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# The development of ECVET in Europe

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# The development of ECVET in Europe

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## Foreword

This Cedefop working paper focuses on strategies for the European credit system for vocational education and training (ECVET) (European Parliament and Council of the European Union, 2009b). It monitors and analyses the progress made – up to mid-2010 – in the Member States of the European Union and Norway in preparing for ECVET, the strategies planned and the questions raised by the role of credit systems in education and training at national or regional levels. It contributes to the preparation for application of ECVET to VET qualifications at all levels of the European qualifications framework (EQF), for which the European Recommendation has set the deadline of 2012.

ECVET is intrinsically linked to national education and training systems and to European tools for mobility and transparency such as the European qualifications framework (EQF). This analysis shows increased uptake of ECVET to support learner mobility and recognition of learning outcomes in different fields of Europe education and training (from construction building to winemaking), at different qualifications levels of the EQF, and for various target groups from youngsters to adults. It also demonstrates that there is still much to be done on the contents and regulations for qualifications, and on mobility schemes for ECVET to be reality outside the many testing initiatives. This report casts light on the role of national and European testing projects and initiatives in the expected strong push effect on education and training policy-making. This may see ECVET covering new ground.

The conclusions drawn from this report are based on analysis and interpretation at Cedefop and do not reflect the points of view of those who have shared their knowledge and expertise with us. As developments in this field are constant and rapid, Cedefop will continue to publish regular monitoring of ECVET developments, in cooperation with the European Commission.

With this working paper, Cedefop supports exchanges of experiences and opinions and contributes to introducing ECVET. It is conceived as part of the evaluation of ECVET towards the 2014 deadline of the ECVET Recommendation (in 2014, the ECVET implementation shall be analysed for possible revision of the European Recommendation).

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This report is part of Cedefop's monitoring of ECVET developments. It provides the basis for future peer learning and networking activities. It will be regularly updated to include different initiatives and to reflect on upcoming European deadlines for evaluating the implementation of ECVET in Europe. This work is undertaken in cooperation with the European Commission.



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## Executive summary

The European Recommendation on the European credit system for vocational education and training (ECVET) in June 2009 encouraged the start of ECVET tests and experimentation. Most countries have started work, among them, Belgium (Wallonia), Germany, Austria and Finland have developed national initiatives which illustrate the diversity of approaches. They are considering ECVET either for enabling learning and aiding mobility or for supporting permeability within VET; they are carrying out feasibility or impact studies and, as in Belgium (Wallonia), the development of ECVET is nurtured by the developments and results of European ECVET projects. Two further elements are worth noticing in these examples: the involvement of a large range of stakeholders and the regional dimension as support for mobility.

Preparing for ECVET encompasses activities ranging from legal and regulatory updates to broad range test initiatives; the country cases are illustrative of the eight main strategies for ECVET implementation, as identified in the Cedefop analysis:

- (a) setting up broad range testing initiatives at national level;
- (b) measuring impact (theoretical and methodological approaches);
- (c) updating VET legislations and regulations;
- (d) adapting qualifications systems;
- (e) a 'wait and see' strategy;
- (f) combining ECVET with NQF development;
- (g) learning by working in ECVET European projects;
- (h) marketing ECVET to the stakeholders.

Of these eight strategies, 'learning by working in projects', which denotes the involvement of stakeholders, is most widespread, followed by updating and adapting legislation, regulations and qualifications systems. The key role given to projects and project partnerships includes expected spill-over in practices and regulations. Projects are analysing the ECVET features (learning outcomes approach, design of units of learning outcomes, memorandum of understanding and learning agreements), elaborating solutions, and communicating on their difficulties and solutions. It appears that setting up common references or qualifications for mobility and transparency is not easy and requires adapting the European definitions as in the recommendations for the European qualifications framework (EQF) and ECVET to national, regional and sectoral settings. A major further challenge is to ensure feed-back from the projects to the national and European policy-makers.

ECVET is being developed for qualifications located at EQF levels 3 to 6 in different activities such as construction and building, health care, and transport and logistics. This is happening not only nationally but also at regional and local levels as ECVET deals with the larger issue of geographic, educational and professional mobility in VET. Triggered by developments in qualifications frameworks and validation mechanisms, ECVET is gaining wider support, as in the setting up of European ECVET governance and corresponding arrangements within the Member States. Some countries have already established national coordination points or working groups for ECVET. Some combine their ECVET mandate with mandates for qualifications frameworks and recognition of qualifications.

At this stage of development, there is no single best way to take ECVET forward but a bundle of more or less tightly coordinated strategies. These pay attention to the characteristics and traditions of VET systems but also identify areas for change: ECVET is closely related to the need for increased permeability in education and training, for more recognition of prior learning, and for 'Europeanisation' of learning paths.

ECVET European and national governance mechanisms will have to take an active role, without excessive or duplicate administrative layers. A diversity of implementation strategies results from the fact that ECVET touches on many aspects of VET systems and asks the question of 'ECVET identity' (what is ECVET? what is not ECVET?). Increasingly, ECVET requires communication to VET providers and learners, and to the wider public to support involvement and ownership by the stakeholders.

## CHAPTER 1

# Introduction

The European Recommendation on the European credit system for vocational education and training (ECVET) in 2009 encouraged the start of ECVET tests and experimentation. Most countries have started work with developments ranging from legal and regulatory updates to broad range test initiatives. The paper first presents the contexts and challenges to the development of ECVET, recalling its geneses and its features. It then shows how ECVET is being taken on board at national, regional and project levels, outlining objectives, characteristics and implementation arrangements, as well as the challenges or issues they are facing. The section on levers and barriers to implementation identifies the challenges ahead, especially with the approaching European ECVET evaluation deadline.

This working paper relies on analysis and interpretations of published research findings, Internet sources, documents available from the ReferNet network and the ECVET European pilot projects initiatives. It may not necessarily reflect the views of single documents or of those who provided information. It refers to the ECVET features as elaborated in the Recommendation by the European Parliament and the Council of 18 June 2009 (European Parliament and Council of the European Union, 2009b).

## CHAPTER 2

# ECVET contexts and challenges

## 2.1. European tools for mobility and transparency

ECVET is not a stand-alone element in European education and training. It belongs to a series of tools for developing intra-European mobility, supporting individualised career and learning paths, for better recognition of informal and non-formal learning, better transparency and mutual trust between education systems, increasing VET participation rates and motivation for lifelong learning. All contain features sustaining transparency and portability of qualifications across institutional, sectoral and national borders.

European tools initiated within the Copenhagen process include:

- (a) Europass, the single Community framework for transparency of qualifications and competences, a portfolio of five documents for documenting formal and non-formal learning outcomes (European Parliament and Council of the European Union, 2004);
- (b) European principles for the identification and validation of non-formal and informal learning, aimed at strengthening the comparability and transparency of validation approaches and methods across national boundaries (European Parliament and Council of the European Union, 2004);
- (c) the European quality charter for mobility (EQCM), which ‘offers guidance for mobility undertaken by individual young people or adults, for the purposes of formal and non-formal learning and for their personal and professional development’ (European Parliament and Council of the European Union, 2006, p. 8);
- (d) the European qualifications framework for lifelong learning (EQF), as a translation device between different qualifications systems and their levels (general education, higher education, vocational education and training) (European Parliament and Council of the European Union, 2008);
- (e) the European quality assurance reference framework for vocational education and training (EQAVET), ‘a reference instrument to help Member States to promote and monitor continuous improvement of their VET systems based on common European references’ (European Parliament and Council of the European Union, 2009a, p. 2).

According to the European Commission ‘the lifelong learning perspective calls for coordination and priority setting across different education and training sectors.

Specific policy agendas have been set out for schools, VET, higher and adult education. Policy exchange and implementation work in all sectors must contribute to overall strategic priorities' (European Commission, 2008, p. 11). Most of those tools are conceived to operate in the context of geographic and professional mobility, not only in formal education and training settings, but also for the recognition of non-formal and informal learning. To this bundle of tools, one should add the credit system developed within the Bologna process (European credit transfer and accumulation system (ECTS)) and the Framework of qualifications for the European higher education area (FQ-EHEA).

These tools consider learning processes taking place in different settings, by various categories of learners, within and/or across borders of education and training systems. They have been developed at different times, and their parallel, and sometimes conflicting, implementations represent a concern to European and national stakeholders in Education and Training. For instance, ECTS was developed in the framework of the ERASMUS student mobility programme during 1989-95, Europass dates back to December 2004, and the EQF Recommendation was approved by the European Parliament and the Council on 23 April 2008 (European Parliament and Council of the European Union, 2008).

While they have been developed as separate initiatives, they will increasingly need to be linked to be of relevance to individual users. The progress made in developing national qualifications frameworks and the development of validation arrangements builds the context for setting up ECVET implementation strategies. Besides their core objectives, the European tools for mobility and transparency share the learning outcomes approach. Shared ground builds two definitions common to ECVET and EQF:

- learning outcomes as 'statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and competence';
- qualifications as 'means a formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards' (European Parliament and Council of the European Union, 2008).

