Framework (SCQF), established on a platform of highly respected NQs. Through the Scottish Engineering Sector Partnership (ESP) the college can access specialist facilities when required, without having to incur a prohibitively high level of investment, improving the quality of provision, by design.

Specific good practice highlights:

No	Good practice	Highlighted impacts	Main actors
1	Employer involvement in the QA of delivery	Company managers make unscheduled visits to the college premises including the training workshops and comment to the Head of Department on their observations.	Employer
2	Employer portal	The college has developed an employer portal, allowing employers to access records on their trainee's behaviour and progress during their time at college.	VET provider
3	VET provider responsiveness	The college are informed immediately of any	Employer,

		changes to Standard Operating Procedures (SOPs) that necessitate an immediate curriculum revision.	VET provider
4	VET sector collaboration	The Scottish Engineering Sector Partnership (ESP) formed following a damaging period of competition and encourages training request referrals to the best equipped ESP provider	VET provider

(d) UK: Land Based Engineering

The UK land-based engineering sector is dominated by large multinational machinery manufacturers who work closely with a minority of proactive public sector providers (Scottish colleges) to develop National Occupational Standards, qualifications and courses. This has led to the most influential companies developing very close alliances with those providers able to customise national qualifications and deliver them to their apprentices. This mutually beneficial arrangement has led to a flow of well qualified recruits for industry and access to state-of-the-art machinery and equipment by VET college staff and learners. In addition, both large and smaller companies have effectively complemented the national provision with company bespoke training to suit their specific needs.

Specific good practice highlights:

National level

No	Good practice	Highlighted impacts	Main actors
1	Involvement of smaller employers in standards development	The involvement by proactive VET providers taking a keen interest in standards development and the facilitation they have offered has been important to widening engagement	VET provider
2	Employer VET provider partnerships	Some larger machinery manufacturers formed mutually beneficial alliances with selected VET providers which provide learners and trainers to access to equipment	Employer, VET provider
3	Learning and assessment platform	A digital learning and assessment platform developed for the Land-Based Technician scheme and made accessible to the industry	VET provider

Organisation level

No	Good practice	Highlighted impacts	Main actors
1	CLAAS Academy company specific training	The CLAAS Academy delivers commercial training, building on the Apprenticeship platform, but closely aligned to company products and sales process. It includes soft skills, financial management, high level product features and benefits.	Employer
2	Jas P Wilson - Forest	The company has invested in an Education	Employer

	Machines Education Centre	Centre employing an experienced assessor on site to undertake assessment and coordinate activity with schools and VET providers. By design, post school apprentices are supported by a network of trained and experienced company mentors with exemplary product knowledge.	
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(e) Norway: Employer involvement in aquaculture VET customisation

The comprehensive Norwegian system for VET provides well prepared young people for employment following two years at an Upper Secondary School and two years in a company apprenticeship. Aquaculture is a rapidly growing industry and Norway is the major European producer of farmed fish and has a technologically advanced industrial scale industry in the coastal zone. There are 14 upper secondary schools serving the sector

Specific good practice highlights:

No	Good practice	Highlighted impacts	Main actors
1	Employer driven updating of the local curriculum	Regular formal and informal communication between aquaculture employers and their local Upper Secondary School ensures that the VET provision is continuously updated.	Employer, VET provider
2	High quality practical training	The aquaculture companies work closely with their local upper secondary school to provide high quality practical training opportunities on their farm sites.	Employer
3	Employer led quality assured assessment	Employers are actively involved in the assessment process by inputting to the national theory exam question setting and on farm practical exam.	Employer, VET provider

6. Conclusions and recommendations

6.1 Good practice encountered

A wide range of good practices regarding ‘employer involvement in VET design and development’ have been encountered and validated during the ED2VET study. The nature of employer involvement is diverse and includes; the development of occupational standards, providing labour market information, offering quality assured work placements, involvement with assessment and the creation of company bespoke VET to complement national provision.

There are examples of VET policy initiatives and established public sector organisations that have promoted employer representation and provide practical support, leadership and facilitation to encourage employer involvement, with success.

6.1.1 Systems led good practices

Many examples of systemic good practice were encountered, and for some countries validated by the outcome of 'in-depth' sector specific case studies. In some cases there have been national level policy initiatives introduced to address recognised national systemic issues and improve the relevance, responsiveness and quality of VET provision.

Many policies and initiatives have similar general aims, reflecting the following themes; employer representation, VET customisation based on labour market intelligence and the provision of quality assured VET courses and qualifications that are recognised nationally and internationally. There are many ways that these aims are being achieved, shaped by each country's culture, political priorities and the maturity of its VET sector.