Differences between frameworks and credit arrangements rely partly on the way they operate (using classifications or registers of qualifications) according to certain criteria (level descriptors, typically based on learning outcomes), thus showing how qualifications from different sub-systems inter-relate. Both credit systems (ECTS and ECVET) are put in place to enable learning outcomes achieved in different institutions, learning contexts (education and training institution, work, voluntary activities or leisure), systems (vocational or academic education and training) or

over a longer period of time to be recognised and validated towards achievement of a qualification (Cedefop, 2010a). As mentioned by Maguire (2010) the relationship between ECVET and ECTS is a topic of considerable interest within national systems, as well as between countries: credit can assist in achieving recognition, support validation and can be built into national frameworks. Maguire (2010) and Cedefop (2010a) prompt reflection on the prescriptive or informative role of credits and credit ranges which could prohibit mobility and recognition. Credit systems have the potential to impact on the structure of qualifications (via the design of units and the setting up of credit points) and to impact on progression and transition in education and training (by setting up rules for accumulation and transfer). The extent of this impact will depend on the field of implementation (for international mobility or for reforms) and the political/regulatory anchorage and support to credits in qualifications systems.

Qualifications frameworks and credit systems are highly interwoven, with reciprocal conditions for success in increased transparency and better access to education and training. Currently, Member States are developing their national qualifications frameworks (NQF) and/or referencing their qualifications levels to EQF. The referencing process is backed up by a list of ten criteria, the third of which introduces credit systems as part of the learning outcomes-based approach to qualifications:

‘The national qualifications framework or system and its qualifications are based on the principle and objective of learning outcomes and linked to arrangements for validation of non-formal and informal learning and, where these exist, to credit systems’ (European Commission, Cedefop, 2008).

One of the challenges ahead of NQF developments is their ‘ability to aid support functions such as validation of non-formal and informal learning and credit transfer arrangements’ (Cedefop, 2010c).

## 2.2. ECVET geneses

ECVET has continuously developed since the decision, stated in the Copenhagen Declaration (European Commission, 2002), on a system of credit transfer for vocational education and training to promote transparency, comparability, transferability and recognition of competence and/or qualifications, between different countries and at different levels. Cedefop was involved very early in the process of designing a credit system concept for vocational education and training and in 2003 carried out a feasibility study which concluded by setting up core elements of the future ECVET: a learning outcomes approach resulting from the interface between



educational/pedagogical logic and the labour market; the need for partnerships; and the issue of mobility set in the wider context of the enlargement and enrichment of the learners' knowledge, skills and competence across professional/vocational specialisation and across levels of education and training systems (Cedefop, Le Mouillour, 2005). The communiqué of Maastricht (European Commission, 2004) gave priority to ECVET, stressing the importance of testing and implementing such a European instrument.

In 2006-07 the ECVET proposal based upon the activities of the European technical working group (European Commission, 2005; European Commission, 2006a) was submitted to a Europe-wide consultation. In parallel to this consultation, two major European studies, ECVET connexion and ECVET reflector, (Gelibert and Maniak, 2007; Fietz et al., 2007) contributed to the fine-tuning of the ECVET proposal as well as defining and identifying pitfalls for ECVET development. The European communiqués of Helsinki (European Commission, 2006b) and Bordeaux (Bordeaux Communiqué, 2008) underlined the importance of testing; the latter emphasised further developing ECVET and building ECVET/EQF related networks. It also strongly advocates the learning outcomes approach and the need to establish links with Europass and validation processes. On 18 June 2009 the European Parliament and the Council signed the European Recommendation on the establishment of a European credit system for vocational education and training (ECVET) (European Commission and Council of the European Union, 2009b).

ECVET aims at promoting learner mobility, lifelong learning, and development of mutual trust and cooperation between VET providers in Europe.

The purpose of (the ECVET) Recommendation is to create a European Credit System for Vocational Education and Training ('ECVET') intended to facilitate the transfer, recognition and accumulation of assessed learning outcomes of individuals who are aiming to achieve a qualification. This will improve the general understanding of citizens' learning outcomes and their transparency, transnational mobility and portability across and, where appropriate, within Member States in a borderless lifelong learning area, and will also improve the mobility and portability of qualifications at national level between various sectors of the economy and within the labour market furthermore, it will contribute to the development and expansion of European cooperation in education and training (European Parliament and Council of the European Union, 2009b, p. 11).

As with other European instruments elaborated in the context of the method of open coordination, such as the European qualifications framework (EQF) or the European quality assurance reference framework (EQARF), introduction of ECVET is based on voluntary decisions by the Member States and on mutual learning processes relying on monitoring, evaluation and peer review.

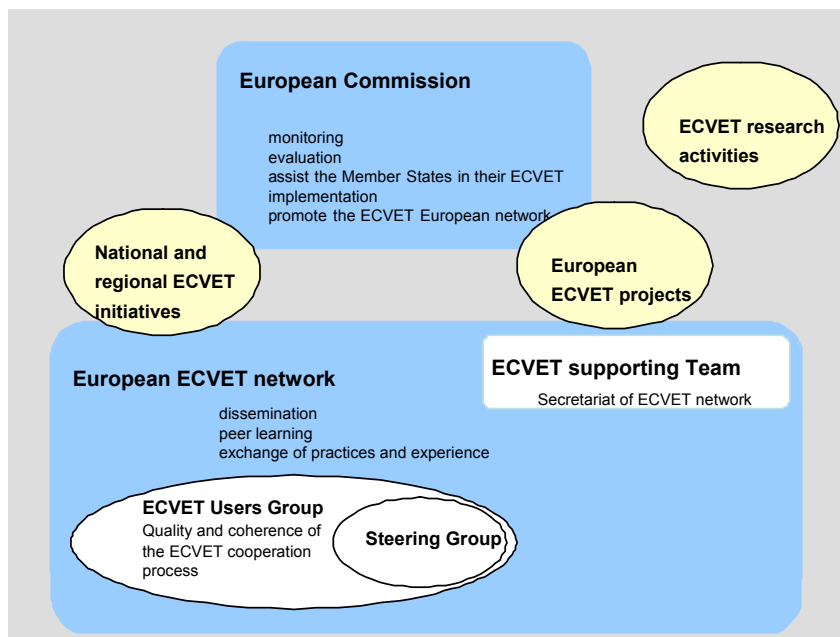
### 2.3. An orchestrated European approach to ECVET

The timetable for ECVET implementation, as foreseen in the ECVET recommendation, includes:

- (a) a preparatory period running until 2012, during which the Member States will be asked to create the necessary conditions and to adopt measures with a view to introducing ECVET. During that period, each Member State may adopt and introduce ECVET (and also carry out tests and experiments, for which support may be provided under the lifelong education and training programme) without waiting until 2012;
- (b) a period for the gradual introduction of ECVET, running until 2014;
- (c) possible revision of the European Recommendation in 2014 (European Parliament and Council of the European union, 2009b).

In the meantime, the European Commission has set up the governance structure for the ECVET initiative which includes all relevant VET stakeholders (see figure 1).

Figure 1. ECVET governance structure



The different constituents of the ECVET governance structure are:

- (a) a European ECVET network. This is a large open forum gathering competent institutions, social partners, sectors and VET providers. Its main activities are specified as dissemination and exchange of information and experience. It is open to members nominated by ministries and to spontaneous members;

- (b) a European ECVET users group. This can be considered as the main body in charge of the political follow-up on ECVET at European level. This group consists of representatives of the Member States, the European social partners and other stakeholders as well as Cedefop and European Training Foundation. Due to its size, the users group is steered by elected members forming the ECVET steering group;
- (c) the ECVET supporting team, contracted by the European Commission to a French consortium, supports the ECVET network. More concretely, it organises the meetings of the ECVET network, provides coordination and advice, supplies and disseminates information concerning ECVET and the network; it designs and carries out peer learning activities for the ECVET users and interested parties. It is backed by a scientific committee.

ECVET governance fulfils the following activities:

- (a) supporting national initiatives;
- (b) supporting cooperation, peer learning and ownership;
- (c) supporting policy developments;
- (d) making visible and mainstreaming ECVET developments,
- (e) improving promotion activities, information and notoriety of ECVET,
- (f) providing tools for implementation.

Testing and experimenting are of major importance. These are seen in the early release in November 2009 of the ECVET users' guide *Get to know ECVET better – Questions and Answers*, aimed at experts and VET practitioners engaged in experimentation or in establishing ECVET (European Commission, 2009b). It also explains the focus on European pilot projects and the need to install an ECVET secretariat for coordinating and enabling peer learning.

## 2.4. ECVET features

ECVET aids European mobility in VET and access to lifelong learning for young and adult learners. It supports the learners while building individual learning pathways leading to qualifications. It provides a common methodological framework based on units of learning outcomes, to facilitate transfer of credits between qualifications and VET systems. ECVET relies on partnerships and networks involving competent institutions, authorities, social partners, sectors, providers and learners.

ECVET combines being based on units and on learning outcomes to support transfer, accumulation and validation.

#### **2.4.1. ECVET as a unit-based credit system**

The units of learning outcomes are directly related to qualifications. The methodological framework includes principles and key technical specifications concerning the design of units of learning outcomes, the transfer and accumulation of these units, and the definition of learning outcomes. It also includes the allocation of credit points to units and qualifications, the understanding of qualifications and the meaning of the learning locations in VET.

The units of learning outcomes are 'components of a qualification, consisting of a coherent set of knowledge, skills and competence that can be assessed and validated' (European Parliament and Council of the European Union, 2009b, p. 15). A unit can be specific to a single qualification or common to different qualifications. ECVET points allow for a numerical assessment of the relative value of each unit to the full qualification.

#### **2.4.2. ECVET as a learning outcomes-based credit system**

The phrase 'learning outcomes' means statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and competence (European Parliament and Council of the European Union, 2008).

The core of ECVET is the description of qualifications in terms of learning outcomes (based on the categories set within the EQF: knowledge, skills and competence). Organised in units, these learning outcomes can be transferred and accumulated towards qualifications. While existing credit systems usually refer largely to learning input (notional learning time, duration or workload), ECVET introduces learning outcomes as the basis for the award of credits and, eventually, of a qualification.

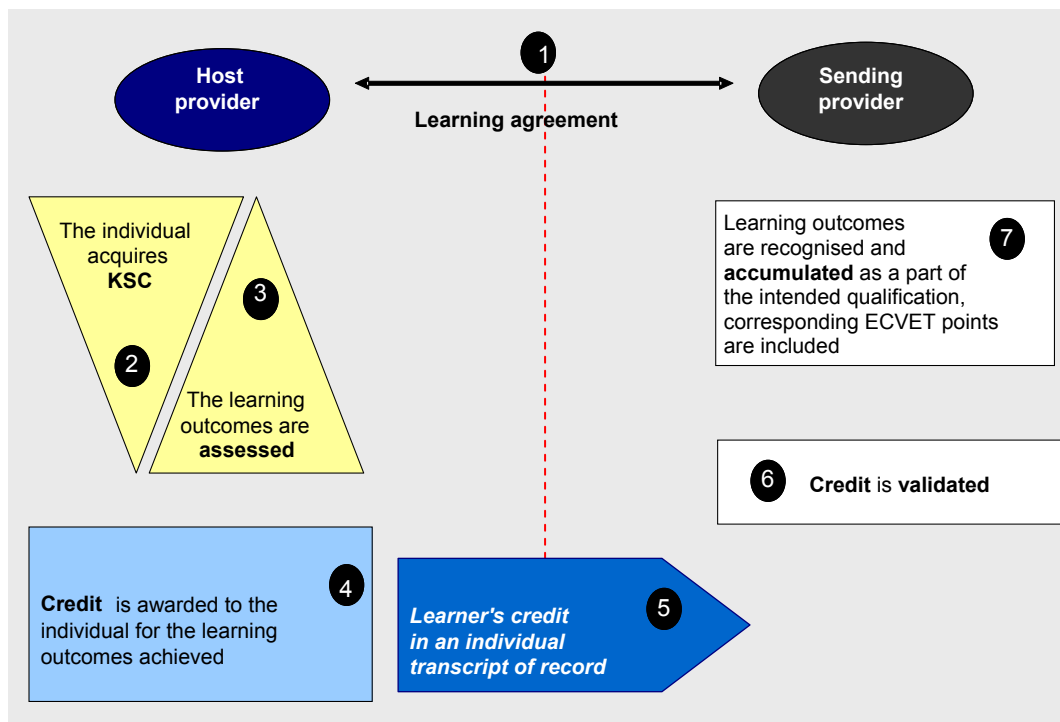
Credit is 'a set of learning outcomes of an individual which have been assessed and which can be accumulated towards a qualification or transferred to other learning programmes or qualifications' (European Parliament and Council of the European Union 2009b, p. 14). This could lead to exemption from part of the study programmes or to equivalences.

The learning outcomes approach to qualifications increases consistency between the European tools (as they all follow this approach) and echoes the development at national levels of an outcomes approach to qualifications and standards (educational, occupational, certification); however, progress in implementing this approach is slow and differs between countries. Choosing the learning outcomes approach for a credit system is a logical step for VET linking the occupational and the educational standards used for the definition of qualifications and VET learning processes, and, at a macro level, education and the labour market (Cedefop, Le

Mouillour, 2005; Cedefop, 2008a; Cedefop, 2009b). Learning outcomes are the link between occupational and educational standards (for definitions, Cedefop, 2008a). They also fulfil different functions, ranging from introducing a common language within the education and training community (thus allowing for better understanding and readability of qualifications) to clarifying the relationships between different forms and contexts of learning. At the same time, they raise discussion on the input-based perspective to education, training and qualifications purely based on location, duration and/or teaching methods and call for dialogue on the relevance and quality of qualifications (Cedefop, 2009a).

ECVET can be presented as follows, to highlight the role of learning outcomes and units in transfer, accumulation, validation and recognition mechanisms.

Figure 2. **ECVET scheme: transfer and accumulation of learning outcomes**



Source: adapted from European Parliament and Council of the European Union, 2009b.

Building on a learning outcomes approach, ECVET gives a central role to qualifications. Qualifications are the reference for any transfer or accumulation arrangements and agreements. They might vary in size (an indication of which is given by the total number of ECVET points allocated to the qualification) or they might vary in the amount of units they contain.

The diversity of the VET and qualifications systems in Europe, the various stages of development in validation, and the difficulties of implementing mobility in VET

demand the partnerships or cooperative aspects of ECVET. The implementation of ECVET involves a large range of stakeholders operating in the VET and qualifications systems: competent authorities, awarding bodies, assessment boards, and training providers. These stakeholders fulfil different roles and assume different functions in the ECVET process: designing the qualifications in units of learning outcomes, allocating ECVET points, carrying out assessment of learning outcomes, awarding credits, validating the learning outcomes, and organising mobility and transfer of credit. It might be, for instance, that a VET school provider from one Member State will enter a partnership with a regional ministry from another Member State as both might be in charge of awarding qualifications in their respective countries. It might also be that the assessment processes are shared by the sending and the hosting providers.

The ECVET Recommendation suggests that stakeholders conclude a memorandum of understanding to provide a general framework of cooperation and networking (European Parliament and Council of the European Union, 2009b). The mobile learner and the involved two VET partners should conclude a learning agreement which describes the training provision and the content of the mobility in terms of learning outcomes. The learner will receive a personal transcript detailing the assessed learning outcomes, units and ECVET points awarded.

Europass may be used within ECVET, as mentioned in the ECVET Recommendation. This concerns more directly the Europass certificate supplement and European mobility:

- (a) the Europass certificate supplement is delivered to people who hold a vocational education and training certificate; it describes, among others, the knowledge, skills and competence acquired, the jobs accessible, and details of the certification. This explicit reference to learning outcomes makes it easier to understand the certificate, especially for employers or institutions outside the issuing country. The certificate supplement is a standardised document, drawn up by the relevant certifying authorities;
- (b) Europass mobility offers a template to record the learning outcomes acquired during a transnational mobility period for the purpose of learning (for instance, a work placement in a company or in volunteer work, or an academic term as part of an exchange programme). This template also includes a structure to describe hosting and sending partners, the learning experience abroad: activities and tasks carried out, learning outcomes acquired, learning process (courses or job placement). It follows a similar approach in terms of documentation and quality criteria for mobility to the ECVET one: the two partner organisations agree on the purpose, content and duration of the experience, and a mentor is identified in the host country.

The Europass certificate supplement and Europass mobility could offer ECVET the templates to improve transparency and understanding of qualifications, and of individual learning pathways across education and training systems in Europe. Cedefop is currently considering improving both the Europass certificate supplement and Europass mobility to adapt them to ECVET and EQF requirements.

## CHAPTER 3

## Going for implementation

## 3.1. The ECVET environment

The ECTS (European credit transfer system for higher education) has been evolving since 1989. It took in France 20 years to set up validation in its current shape. In the UK the qualifications and credit framework was first introduced in 1997 and has since been revised.

These examples show that credit systems have to be fine-tuned to qualifications systems and, in broader terms, to the understandings and values linked to education and training in societies. ECVET has technical features but also societal, institutional and volitional aspects which mean that its implementation requires a specific environment. This environment has been conceptualised as ECVET readiness: it is a proxy for appreciating the feasibility of ECVET implementation while looking at different aspects of VET and qualifications systems.

Most qualifications systems in Europe show a high level of ECVET readiness (Fietz et al., 2007; Gelibert and Maniak, 2007). ECVET readiness is given if qualifications systems present specific aspects of ECVET such as units and learning outcomes, transfer and accumulation; a proliferation of unified national lifelong learning frameworks based on credits and common methodological approaches employing learning outcomes can be expected (Cedefop, 2008a). The Reflector study analyses analogies between ECVET features and practices in VET systems to measure ECVET readiness in terms of assessment of units (parts of qualifications), defined by learning outcomes (knowledge, skills and competence) and transfer of credited units into the home qualifications system for recognition and awarding of qualifications (Fietz et al., 2007). If relevant practices already exist, the degree of ECVET readiness is high.