Some policies are overarching in nature, as exemplified by the VET provision in Slovenia which ensures National Occupational Standards are developed, whilst allowing providers the freedom to control and customise 20% of the curriculum to meet local needs (5.2.1 h). VET responsiveness and customisation have been recurring themes throughout the ED2VET study. Many systems have strived to balance the need for national standards and consistency between providers with the freedom to customise to satisfy labour market needs at local level. Most systems appear to have resolved these opposing objectives through compromise. Likewise in Sweden, Folkuniversitetet (FU) has been devised to govern Higher VET development and ensure that providers are delivering what the labour market requires and the FU Board are directly involved in quality assurance. (See 5.2.b)

Other systemic initiatives encountered are more focussed, such as; the development of VET by the Business Campuses in France for targeted key economic sectors (see 5.2.1 g), the provision of internationally recognised qualifications in Greece for painters to help the unemployed find work at home or abroad (see 5.2.1.c) and the quality assurance of work placements by the SBB in the Netherlands (see 5.2.1 a).

There are also examples of the introduction of policy initiatives to address recognised national deficiencies within the VET regulatory system (6.2). Some of these initiatives are 'home grown' such as the LAEK in Greece (5.2.1.d) introduced to encourage employers and VET providers to work closely together to devise suitable VET programmes whilst the national VET system completes a reform. Similarly, despite having a mature VET sector, the 'Trailblazer' initiative in the UK was introduced to overcome alleged shortcomings regarding the responsiveness of the VET system to specific company needs (6.2). Others involve the transfer of proven good practice from other countries, most notably the piloting of the Swiss 'dual system' within the Bulgarian national DOMINO project which is showing promise (5.2.1.e).

6.1.2 Employer led good practices

Whilst collaborative partnerships within conducive regulatory environments tend to be the foundation of most good practice, there are some cases studies where the industry and/or employers are particularly proactive and the lead actor. The construction industry in the UK provides the most striking example. Workforce development, including the development and updating of occupational standards and quality assuring provision is orchestrated very effectively by the industry representative body, the CITB, with the full support of the industry, including both the large and smaller companies. The CITB mediate within communication between their members and the VET sector to ensure that industry training needs and ambitions can be realised by VET providers. They are most proactive at all stages of the VET development, and quality assurance process, but do depend on the cooperation of the VET sector (see section 5.2.3.a).

6.1.3 VET provider led good practices

Proactive VET providers are often the best placed to engage employers in the VET development process, particularly in the absence of effective employer representation and/or inertia within the

national system. The SMEs are most at risk of being left out of VET design processes as they lack the resources of the larger companies to attend meetings and contribute. Dimitra, an award-winning VET provider, has overcome this problem in the Greek hospitality sector. They led development of VET for chefs and cooks, an initiative that targeted small companies, leading to the development of up to date specialist training that their employees need (see 5.2.2.a). This initiative was necessary to overcome current VET systemic issues which were causing long delays with national qualifications updating. The private college for tourism, Blagoevgrad in Bulgaria provide an alternative example of improvements to VET benefiting SMEs. They ensured that learners' work placements are quality assured and relevant mentoring provided by the employer, to provide the skills that the sector needs, thereby overcoming deficiencies in the current Bulgarian national VET system (5.2.2 b). Conversely, the Professional School for Mechanics and Electricians (PGME) has strengthened the quality of work place learning and relevance of practical training to meet the needs of large companies in the mechanical and electrical engineering fields through its proactive adoption of the national DOMINO project (see 5.2.2.c).

6.1.4 Good practices involving multiple actors

Employers often work closely with VET providers to design, deliver and quality assure VET. The case studies provide many illustrative examples of mature 'high trust' relationships between these two main actors. This includes the establishment of formal partnerships, with VET providers working closely with their employers in the development of occupational standards and qualifications to ensure that employers' current skills needs are reflected in qualifications, and that they have the resources required to deliver them. Two notable examples of mature, high trust partnerships were fully investigated in the UK. Large land-based machinery manufacturers and selected leading VET providers collaborate very effectively to develop and update national qualifications, digital learning platforms and employers in return provide access to the most up to date equipment for training purposes. Some measures have been taken to include SMEs within the process, but this has proven to be challenging (see 5.2.4.d). Similarly, the Forth-Valley College in Scotland have mechanisms that ensure they can respond immediately to curriculum changes urgently required. They also operate transparent and inclusive quality assurance and learner monitoring systems and refer employers to their VET partners to ensure they can access the most appropriate facilities and training to meet their specialist requirements (see 5.2.4.c).

The creation of an assessment strategy is an integral part of the VET design process and some employers are directly involved in the assessment process, and/or the quality assurance of assessment, by design. This is a most valuable aspect of any partnership as it allows the employer to reassure themselves that learners are achieving the standards they have developed or approved. This is exemplified In Norway where aquaculture employers are involved in setting the national theory exam and are active members of assessor teams during the final 'on farm' practical exam that determines the apprenticeship outcome (see 5.2.4.e). A similar level of cooperation in assessment has been developed in Finland by SEDU within their Forestry VET, where their 'tripartite practical skills assessment' policy the learner, tutor and employer are involved in judging performance evidence (see 5.2.4.b).