This is closely related to the possibility of achieving partial assessments and certificates, as transfer means that parts of qualifications gain formal status in a new context (i.e. are validated). Further, the concept of ECVET readiness includes looking at the flexibility of training pathways, the autonomy of training providers and openness to mobility (Gelibert and Maniak, 2007) but also the existing transfer and recognition mechanisms (see for more details Fietz et al., 2007; Cedefop, 2008b). The N.E.T.WORK project (2008), one of the current ECVET pilot projects, mentions that the qualifications systems in which the project operates represent different stages of ECVET readiness: France and Slovenia are at an advanced stage, since



units of learning outcomes are already used; in Italy and Portugal, the situation is less clear at this stage, but strong emphasis is put on experimentation.

Both 2007 studies (ECVET reflector and ECVET connexion) indicate that no VET or qualifications systems are in a position immediately to implement ECVET fully (Fietz et al., 2007; Gelibert and Maniak, 2007). At the same time, implementing ECVET does not require a radical change in the rationales of existing VET and qualifications systems as all of them can be characterised by a certain level of ECVET readiness.

ECVET is not being introduced on its own but is linked to policies on improving international mobility in VET or to changes at national, regional or local levels towards more permeability within and between VET systems or sub-systems. The further development of ECVET as proposed at European level is dependent on the settings of national or regional education and training systems, for instance on the widespread use of recognition and validation of learning outcomes. Validation mechanisms for learning outcomes are developing but vary across Member States since the adoption of common European principles for the identification and validation of non-formal and informal learning in 2004 (Cedefop, 2008a).

Evidence for assessing the spread of ECVET in Member States is scarce: this report is seen as a contribution to broad analysis. If we consider the ECVET features (learning outcomes and unit-based approaches) and look at different qualifications systems in Europe, we see the following:

- (a) the award of qualifications is based, in some qualifications systems, on the accumulation of units of learning outcomes either associated with credit points (Finland, Sweden, United Kingdom), crediting according to the ECTS model (higher technical VET modules in Spain) or without credit points (France);
- (b) credit systems are sometimes developed within a broader qualifications framework (Scottish and Welsh credit and qualifications framework) or designed for specific qualifications (IFTS system in Italy) (European Commission, 2008).

A new learning culture implies going further with the development of legibility and transparency of qualifications systems, with supporting lifelong learning by making learning pathways visible, to aid access, progression and participation and recognition of a broader range of learning (including non-formal and informal learning). All these are arguments stated by Member States for developing national qualifications frameworks (Cedefop, 2009d). From this non-exhaustive list, it is seen that EQF objectives are relevant to ECVET and could pave the way to ECVET implementation and strategy-setting.

This should not mask differences and difficulties. Credit systems and qualifications frameworks are characterised by diversity of patterns and purposes

(Young, 2007). In the Member States, well before the 2008 Recommendation, ECVET prompted controversial discussion of issues such as modularisation, meaning of learning outcomes, understanding of trades and professions, etc. (Markowitsch et al., 2006).

In terms of implementation strategies and impact, it should be noted that the development and implementation of ECTS in higher education is not single but plural, adapting to the specifics of national higher education systems (Reichert, 2010). ECTS was introduced in 1989 to ensure recognition of learning periods spent abroad; in the following years it was integrated in the Bologna process and underpinned by national legislation for all accredited higher education institutions (Cedefop, 2010a). The 2007 survey on ECVET identified two main objectives: fostering international mobility for VET learners, and contributing to increased progression and permeability between the subsystems of a given VET system (Fietz et al., 2007). As in higher education, VET internationalisation campaigns are found in Member States such as France or Germany; the need for recognition of learning period abroad and Europeanisation of learning and career pathways is a trigger for implementation of ECVET. Further elements of interpretation of ECVET are presented in the following table.

Table 1. **Interpreting ECVET**

<b>1. Learning pathways</b>
Individualising pathways and increasing motivation for lifelong learning through accumulation of individual learning credits and reduction in drop-out rates Increasing geographic mobility between qualifications systems and permeability (vertical and horizontal) between different learning pathways
<b>2. Recognition of learning outcomes</b>
Acquired in a formal, non-formal or informal learning context, introducing the notion of 'units'
<b>3. Social inclusion</b>
People with diverse backgrounds and experiences to gain access to opportunities for learning and employment within a country, particularly by helping people to move between and across employment sectors
<b>4. Labour market</b>
Allowing workers to enter the European labour market and benefit from more and better opportunities Increasing employability
<b>5. Building European citizenship</b>
Build cultural and linguistic knowledge and competence in Europe by supporting international mobility in education and training

Source: DGVT questionnaires, 2008.

As well as identifying objectives, implementation strategies are associated with expectations. There are two main elements: those related to qualifications/VET systems, and those related to education and training provision. This sums up the difficulties ECVET might meet in terms of bridging the gap between legal or regulatory statements (anchored in the qualifications systems) and the practice-related requirements of implementing mobility. The two categories are presented in table 2.

Table 2. **Expectations linked to ECVET implementation**

Qualifications/VET systems	Education and training provision
<ul style="list-style-type: none"> <li>• European cooperation in VET.</li> <li>• Status and attractiveness of VET.</li> <li>• To increase the participation rates in VET (reduce drop-outs).</li> <li>• To ensure transparency among educational systems establishing mutual trust.</li> <li>• To provide the opportunity to create a closer link between vocational standards and curricula.</li> </ul>	<ul style="list-style-type: none"> <li>• To upgrade and improve the level and quality of training provision.</li> <li>• To promote strong links between education and training, business, industry, and HE, ensuring the continuing relevance and adequate appreciation of competences and qualifications.</li> <li>• To allow for further development of existing tools, with potential connection to the Europass certificate supplement, etc.</li> </ul>

Source: DGVT questionnaires, 2008.

ECVET is expected to reinforce flexibility in VET systems by allowing for individualisation and diversification of the learning pathways. From an institutional viewpoint this is sustained by increasing efforts in terms of documentation, readability and visibility of VET programmes and qualifications for all stakeholders in the European VET area.

A first step has been taken with the development of the Europass certificate supplement which introduces common terminology (e.g. using action verbs) to describe learning outcomes and qualifications. This development needs further reinforcement towards a shared format for presenting learning outcomes.

However, the 2008 DGVT questionnaires <sup>(1)</sup> also reveal concerns about the administrative and financial burden of implementing ECVET: a key element is to keep the balance between the expected positive effects on mobility (and permeability) on the one side and the administrative, social and legal arrangements on the other side. Changes are anticipated in terms of curricula and VET teacher activities that will have to deal with different VET locations as well as contracts and agreements. Whatever the objectives selected within Member States, they will also have related requirements in terms of acculturation of stakeholders, development of

<sup>(1)</sup> The DGVT questionnaires have been collected for the Cedefop 2009 policy report (Cedefop (2009). *Towards a European era of vocational education and training. continuity, consolidation and change.* Cedefop Reference series; 73. Luxembourg: Publications Office, 2009).

expertise or capacity-building (in terms of individualisation of the training pathways, validation, recognition), assessment processes, development of projects on common methodologies for curricula development and information to the final beneficiaries of ECVET. These approximate the activities developed in ECVET projects and initiatives.

### 3.2. Developing ECVET in VET systems

Reactions to ECVET in European Member States, and on the part of VET stakeholders, started with the setting up of the European technical working group on ECVET (Le Mouillour et al., 2003). The ECVET Europe-wide consultation between November 2006 and March 2007 placed ECVET in national debates on modernisation and Europeanisation of education and training. The European Commission received 31 national statements and 60 statements from representatives of the education and training community as well as of the labour market. Those already related ECVET to the national, regional and/or sectoral education and training developments (European Commission, 2007).

#### 3.2.1. What strategies for ECVET?

Credit systems are currently further developed in the context of broad range testing initiatives, feasibility studies, testing within specific qualifications (or occupational fields) or amending national legislations, as well as within the European programmes for vocational education and training and pilot projects. On the basis of the ReferNet reports (2008, 2009, 2010) <sup>(2)</sup> and information provided by national stakeholders, it is possible to identify eight strategies for ECVET implementation. Strategy is used here in the sense of how ECVET is taken forward. A strategy may follow a single line or combine different lines of action as presented in the table; at this stage of Cedefop ECVET monitoring, the list is not exhaustive; it will be refined in future issues of the monitoring. The table presents an overview of ECVET strategies as at mid-2010. Some of the strategies are described in more detail in this document (see the section on case studies).

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<sup>(2)</sup> The ReferNet reports from 2008 are available under the title 'VET policy – country reports' and the ReferNet reports from the year 2009 are available under the title 'VET in Europe – country reports'; the 2010 ReferNet reports will be soon available from Internet: <http://www.cedefop.europa.eu/EN/bibliographies/refernet-contributions.aspx> [cited 23.11.2010]

Table 3. **Overview of ECVET strategies**

<p><b>Strategy 1: setting up broad range testing initiatives</b></p> <p>Testing is carried out within national initiatives such as the FINECVET initiative in Finland or the DECVET initiative in Germany. There is also elaboration of specific qualifications such as in Bulgaria and the Czech Republic and in Belgium (French Community) starting 2011. In most cases these initiatives follow policy decisions by the main stakeholders (ministries or qualifications authorities). The initiatives receive a specific budget line and are cofinanced by national and European budgets.</p>
<p><b>Strategy 2: measuring impact (theoretical and methodological approaches)</b></p> <p>In Austria a feasibility study analysed the legal and organisational status of various Austrian VET options regarding their VET readiness; it delivered evidence to policy which underpinned the decision to develop ECVET for European mobility. This strategy is also present in the Czech Republic, Germany and Finland.</p>
<p><b>Strategy 3: updating VET legislation and regulations</b></p> <p>Legislation and regulations are updated taking on board some (or all) technical features of ECVET. This is the case in Belgium (French Speaking Community), Estonia, Iceland, Italy Latvia, Luxembourg, and Slovenia or at regional level (Catalonia).</p>
<p><b>Strategy 4: adapting qualifications system</b></p> <p>ECVET or elements of ECVET are being introduced within activities for adapting qualifications systems, such as:</p> <ol style="list-style-type: none"> <li>1. renewing curricula: in Estonia, Lithuania or Latvia, Hungary;</li> <li>2. conceiving partial qualifications such as in the Czech Republic, Spain, Hungary, Slovakia;</li> <li>3. developing validation mechanisms such as in the Czech Republic or Germany;</li> <li>4. reviewing educational standards such as in Austria.</li> </ol>
<p><b>Strategy 5: a 'wait and see' strategy</b></p> <p>ECVET developments at national and European levels are observed and discussed, as in Cyprus or Norway. For the time being no concrete action plan is defined. Both countries are represented in the ECVET Users Group.</p>
<p><b>Strategy 6: combining ECVET with NQF development</b></p> <p>The development of NQF includes introducing ECVET. This is happening, among others, in Poland within the Human capital operational programme (2007-13), in the Czech Republic (<i>Národní Soustava Kvalifikací</i>) or in Greece (within a new institutional set-up). For the two countries already having a qualifications framework, these have been revised to consider credit transfer (England, Wales and Northern Ireland (EWN-UK/QCF) and Scottish credit and qualifications framework (SCQF)).</p>
<p><b>Strategy 7: learning by working in ECVET European projects</b></p> <p>This strategy consists of leading or participating in European, national, regional or sector-related ECVET projects and bundling the experiences. This happens in many countries as illustrated in Table 4.</p>
<p><b>Strategy 8: marketing ECVET to stakeholders</b></p> <p>Different Member States are working on developing information materials. In Austria a working group is writing guidelines for the implementation of ECVET for the purpose of mobility exchange, addressing VET practitioners who are involved in transnational mobility projects (e.g. teachers, people responsible for mobility, project sponsors from VET schools and colleges, part-time vocational schools for apprentices, training enterprises, sectoral organisations). In Poland stakeholders are preparing guidelines, typical procedures and model documents. Within the third phase of FINECVET, a handbook will be developed tackling the implementation of ECVET before, during and after mobility. During the ECVET forum (July 2010) the French delegate announced the development of information materials on ECVET.</p>

Source: Based on ReferNet reports; Cedefop, 2009c, p. 116.

Those strategies could be further classified in those linked to continuing reforms of VET systems or recent updates of legislation and regulations, and those addressing a wider public. The first category includes Luxembourg where the updating of the law concerning foundation courses (EQF level 2) takes into consideration ECVET features. In Latvia the new vocational education law is expected to introduce ECVET and a working group has been set up. Adapting qualifications systems involves different aspects such as the review of educational standards in Austria. Generally, it is about adapting ECVET principles to the characteristics of existing education and training systems: this is so in Germany, Ireland, Spain, Austria, Finland and the UK.

The second category of strategies addresses the outer-circle of ECVET. In Belgium (Flanders) there is insufficient information available to VET stakeholders and the wider public, consequently ECVET appears 'reserved' for an inner circle, or there is a low level of awareness on ECVET (Cedefop ReferNet UK, 2010). Informing the stakeholders means addressing different groups such as experts engaged in policy-making and practitioners in validation and mobility. Events are being organised in Germany, Austria, and Finland. In Finland, activities have been developed for coaching and guiding teachers applying ECVET; in Hungary ECVET domestic partnerships have been set up. Increasingly, ECVET finds its way to national VET websites, for instance [www.finecvet.fi](http://www.finecvet.fi).

These two categories of strategy are outnumbered (see table 4) by the occurrences related to testing and experimenting under strategy 1 (broad range testing initiatives) and strategy 7 (participating/leading European ECVET projects). Although data are difficult to gather in terms of budget, one can assume significant investment in terms of manpower and financial support to testing and experimenting ECVET.

### **3.2.2. Strategy combinations**

Developing ECVET in a national context is seldom a stand-alone initiative. ECVET has been mainly discussed at national level in the context of validating non-formal and informal learning and supporting learner mobility across national borders. More concretely, it is embedded in the developments of validation procedures (as in the Czech Republic or Germany), in broader reform of VET (as in Iceland, Luxembourg, Slovenia), or in the development or reform of national qualifications frameworks (as in the Czech Republic or UK-EWNI).

Table 4. **Strategy-mix**

Countries	Broad range initiative	Impact analysis	Updating regulations	Adapting qualifications system	Wait and see	Combine with NQF	ECVET European projects	Informing stakeholders
	1	2	3	4	5	6	7	8
Austria		X		X			X	X
Belgium – Fr	X		X				X	
Belgium – NL							X	
Bulgaria	X						X	
Cyprus					X			
Czech Republic	X	X	X	X		X	X	
Denmark				X		X	X	
Estonia	X		X	X			X	
Finland	X	X					X	X
France							X	X
Germany	X	X					X	
Greece						X	X	
Hungary				X		X	X	
Iceland			X				X	
Ireland	X					X		
Italy	X		X				X	
Latvia			X	X			X	
Lichtenstein								
Lithuania	X		X	X			X	
Luxembourg			X				X	
Malta				X				
Netherlands							X	
Norway					X		X	
Poland	X					X	X	X
Portugal	X					X	X	
Romania							X	
Slovakia	X			X	X		X	
Slovenia			X				X	X
Spain				X			X	
Sweden					X		X	
UK						X	X	X
<b>Total</b>	<b>12</b>	<b>4</b>	<b>9</b>	<b>10</b>	<b>4</b>	<b>8</b>	<b>27</b>	<b>6</b>

Based on ReferNet reports, information provided by national stakeholders.

In most countries, ECVET is developing through a combination of strategies. Looking at Table 4, the most common strategies are setting up broad range testing initiatives (12 out of 31 country cases), adapting the qualifications systems to ECVET features (10 out of 31 cases) and updating VET legislations and regulations (9 out of 30 cases). Nearly all countries are represented in ECVET European projects. The high number of projects in the first set of strategies addressing the macro and regulatory level of qualifications systems is balanced by those addressing practical and experimental levels of implementation.

The ECVET process does not start from scratch but builds on experience gained over many years, preceding the Copenhagen Declaration of 2002 (European Commission, 2002) in Belgium (Flemish Community), Denmark, Spain, Sweden and UK-Scotland. As the work on ECVET has moved on, further national developments have been triggered, for example in Finland (FINECVET) and in Germany (DECVET). The new qualifications framework for England and Northern Ireland (qualifications and credit framework, QCF) strengthens the role of credit transfer, an approach largely followed by the Scottish credit and qualifications framework (SCQF) and the Welsh framework.

### **3.2.3. ECVET testing and developing**

The overview on ECVET strategies shows that testing and developing is accompanied by increased interest in permeability, recognition and validation (Table 3). Experience of these has already been gained in many Member States and mobility is also not new in most of them.

In most Member States the ministry in charge of education would lead ECVET implementation in cooperation with other ministries and a wider range of stakeholders: representatives of labour market actors, national VET agencies or research centres. There is, however, at least one exception: in Denmark the technical schools and trade committees are the driving force in ECVET testing. They have set up projects financed partly by the European lifelong learning programme and projects run with national funding (Cedefop ReferNet Denmark, 2010).

All strategies are underpinned by close monitoring and analysis of policy decision-making processes and developments at European level. The Advisory Committee on Vocational Training (ACVT, representing the interests of governments, trade unions and employers' organisations) and the Directors General for Vocational Education and Training are relevant actors along with diverse European working groups.

Only a few countries have so far designated an institution for follow-up activities. In Austria an informal ECVET expert group was set up in 2009. In Germany the national agency Education for Europe will be the coordination point for ECVET from



November 2010; in parallel the German DECVET initiative is accompanied by a multi-stakeholder advisory council. Similarly, the Finnish FINECVET is steered by a group representing the FNBE (Finnish National Board of Education), CIMO (Centre for International Mobility), social partners, VET providers, principals, teachers and students. Italy and UK have introduced ECVET in the list of their EU-related activities. In 2006 the Italian *Technical table for construction of a national system of minimum vocational and training standards and competence certification* gathered all stakeholders (competent ministries, regions, social partners) to coordinate and develop, within a common methodological framework, a national system for defining and recognising qualifications, certifying competences and training credits, the transparency of competences, and the establishment of training and occupational standards; it has currently suspended its activity because of the need to focus on the requirements of the current crisis (Ministry for Education et al., 2009). In UK the current qualifications framework working group will be renamed the European qualifications coordinating group to deal with all relevant issues (including credits) (Cedefop ReferNet UK, 2010). In Ireland, FETAC is foreseen as facilitator for integrating ECVET with the existing credit system. In Spring 2010, the British government gave mandate to ECCTIS Ltd to act as national contact point for ECVET; this private organisation is already the national agency responsible for providing information, advice and expert opinion on vocational, academic and professional skills (NARIC) and the National Europass centre (NEC) for England. In the Netherlands, the national reference point for quality assurance will also be forming the national coordination point (NCP) for ECVET (Cedefop ReferNet Netherlands, 2010).