6.1.5 Summary

It is evident that there are good practice examples of employers contributing to VET design in most of the EU countries that took part in the ED2VET study. Some good practices are systemic and ensure effective employer representation within reliable, mature organisational structures that support a well-managed communication process and result in a relevant and responsive VET system. Within these functional and effective VET regulatory environments, labour market intelligence is transferred to the VET sector efficiently, allowing them to respond with a minimum of delay. Some also include employer representatives within quality assurance allowing them to more directly influence VET review and revision. In other cases, systemic deficiencies were found to exist that are being

addressed in the short term through national and regional level initiatives that secure the continuity of a relevant VET supply (see 6.2 below).

There is one example of employer led good practice, but in most cases good practice is either the result of multiple actors (VET system, employer, or VET provider), or largely VET led. Therefore, the opinion revealed during the desk study, that *“employer led VET is a misnomer, and success more often relies on effective partnerships and collaboration between employers and the VET sector”*, has been resoundingly substantiated.

Whichever actor or combination of ‘actors’ have taken the initiative; the benefits are impossible to sustain without the on-going commitment of employers themselves. Therefore, sustainability depends on employer perceptions that the benefits outweigh their costs, in terms of their time and commitment to the process.

6.2 Alleged VET systemic issues:

VET systemic issues in Bulgaria and Greece (two ED2VET partner countries) were recognised and openly discussed during the study weeks in each of these countries. The highly centralised education system in Bulgaria appears to be a particular obstacle in more direct involvement of employer engagement in the design of the VET programmes. Industry can only propose limited changes to subjects in annual consultations between ministry, national educational committees and employer representative organisations. Any transfer of a good practice is a subject to a lengthy and detailed process of “adapting to national context”, thus in some cases the original idea can be lost.

Whilst national reforms to create a more responsive and efficient bureaucracy is ongoing in both Bulgaria and Greece, additional national initiatives have been successfully introduced to improve employer involvement and VET responsiveness in the short term. They are fully described within the Bulgarian DOMINO and Greek LAEK cases studies, respectively.

In the UK the relatively recent and controversial ‘Trailblazer’ initiative operating in England is giving cause for concern amongst some stakeholders. This UK government reform has been introduced to allow companies to engage directly with VET providers to establish their VET needs and create frameworks and programmes that are fundable by the public sector. The aim is to improve the responsiveness of the VET system and overcome previous long time lags due to lengthy occupational standards review and revision cycles. However, critics argue that this system is favouring the larger companies at the expense of SMEs and could result in a proliferation of VET frameworks and a divergence in standards that may be unhelpful, chaotic and confusing in the longer term.

The Trailblazer initiative is part of an on-going shift towards more direct employer influence on VET in England. A consequence of this reform was the cessation of state funding for the Sector Skills Councils (SSCs) that developed national occupational standards (NOS) for the whole of the UK. Whilst Scotland, Wales and Northern Ireland are continuing the maintenance of the NOS, they are no longer mandatory within VET qualifications in England. The move towards self-funded SSCs has resulted in only the most effective SSCs that are valued by industry being left operational, including the CITB. A potential ED2VET case study could not be completed due to two other SSCs having to close.

In Estonia, despite having a sound national VET system, on interviewing a VET provider in the human health sector nominated as potential good practice, it became clear during the interview that despite the best efforts of the VET provider, employers were largely apathetic and were not effectively partaking in the VET design process.

A high dependency of the design of the VET programmes on state funding has been observed and as a consequence direct involvement of employers is less probable in Italy. According to the information on Italy, the VET system appears to be highly administrative led with the government (Ministries of Education and Labour) leading the multilevel governance and defining the general policies and

framework, while regions and provinces are responsible for specific programmes. In parallel funds provided are governed by “social-partners” in which individual employer participation is almost impossible.

6.3 Recommendations

There are many factors contributing to successful employer involvement in VET design and development and whilst some recommendations for improvement are universally applicable, others are country specific.

6.3.1 Universal recommendations

These recommendations focus on the recurring challenges revealed during the ED2VET study. However, they do not apply equally to all countries or sectors of the economy. Each country’s economy, culture, political priorities and VET regulatory environment need to be carefully considered when evaluating the relevance and application of each.

Consider national policy initiatives and activities that will help to ensure:

- Communication links between the employers and VET providers are as direct as possible to minimise bureaucratic delay when transferring labour market intelligence to VET providers to inform VET design.
- SMEs are represented effectively, and can fully partake in the VET design process, particularly within sectors that are dominated by large company interests.
- The VET regulatory environment maintains a suitable balance between standardisation to pave the way to qualifications that are recognised nationally and internationally and customisation necessary to meet local labour market needs.
- Encourage employer involvement in all aspects of VET including provision of work placements, mentoring learners, assessment and quality assurance to encourage their full investment in the VET design and development process.