### 3.3. Case studies

This section uses selected case studies to illustrate some of the identified strategies (Table 3). It is a first attempt to give more insight into national initiatives, detailing objectives, stakeholders involved and decision-making processes.

#### 3.3.1. Piloting a VET credit system (Germany)

The German initiative, DECVET, aims at 'piloting a national credit system in vocational education and training' (*Erprobung eines nationalen Leistungspunktesystems in der beruflichen Bildung*). The initiative is financed by the German Federal Ministry for Education and Research; it started in November 2007 and will end in March 2012. Its advisory council includes the Federal Employment Agency, the Confederation of German Employers' Associations, the Confederation of

German Trade Unions, the Association of German Chambers of Industry and Commerce, the German Mining, Chemical and Energy Trade Union, the German Metal Industry Trade Union, the Ministry of Education and Cultural Affairs of the State of Hesse, and the German Confederation of Skilled Crafts and Trades (BMBF, 2010).

It focuses on enabling permeability within the German vocational education and training system, using and/or adapting the ECVET features. Answering the specific need for more transition and no dead-end learning pathways in education and training, DECVET is following a learning outcomes approach to set out mechanisms for evaluation or equivalence setting, and credit transfer procedures. It concerns a wide range of VET programmes and deals with permeability at different transition points of the German VET as presented in table 5.

Table 5. **Overview of the DECVET initiative**

Transition points	Sectors/disciplines
Between prevocational training and dual-system initial vocational training	Metals technology: plant mechanic, industrial mechanic, tools mechanic, metal worker Logistics and transport: service occupations, metal and electro-technology occupations
Cross-cutting VET qualifications within a single occupational field	Metal: machine and plant operator, production mechanic, motor vehicle mechatronics technician, motor vehicle body and vehicle construction mechanic, industrial mechatronics fitter, electronics technician for automation, industrial mechanic, tools mechanic Plastics processing: mechanic in plastics and rubber processing, tools mechanic, mechatronics fitter
Between full-time school-based and dual-system IVET	Commercial occupations, tourism and trade: certified assistant in business administration, management assistant for office communication, office management clerk, international tourism assistant, travel agent Trade and technology: clerk for wholesale and foreign trade, mechanic for sanitary, heating and air conditioning systems
Between dual-system IVET, second-chance vocational qualifications, and CVET	Construction sector: foreman, skilled worker Industry: certified industrial foreman (mechatronics), systems technician in mechatronics, mechatronics fitter, certified technician in mechatronics Chemical industry: chemical technician, chemical laboratory technician, certified industrial foreman (chemical industry)

Source BMBF, 2010.

The DECVET initiative takes on board ECVET technical features: learning outcomes, units of learning outcomes, role of credit points, credit-award process. It gathers single projects working on specific transition points (as presented in Table 5); these projects are monitored by a research group and the BIBB. The initiative

combines conceptual work on assessment methods and recognition mechanisms with their practicability by involving a large range of stakeholders, including teaching staff.

‘To ensure that the new approaches to testing would be practicable and gain acceptance, the criteria of procedural economy and examiner competence also had to be considered. Since the new competence testing procedures geared towards credit transfer made new demands on examination staff, the pilot projects developed concepts to upgrade their qualifications for the task. If the piloted recognition procedures are to gain acceptance among all the education and training actors involved, it will be critical for testing procedures to be transparent, comprehensible and valid’ (Meerten, 2010).

DECVET was preceded by the ANKOM initiative (2005-08) which dealt with crediting vocational qualifications towards qualifications at higher education level. It aimed at developing methods for identifying and assessing qualifications and competences acquired in CVET and for awarding credit towards higher education programme. ANKOM set out equivalence between vocational and university qualifications with reference to learning outcomes to aid permeability between VET and HE, working on the basis of ECTS. Encompassing eleven single projects, operating as consortiums (higher education institutions, CVET providers, chambers of trade and industry in their capacity as competent bodies, companies in their capacity as IVET providers, unions and employer organisations, practice centres and professional associations) it developed a reference framework for competence-based assessment.

ANKOM is considered as related to DECVET as it contributed to the shift from workload-based methods for assessment to competence-based methods. It dealt with different perspectives on competence while highlighting the differences between a meta-cognitive approach to learning outcomes in higher education and a more proficiency-based approach in vocational education and training (Stamm-Riemer et al., 2008). It also touched upon the divide between scientific/academic and vocational orientation of qualifications and programmes.

### **3.3.2. Piloting ECVET for international mobility (Finland)**

Finland is a specific case in the development of ECVET because, as with Sweden and the UK, it already had a credit system: study programmes for each vocational qualification at upper secondary level are allocated 120 credits. The study programmes are divided into 90 credit vocational units, 20 credit core units (common to all), and free-choice units at 10 credits. Further to the FINECVET initiative, the ‘implementation of ECVET will require a national resolution, the description of qualification system, classification of the existing qualifications

according to EQF levels and agreement on principles for allocating credit points in a Government degree' (Autere, 2009).

FINECVET (which stands for Finnish approach to ECVET) is mainly testing the use of ECVET in a transnational mobility context in selected sectors and is focused on student exchange programmes at the upper secondary level in formal VET. It involves VET providers and the Finnish Board of Education as national qualifications authority in charge of developing curricula and VET programmes. Partner organisations from Austria, France, Germany, Hungary, Italy, Lithuania, the Netherlands, Spain, Sweden and Turkey are involved (Autere, 2009).

Table 6. **Overview of the FINECVET initiative**

Phases	Sectors/disciplines/qualifications levels
<b>Phase 1: 12/2004-12/2005</b>	
4 VET providers and 5 VQs	Forestry, construction, business and administration, hotel and restaurant services, social and health care Vocational qualifications at upper secondary level
<b>Phase 2: 8/2006-12/2007</b>	
To the previous phase: 2 new VET providers between full-time school-based and dual-system IVET	To the previous phase: agriculture, building and maintenance technology, information technology, vehicle technology Vocational qualifications at upper secondary level
<b>Phase 3: 9/2009-12/2011</b>	
4 to 6 sectoral projects led Finnish VET providers with their international partner schools	Technology and transport, business and administration, health and social services, culture 3 qualifications levels: vocational, further and specialist vocational qualifications

Source: Autere, 2009; Autere, 2010.

Participants in FINECVET are education authorities at regional/national levels and vocational colleges/schools in 12 countries. The third phase gathers 16 Finnish VET providers and social partners with partners from 10 other countries. FINECVET developed different models to describe entire qualifications or studies of different scopes in terms of knowledge, skills and competence and set out a proposal to determine credit points and the EQF level of qualifications/studies. This proposal suggests that one year of study and a three-year qualification would equate to 60 and 180 credit points respectively.

As FINECVET is targeted at international mobility in VET within student exchange programmes, it tackles specific issues such as assessment, learning agreement, memorandum of understanding or the use of Europass. In assessment of learning outcomes, the project tested the assessment criteria and documentation forms developed for Finnish vocational skills demonstrations. These work when a Finnish teacher is involved in assessment of skills demonstrations and where the receiving country has an assessment procedure equivalent to vocational skills demonstrations. Each project also cooperated with an international partner to produce a documentation form for assessment of a skills demonstration/practical test, which differed from the Finnish assessment procedure and was also used.

A credit transfer model was produced for one qualification. The tool applied is a description of learning outcomes in terms of knowledge, skills and competence and comparison of these between three countries. It highlights decision-making at the level of education provider: education providers should decide on the procedure of validating and recognising studies completed in another country as credits for students as part of their curricula.

### **3.3.3. Analysing ECVET feasibility in national context (Austria)**

The feasibility study analyses ECVET from a costs and benefits perspective of its use in the Austrian IVET system (upper secondary level, both sub-systems: school-based and work-based systems). The costs are interpreted in terms of legislative, regulatory and organisational changes that might be needed for ECVET implementation. They are set in relation to two possible main implementation objectives: using ECVET as an instrument for mobility and using ECVET as a system for recognising and validating learning outcomes. The main results are, however, not related to either of those objectives. The analysis is carried out along the main characteristics of ECVET: learning outcomes and learning units, credit points and transfer process (see Table 7).

The analysis of ECVET through the characteristics of Austrian VET includes a clear request for more staff and financial resources as well as changes in legal and organisational patterns of VET. It also defines requirements in terms of learning outcomes, units of learning outcomes and competent institutions if a best-fit approach to ECVET is to be followed:

- (a) learning outcomes and learning units. The learning outcomes orientation implies formulating the corresponding curricula and training plans. To do this, methods for describing knowledge, skills and competence and for training those in charge of the corresponding syllabus should be developed. Qualifications should be further subdivided; the transfer of learning outcomes requires modular curricula and training plans (*Ausbildungspläne; Lehrpläne*). Each

learning unit should be separately valued and certified. Each learning unit and qualification should be allocated a numerical value in credit points;

Table 7. **Overview of the Austrian ECVET feasibility study**

	School-based system	Work-based system
<b>Issue 1: Learning outcomes and learning units</b>		
<b>State-of-art</b>	<p>Input-oriented description</p> <p>Learning outcomes are given in teaching/learning objectives in an abstract, piecemeal fashion, mostly without referencing to assessment criteria</p> <p>Teacher-centred provision (as opposed to learner-centred)</p> <p>Configuration of qualifications</p>	<p><u>In-firm training</u>: profession description is structured in knowledge and skills, the vocational profile (<i>Berufsprofil</i>) lists all competences acquired that will be carried out professionally, independently and self-responsibility. A further development towards a real learning outcomes orientation can be envisaged.</p> <p><u>In-school training</u>: input orientation, no KSC defined, the syllabus will have to be redrafted.</p> <p>Organising qualifications with two different separated provision modes (not complementary) might make ECVET implementation difficult.</p>
<b>Initiatives</b>	<p>2005 project for development of educational standards for general and vocational core subjects. It aims at defining core learning outcomes for vocational learning pathway independently of the VET provision.</p>	<p>Modularisation in VET law (2006) can be interpreted as awareness-raising for learning units.</p> <p>Stronger learning units are given in some professions in commerce and administration</p>
<b>Issue 2: Credit points</b>		
<b>State-of-art</b>	No experience	No common description of learning outcomes, partly identification of learning units are obstacles to allocation of credit points
<b>Issue 3: Transfer</b>		
<b>State-of-art</b>	<p>Legal provision and general openness for school visits and work placement abroad</p> <p>Existing regulations for release from tuition, crediting for terms abroad</p> <p>Existing school partnerships and cooperation could be used for developing agreements models (MoU)</p>	<p>Existing legal provision positive for ECVET</p> <p>Concrete implementation within workplace-based part is considered as difficult. This is due to the lack of formal evaluation during the in-firm training (final examination). However crediting could take place based on workplace observation in the context of mutual trust and quality assurance measures.</p> <p>In-school training leads to formal evaluation which has a legal function (authorising to pursue with VET). Temporary school period abroad will have to be formally assessed. It implies high expenses in terms of teaching personal.</p> <p>Timetable and schedule for training and learning units are more flexible during in-firm training than during in-school training.</p> <p>VET contents are described in separate documents and regulations for evaluation and assessment.</p>
<b>Initiatives</b>	Leonardo and Comenius partnerships	

Source: adapted from Tritscher-Archan, Luomi-Messerer, 2008.

- (b) competent institution: this should be able to define learning units, formulate learning outcomes and allocate credit points for both subsystems. Coordination should be placed with an ECVET agency. Mobility and permeability should be given a legal framework in line with ECVET (time flexibility, and release from tuition during VET).

Table 8. **Assessing effort and expense**

Objectives of ECVET		Implementation of ECVET
1) using ECVET as an instrument for mobility	1.1) À la ECTS – in combination with qualifying mobility (longer period abroad, recognition by the sending institution, no change in VET programme duration)	Yes
	1.2) As usual – without qualification-oriented mobility	No
2) using ECVET as a system for recognition and validation of learning outcomes		? Need for extensive political analysis and consultation with stakeholders to examine the question of permeability in Austrian VET

Source: adapted from Tritscher-Archan, Luomi-Messerer, 2008.

The policy recommendations formulated on the basis of the feasibility study call for:

- (a) clarifying the primary objective of ECVET implementation (qualifying transnational mobility, permeability within the qualification system);
- (b) testing ECVET in pilot projects in one or two areas to elaborate on learning outcomes, crediting and cooperation surveyed;
- (c) gathering and analysing practical experience with transnational mobility projects (including qualifying mobility);
- (d) coordinating the activities linked to NQF development and ECVET implementation to benefit from synergies, especially concerning the learning outcomes approach (Tritscher-Archan and Mayr, 2008).

The feasibility study fed into the decision on how to deal with ECVET at federal level. Besides the feasibility study, the decision is based on contributions of parallel initiatives such as NQF and EQF processes, the elaboration of educational standards for VET and general education, and quality initiatives in the school sector. The ministries in charge of VET-related matters (BMUKK and BMWA) support individual Leonardo da Vinci projects on ECVET, for example VQTS and VQTS II

(Vocational qualification transfer system) and SME-Master (Skilled mobile European master).

For the time being, the competent authorities have decided to apply ECVET in the context of transnational mobility (BMUKK/BMWF, 2009). The activities are shared by the stakeholders (ministries, authorities, VET providers and institutions).

Table 9. **Sharing the tasks**

Ministries and other federal institutions	VET schools and competent bodies
Support to learning outcomes based description (NQF, standards, actualised/new training plans)	Set up cooperation agreement and memoranda of understanding
Support to long-term mobility in VET	Take care of definition of units, allocation of points to the units following ECVET features
Linking ECVET and Europass	Implementation of mobility
Development of guidelines and materials (together with the European Commission) such as learning agreement and transcript of records	Recognition of credits acquired abroad (mutual trust)

Source: adapted from Nöbauer, 2009.

#### 3.3.4. Going for it (Belgium Wallonia)

This initiative is fed by the work in different ECVET pilot projects, partly because of financial and time resource limitations and partly a deliberate choice to use available results and templates from diverse projects (Bultot, 2010). The French Community of Belgium is planning to experiment ECVET in three sectors: automobile, hospitality-catering, and aesthetics. This experimentation concerns qualifications at level 4 EQF which are awarded after completion of school-based alternance and dual training. After a period of fine-tuning and preparation, the initiative will go live in September 2011 for IVET entrants in the three sectors.

This initiative has specific features:

- (a) reform of VET; this initiative is embedded in the development of a unit-based qualifications system and a reform of IVET, which addresses the issues of drop-outs and early school-leavers, of sustaining motivation and ownerships of learning pathways, and of flexibility in education and training;
- (b) federal/regional governance structure; it is a governmental decision, following the remits definition, and regional governments and training providers are invited to join the initiative;
- (c) cooperation; the initiative relies on the coordination between federal and regional policy levels, but also on joint work with inspectorates and representatives of training centres.



This initiative follows the setting up of a French-speaking service for professions and qualifications [*Service francophone des Métiers et des Qualifications*] in 2009 (Lois 34461, 2009). The flexibility introduced into the education and training system includes the definition of learning pathways in units, corresponding to competences and anchored in different education and training programmes <sup>(3)</sup> (n.n., 2010). This wider context also sets up a common vocabulary for stakeholders working in qualifying training and education, social promotion, and validation which reflects ECVET features. For instance it contains the term learning outcomes (*acquis d'apprentissage: l'énoncé de ce que l'apprenant sait, comprend et est capable de réaliser au terme d'un processus d'apprentissage*) and units of learning outcomes (*unité d'acquis d'apprentissage: l'ensemble cohérent d'acquis d'apprentissage qui peut être évalué ou validé*) (Lois 34255, 2009).

### 3.3.5. Focus on regions

Some VET systems are strongly regionalised. In Italy some regional administrations have taken direct action to define operational policies and strategies to encourage validation of informal and non-formal learning to recognise training credits in specific formal learning activities or to acquire official qualifications and certificates. In some cases, validation has taken place in higher VET (*Istruzione e Formazione Tecnica Superiore*) and adult education (adult learning pathways). In others, regional administrations have designed and implemented systems for validating and recognising training credits or official qualifications referring to specific learning contexts (national community service, specific economic sectors). Validation mechanisms have also been activated on an ad hoc basis and brought into play for all the vocational training pathways and supply chains involved (Ministry for Education et al., 2009).

The regional dimension of ECVET implementation is supported by associations such as the FREREF, as well as by the involvement of regional decision makers in different ECVET projects (ASSET, RECOMFOR, SME Master Plus for instance). VET mobility between regions has also been developed since the 1988 agreement between four European regions (Baden-Württemberg, Catalonia, Lombardy and Rhône-Alpes) – termed the Four motors for Europe – or within the Regio LLL scheme to promote exchange of experience and joint projects on professional training and lifelong career guidance (<http://www.4motors.eu/-Projects-.html>), or projects such as MOBIVET-REGIO.

The 2007-10 second general plan for vocational education and training in Catalonia addresses 'people's professional qualification all along their lives, also for

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<sup>(3)</sup> Le parcours au sein de l'enseignement technique sera ensuite découpé en unités correspondant à ces compétences et valables dans différentes filières de formation.

those already in the labour market, giving a global and adapted answer to needs for economic fabric competitiveness and social and territorial cohesion' (Consell Català de Formació Professional, 2007, p. 13). It is driven by desire for equity between individuals from different groups, economic change and competitiveness. It addresses difficulties encountered in regional VET, such as number of entrants to VET programmes, lack of training offers for specific VET qualifications, need for better policy coordination and articulation between the different strands of the VET system.