6.3.2 Country specific recommendations

These country specific recommendations have been derived from ED2VET case studies and project partners’ knowledge and experience of their own VET system and provision.

- UK: Monitor the impact of the Trailblazer initiative on SME engagement in the design and development of VET, sector by sector, and the growth in qualifications to ensure there is not a proliferation of competing qualifications and a divergence in occupational standards.
- Estonia: Incentivise health sector employer engagement and proactivity so as they take advantage of the opportunities made available to influence VET design and development. Improvement is dependent on employer input, and it is essential for them to partake in the process, even if not leading it.
- Norway: Develop national standardisation and unitisation within the aquaculture Journeyman Certificate to ensure greater consistency between upper secondary schools within continuous assessment and the sharing of learning resources.
- Greece: There should be a quicker centralised response to the changes of competencies that correspond to the NOS. However, whenever possible the VET providers should involve the employers in the process of designing new training programmes in every possible way. This will help with the development of current competences that correspond to the needs of the labour market. From all the interviews with the stakeholders it is salient that there is the will and they are trying to find a way, however the efforts are fragmented.
- Bulgaria: Broader involvement of the employers in order to reflect changing labour market needs is highly recommended. In-situ training is in most cases provided by the employers, while in areas of broader training programmes it can be incorporated in the curricula of the

schools. We have observed a multilevel “bureaucratic” design of the educational programmes, which do not necessarily reflect the actual needs of the labour market.

Appendices

1) Stakeholder Survey

1. Name:
2. Institution/ Organisation name:
3. Institution/ Organisation address and website:
4. Position in your organisation:
5. Are you happy for the project team to contact you if we have further questions? Yes/No
(delete as appropriate)

VET and industry/business relations

1. Do VET providers work in cooperation with industry representatives to set standards for VET and, if yes, how?
2. Are employers consulted regarding the design of VET programmes/curriculum?
3. In case the answer to the previous question is YES please describe in brief the process you are aware of?
4. To what degree does industry/business rely on national VET programmes (as opposed to private or company-specific training programmes) when looking to hire qualified employees?
5. Are employers' representative organisations (chambers of commerce, sector bodies, etc.) involved in the structuring and design of VET programmes?
6. Is there any process of identifying gaps and skills needed from industry/business in order to update/ create new VET programs?
7. What is the process of updating existing VET programmes and is industry/business involved in it?
8. Do employers usually provide additional training/education to meet their specific needs?
9. Is there anything you would like to suggest that you feel would improve/add to the relationship between business, VET providers, VET programme creators and official educational institutions/ministries/agencies etc.?
10. Are there any examples you are aware of that illustrate particularly good involvement of industry/business in the process of designing and developing VET programmes?

For any questions, please contact the project team at e4@naric.org.uk

2) Stakeholder list

Bulgaria (extensive):

- Ministry of Education and Science, <https://mon.bg/>
- Ministry of Labour and Social policy, <https://www.mlsp.government.bg/>
- Bulgarian Employment Agency, <https://www.az.government.bg/>
- National Agency for VET, <https://www.navet.government.bg/>
- Confederation of Employers and Industrialists in Bulgaria (KRIB), <http://krib.bg/en/>
- Confederation of Independent Trade Unions in Bulgaria, <https://www.knsb-bg.org/>
- Confederation of Labor "Podkrepa", <http://podkrepa.org/>

- Vocational High School of Mechanical Electrotechnics „N. Y. Vapcarov”, <http://pgme-sofia.eu/index.php>
- Ministry of Economy of Republic of Bulgaria, <https://www.mi.government.bg/en>
- Bulgarian Industrial Capital Association, <http://bica-bg.org/?lang=en>
- Ministry of Environment and Water, <https://www.moew.government.bg/en/ministry/>
- Bulgarian Industrial Association, <https://en.bia-bg.com/>
- Bulgarian Federation of Industrial Energy Consumers, <http://www.bfiiec.org/>
- Bulgarian Association of Information Technologies, <http://www.bait.bg/>
- Bulgarian Chamber of Chemical Industry, <http://www.bcci2001.com/>
- Ministry of Transport, Information Technology and Communications, <https://www.mtitc.government.bg/en>
- Bulgarian Association of Automobile Transport Associations, <https://www.basat.eu>
- Bulgarian Construction Chamber, <https://www.ksb.bg/>
- Ministry of Agriculture, Food and Forestry, <http://www.mzh.government.bg/en/>
- Bulgarian Farmers Association, <https://www.baf-bg.org/>
- Ministry of Tourism, <http://www.tourism.government.bg/en>
- Bulgarian Hotel and Restaurant Association, <http://www.bhra-bg.org/>
- National Tourism Research Institute, Association, NGO, <https://www.ngobg.info/>
- Ministry of Finance, <http://www.minfin.bg/en/>
- Ministry of Culture, <http://mc.government.bg/>
- Bulgarian Association of Employers in the area of Culture, <http://barok.bg/>
- Ministry of Youth and Sports, <http://mpes.government.bg/>
- State Agency for child protection, <https://sacp.government.bg/en>
- Ministry of Defence, <https://www.md.government.bg/en/index.php>
- Ministry of Health, <https://www.mh.government.bg/en/>
- Association of Directors in Secondary Education in Bulgaria, <https://en.bia-bg.com/branch/view/89/>
- Bulgarian Union of Teachers, <http://www.sbsubg.info/>
- Bulgarian Branch Chamber of Machine Building, <http://bbcmb.org/#en-about-bbcmb.html>
- National Evaluation and Accreditation Agency, <https://www.neaa.government.bg/en/>
- “DOMINO” project, <http://dominoproject.bg/en/>
- National Center for Information and Documentation NACID on recognition of professional qualifications in Bulgaria: <http://nacid.bg/sites/qual/>
- National Vine and Wine Chamber, <http://bulgarianwines.org/>

Finland

- SEDU

France:

- Centre-inffo
- Aerocampus Aquitaine

Germany (not extensive and only at federal level):

- Federal Ministry of Education and Research, <https://www.bmbf.de/en/index.html>
- Federal Ministry for Economic Affairs and Energy (BMWi), <https://www.bmwi.de/>
- Federal Ministry of Labour and Social Affairs (BMAS), <https://www.bmas.de/EN/Home/home.html>
- Federal Ministry of the Interior, Building and Community (BMI), https://www.bmi.bund.de/EN/home/home_node.html
- Federal Institute for Vocational Education and Training, <https://www.bibb.de/en/>

- Federal Association of German Employer Associations (BDA), <https://www.arbeitgeber.de/www/arbeitgeber.nsf/id/home>
- German Employers' Organisation for Vocational Training (KWB), www.kwb-berufsbildung.de
- Institute for Employment Research (IAB), <https://www.iab.de/en/ueberblick.aspx>
- Association of German Chambers of Industry and Commerce, <https://www.dihk.de/en/>
- Confederation of German Retailers (HDE), <https://www.einzelhandel.de/>
- National Federation of German Skilled Crafts and Trades (ZDH), <https://www.zdh.de/en/>
- Federation of German Industries (BDI), <https://english.bdi.eu/>
- Federation of German Wholesale and Foreign Trade (BGA), <https://bga.de>
- German Farmers Association (DBV), <https://www.bauernverband.de/information-english>
- National labour union confederation DGB, <http://en.dgb.de/>
- Industrial Union of Metalworkers (IGM), <https://www.igmetall.de/>
- National labour union confederation DGB, <http://en.dgb.de/>
- Industrial Union of Metalworkers (IGM), <https://www.igmetall.de/>
- IG Bergbau, Chemie, Energie (IG BCE), <https://www.igbce.de/>
- IG Bauen-Agrar-Umwelt (IG BAU), <http://www.igbau.de/>
- Food, Beverages and Catering Union (NGG), <http://www.ngg.net/>
- Education and Science Workers' Union (GEW), <http://www.gew.de/>
- German Civil Service Federation (DBB), <http://www.dbb.de/>

Greece

- Greek Manpower Employment Agency
- Ministry of Employment, Social Security and Social Solidarity
- DIMITRA
- Iskills
- SMEs collaborating under LAEK programme

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Italy (not extensive):

- Italian Ministry of Labour and Social Policies, www.lavoro.gov.it
- The youth guarantee, www.garanziegiovani.gov.it
- Italian Ministry of Education, University and Research, www.istruzione.it
- National Institute for the Analysis of Public Policies, www.inapp.org
- ReferNet Italy, www.inapp.org/it/refernet
- National Institute for Documentation, Innovation and Educational Research, www.indire.it
- National Agency for Social Security, www.inps.it
- Italian State-regions conference, www.statoregioni.it
- Regional structure for management of the European Social Fund, www.tecnostuttura.it
- National Agency for Active Labour Market Policies, www.anpal.gov.it
- Centre for studies on social investment, www.censis.it
- Italian Union of Chambers of Commerce, Industry, Craft and Agriculture (Unioncamere), www.unioncamere.gov.it/

- Italian Union of Chambers of Commerce, Industry, Craft and Agriculture (Unioncamere), www.unioncamere.gov.it/
- Excelsior Information System, <https://excelsior.unioncamere.net/eng/>
- National Agency for active labour policies, www.anpal.gov.it/
- Vocational Education and Training, <http://www.miur.gov.it/istruzione-e-formazione-professionale>
- Ministry of Labour and Social Policies, <https://www.minori.it>
- Istruzione e Formazione Tecnica Superiore, <http://europalavoro.lavoro.gov.it>
- Istruzione Tecnica Superiore (ITS), <http://www.istruzione.it>

The Netherlands

- Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven (SBB)

Norway

- Froya Upper Secondary School

Slovenia:

- CPI
- BIC Ljubljana

Sweden

- Folkuniversitet

UK

- CLAAS Skills Academy
- CITB Scotland
- Forth-Valley College
- JSP Wilson (Forestry Machinery Manufacturer)
- Hartpury College
- Swindon College
- Ofqual
- SEMTA
- Cskills NOCN
- City & Guilds
- Agored Cymru
- Association of Colleges

3) Good practice quality matrix

Quality matrix for helping to identify good practice in employer involvement in VET design and development:

Country (Name)	
Industry sector (Define and describe)	
VET System (Maturity, reliability and quality assurance)	

Rating system

- 0 Never
- 1 Sometimes
- 2 Usually
- 3 Always

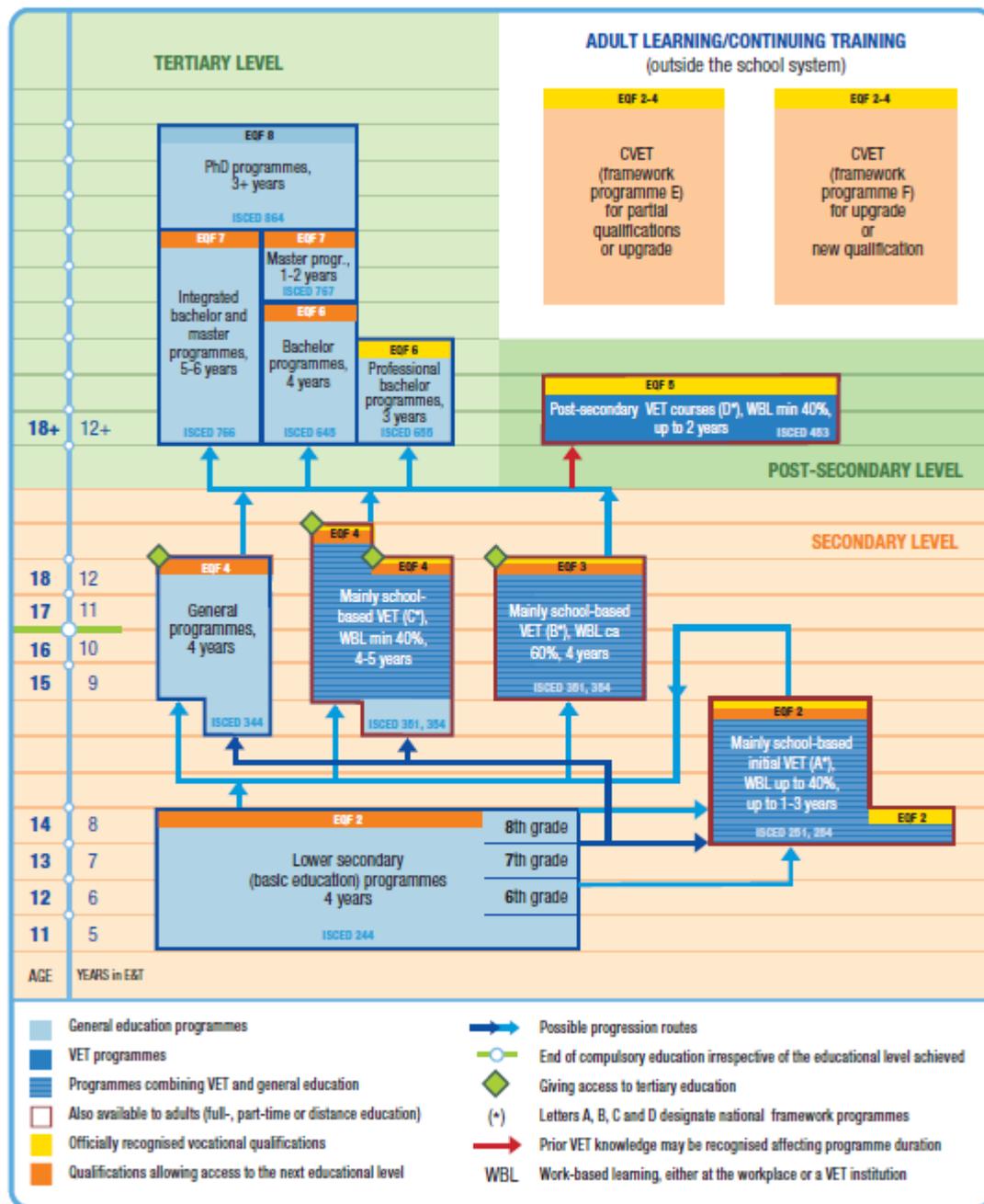
Parameter	Grade				Comments
	0	1	2	3	
1. Quality of the relationship/trust between the VET sector (public and private), industry representatives and employers					
VET providers work with industry representatives to set standards, and design and develop VET					
Employers are dependent on VET provision from the public and/or private sector within company staff development programmes					
National Qualifications are referred to by employers as essential requirements when recruiting new entrants					
The industry depends on VET providers for Work Based Qualifications and Continued Professional Development (CPD)					
Employers cooperate with their VET providers to support the delivery, assessment and QA process for qualifications.					
2. Effectiveness of employer and employee representation within occupational standards development and VET design					
There is a recognised organisation, responsible for labour skills foresight and leading the development of occupational standards in consultation with industry.					
Both small and large employers are represented on appropriate committees, reflecting the structure of the industry sector and can influence the standards.					
Industry meetings to discuss labour skills foresight and the development of occupational standards are well attended by appropriate managers with a staff development role and authority.					
Employees or their representatives are consulted and actively involved in the development of occupational standards and VET design.					
3. Effectiveness of the application of occupational standards (skills, knowledge and attitudes) to VET design					
The industry has defined occupational standards at European and or international level, enabling qualification equivalencies to be recognised to					

assist labour mobility.					
National Occupational Standards (NOS) are defined, reflecting the skills and knowledge requirement for each occupational level and respected by employers.					
National Occupational Standards underpin the qualifications that employers recognise. Company Standard Operating Procedures (SOPs) are revised where necessary to ensure consistency with the NOS.					
The content and validity of the curriculum is acknowledged by employer representatives, who are involved in ongoing, systematic review and continuous improvement					
The content and structure of the curriculum represents the actual status of the profession and is in balance with the current and anticipated future state and future development of the profession's knowledge and skills					
4. Responsiveness of the VET system to changes in labour market requirements, including occupational standards.					
The organisation facility and process exists to support labour skills forecasting on behalf of the industry					
The NOS are kept up to date with regard to technological advances, industry good practice and legislative requirements					
The VET curriculum and qualifications are updated by VET providers in response to changes in the NOS and labour skills forecasting					

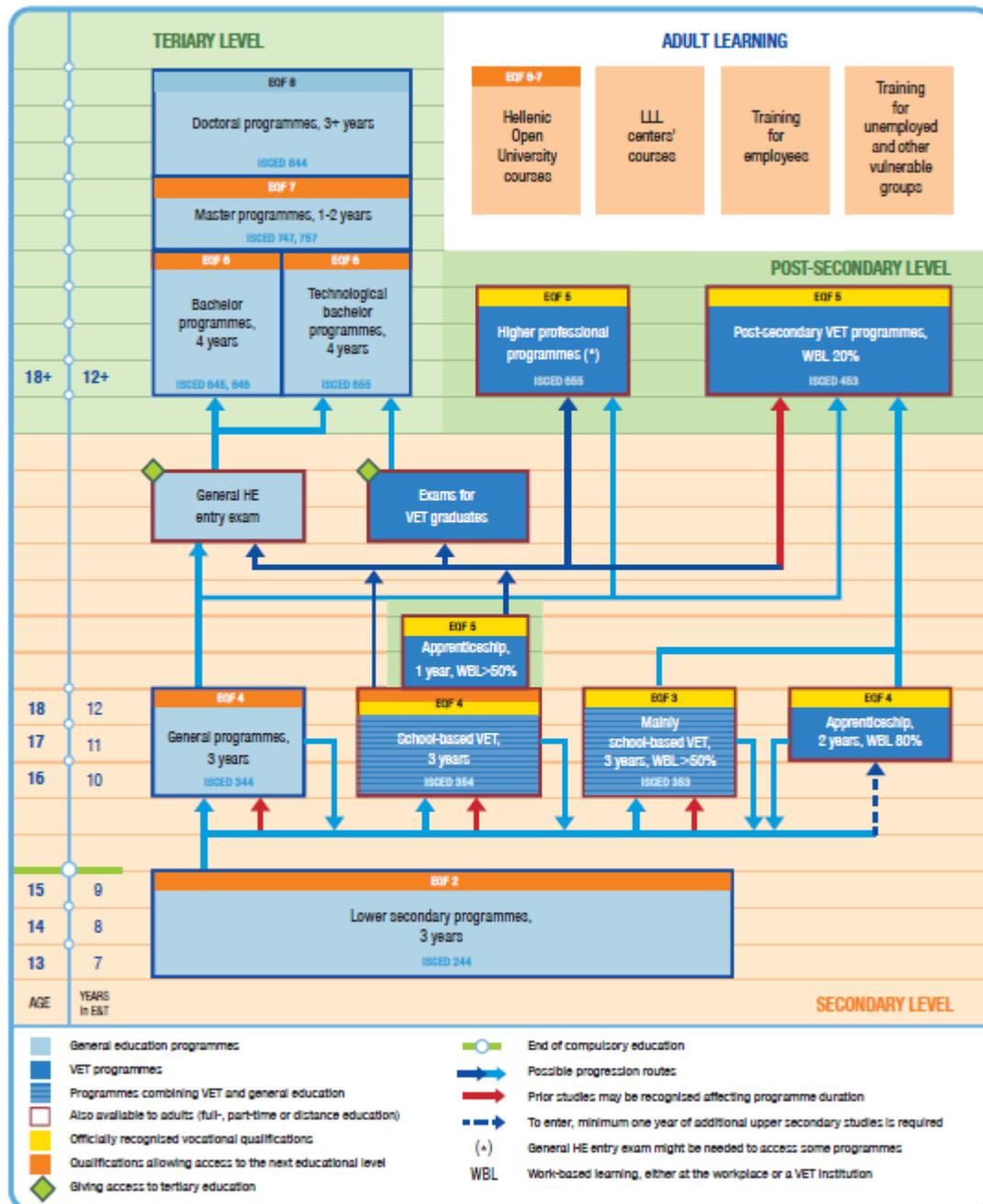
4) National VET systems (graphic descriptions)

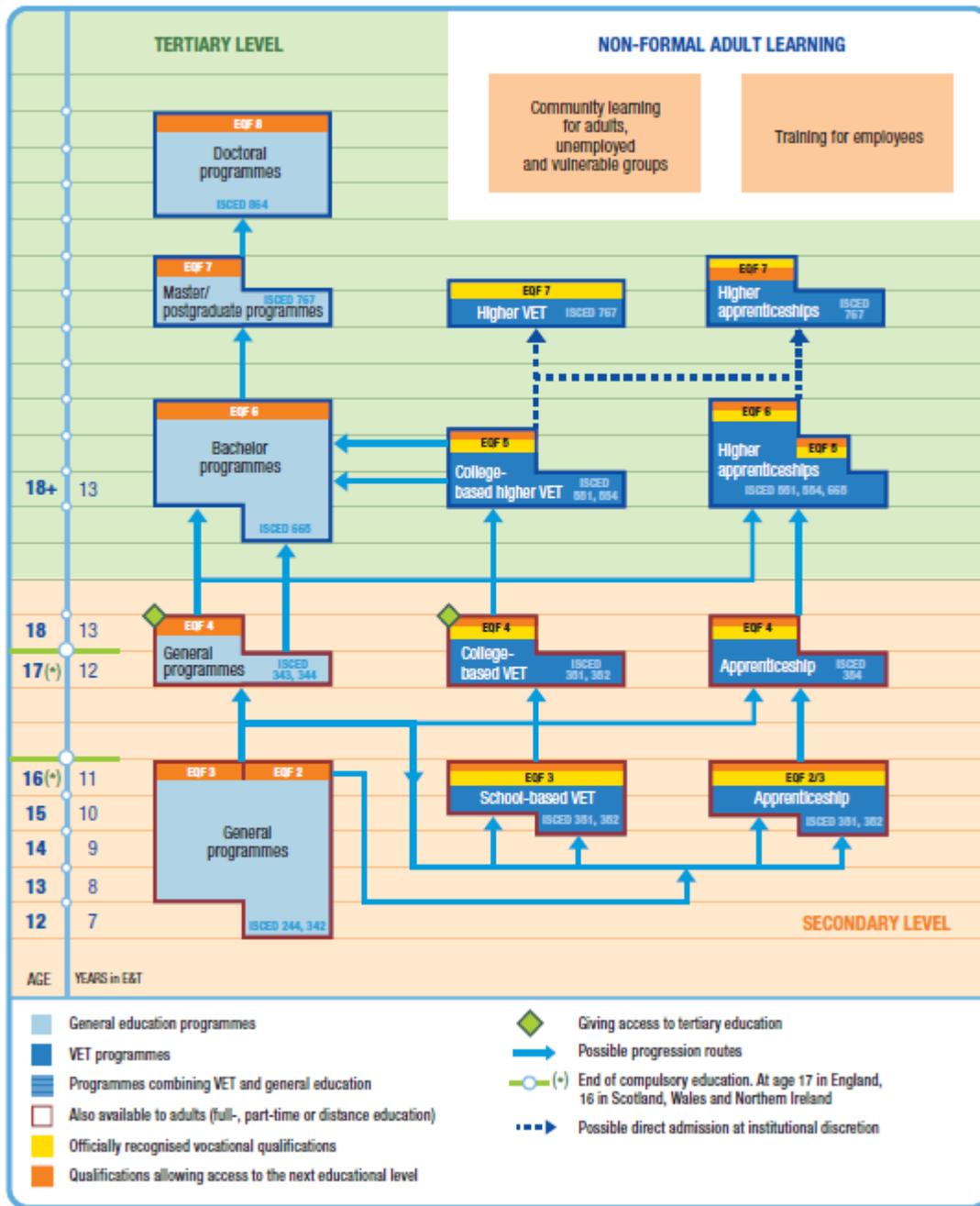
The diagrams inserted below show the main progression routes within the education and training system of the partner countries.

Bulgaria



Greece





Diagrams for other countries mentioned in this report may be found in Cedefop's [Spotlight on VET booklet](#) ⁽²⁾ where the progression charts above have also been copied from.

² http://www.cedefop.europa.eu/files/4135_en.pdf