The plan defines different objectives, two of which are strongly related to ECVET as they concern transnational mobility in VET within Europe and reforming VET. It includes integration into the regional VET system of a 'credit transfer system inspired by ECVET' (Consell Català de Formació Professional, 2007). The technical aspects of ECVET are to the fore: it is foreseen to adapt the degrees catalogue, the professional qualifications catalogue and the professional certificates list, to develop modularisation and training credits, to experiment new integrated and credit transfer systems with certain professional families in European VET (Consell Català de Formació Professional, 2007). A credit transfer system in ECVET mode will undergo experimentation with five vocational families based on research activities.

The second strand of relevant activities links to the regional level VET network, using the *Barcelona declaration on the contribution of the regions and territorial authorities regarding the organisation and promotion of training mobility of individuals in initial vocational education and training* (Government of Catalonia, 2009) as an example. This declaration involves European regions in promoting ECVET, together with Europass and EQF. Further, the plan promotes mobility of learners and trainers for internationalising qualifications and also for improving the recognition of qualifications abroad.

Over three years (2007-10) the foreseen budget in Catalonia reaches around four million Euro for the objective linked to internationalising VET and around eight million for the objective linked to updating qualifications; ECVET is subsumed under both objectives (Consell Català de Formació Professional, 2007).

### 3.4. Experimenting and testing overview

There is nothing anecdotal about the projects within the ECVET initiative. They are integrated at regional, national and European level in the schedule for implementing ECVET and they are an important part of the European ECVET agenda and governance. The projects support the bottom-up approach to ECVET implementation and its evaluation in 2014.

Testing and piloting is part of the ECVET European process, especially as the Recommendation sets the date of 18 June 2014 for ‘if necessary a review and adaptation of this ECVET recommendation’ (European Parliament and Council of the European Union, 2009b) on the basis of the results of trials and testing. The ECVET testing phase (2009-12) can be seen as an effort to link European and the national levels, establishing a feedback loop between practice, research and policy-making, thus moving from meta-level European principles to concrete and operation practices at local level.

The following section briefly sets out the administrative and policy background of the projects with a focus on preliminary results in terms of implementing ECVET in partnerships, the capacity of partnerships, a nearly sine qua none condition for spillover, and transfer from experimentation to policy-making.

#### **3.4.1. European policy approach by projects**

The 2006 European call for award of grants for the promotion and coordination of projects to develop credit systems for vocational education and training focused on building sustainable partnerships with all stakeholders in VET system qualifications. In 2008 the Education, Audiovisual and Culture Executive Agency issued a call for projects for 12 parallel coordinated projects <sup>(4)</sup>, each intended to set up or consolidate partnerships between competent institutions to test and experiment ECVET for the benefit of various groups (e.g. employed adults, jobseekers, young people leaving initial training without qualifications). Further specific objectives are to develop learning outcomes, units of learning outcomes and transfer processes, to conceive methods for assigning points to qualifications and units, for using points, linking ECTS-ECVET and to set up inter-institutional partnerships. Those projects are currently running and are referred to as the ECVET pilot projects. The 2010 call for proposals targets two main elements of ECVET implementation: the partnerships between competent institutions to establish an operational framework and the testing of ECVET technical features <sup>(5)</sup>. The general objectives of the call for proposals are aimed at the ECVET system being put into practice and the preparation of measures for its adoption by the Member States. Parallel to these calls the lifelong learning programme has included ECVET in its actions since 2003.

From 2003 to now, the scope of calls has changed in focus from partnerships and initiatives (2006) to including the development of experimental measures addressing specific learners groups (2008), and to supporting dissemination and marketing activities targeted to a wider public (2010).

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<sup>(4)</sup> [http://eacea.ec.europa.eu/about/call\\_tenders/2008/call\\_tenders\\_02\\_2008\\_en.php](http://eacea.ec.europa.eu/about/call_tenders/2008/call_tenders_02_2008_en.php) [cited 25.11.2010].

<sup>(5)</sup> [http://eacea.ec.europa.eu/llp/funding/2010/call\\_ecvet\\_en.php](http://eacea.ec.europa.eu/llp/funding/2010/call_ecvet_en.php) [cited 25.11.2010].

Meanwhile ADAM (the project and product web portal for Leonardo da Vinci, <http://www.adam-europe.eu/adam/homepageView.htm>) has 111 projects related to ECVET, the earlier ones dating back to 2003. A review of the database by project coordinator organisation types, countries of origin and sectors revealed the following: 40% of the projects are coordinated by an organisation located in Germany, 10% in France and Italy. For Germany, Busse (2008) considered for the year 2009 48 projects linked to ECVET (either financed by European programmes, or by the Federal Ministry for Education and Research), few of which were directly financed and designed by enterprises. The projects registered in the ADAM database are coordinated 32% by VET providers, 19% by research institutes or higher education institutions, and 14% by public authorities. Some 23% of the projects deal with improving education and training (for instance, training of trainers, setting up specific assessment procedures compatible with ECVET), 10% with developing ECVET in management qualifications, 8% in the construction and building sector, 8% in the health sector and 6% in transport and logistics. Further projects deal with developing ECVET for qualifications in automotive sector, chemical industry, engineering, food industry, waste management, ICT, tourism, agriculture or finance.

In some projects the partnership developed accreditation procedures for VET providers. The projects developed common qualifications or occupational standards in their respective fields (European management, painter, master craftsperson qualification in bakery, or vocational fields such as fitness or cultural heritage). The qualifications were subsequently divided into units, with associated credit points. Two options can be observed: either the qualification is aimed at being implemented as such in the project partner countries, or the qualification is used as a reference to compare the design of qualifications in the partner countries (in terms of levels of abilities linked to the units).

Many expectations are linked with ECVET, such as further development of intra-European mobility, more significant development of individualised career and learning paths, better recognition of informal and non-formal learning, better transparency and mutual trust between education systems, increasing VET participation rates and motivation for lifelong learning (Bordeaux Communiqué, 2008; Cedefop, 2009c).

#### **3.4.2. Seeking equivalences, enabling mobility**

ECVET presents a unique feature in foreseeing testing and experimenting; the ECVET Recommendation includes a deadline and technical features. Anyone wishing to report on experiments cannot avoid going deeper into the details of ECVET technical features and checking on how those are being put into practice.

This section examines pilot projects and ECVET projects for a better insight into ECVET technical challenges.

In looking at ways of establishing ECVET, projects concentrate on learning outcomes. Choosing the learning outcomes approach for a credit system is a logical step for VET as it links the occupational and the educational standards used to define occupations, job outlines, qualifications and curricula; it also links, at a macro level, education and the labour market (Cedefop, Le Mouillour, 2005; Cedefop, 2009b). Choosing learning outcomes sets up a community of practice among practitioners and policy-makers in specific professional fields, thus contributing to building up mutual trust for ECVET partnerships. It also establishes a common language across sectors and activities.

This section focuses on how projects establish transparency on qualifications and define learning outcomes within their partnerships. Different projects are considered, some of which are characterised by incremental development of approaches and widening partnerships – thus building clusters of projects <sup>(6)</sup> – while others are more ‘stand-alone’ projects but often embedded in a sectoral approach to the European tools for lifelong learning. A third group are the European ECVET pilot projects from the 2008 award of grants by the European Commission. If not otherwise specified, this section is based on materials available under <http://www.ecvet-projects.eu/> [cited 21.11.2010].

The 2008 ECVET pilot projects focus on European geographic mobility, though some mention horizontal/vertical mobility between different qualifications levels (such as the Be-TWIN project to enable education routes, in particular between VET and HE). Other projects work with ‘mobility across VET providers within countries and regions’ such as OPIR or ‘professional mobility’ such as CAPE-SV. Most projects have a similar number of participants that represent training providers, public bodies such as qualifications authorities, or bodies responsible for the supervision of training provider networks; few are private or semi-private bodies with responsibility for professional qualifications.

#### 3.4.2.1. *Learning outcomes in projects*

The AEROVET, O.P.I.R., RECOMFOR, CREDCHEM, M.O.T.O, CAPE-SV, ECVET ASSET projects express learning outcomes in terms of knowledge, skills, and competence (KSC). Projects write learning outcomes on various bases; for instance, AEROVET uses common core tasks, following a competence levels matrix. The M.O.T.O project develops an approach to learning outcomes starting from occupational tasks crossed with training contents as defined by training centres

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<sup>(6)</sup> At least two clusters of projects can be identified: the ones following the VQTS approach, the ones following the Cominter/professionalisation durable approach.

involved in the field testing. They refer to occupational tasks in the job profile and these are reflected in terms of learning outcomes in the qualification. The SME MASTER Plus and VALOGReg projects are looking for alternative ways of identifying learning outcomes. They decided to abstain from differentiating learning outcomes into knowledge, skills and competence, as division of the learning outcomes would have been contrary to the project claims to reflect professional capacities in a comprehensive and transparent manner. The references used for identifying and agreeing on learning outcomes are presented in the following overview.

Table 10. **Use of standards within the ECVET European pilot projects**

Use of	AEROVET	Be-TWIN	CAPE-SV	CREDCHEM	ECVET-ASSET	M.O.T.O	N.E.T.WORK	OPIR	RECOMFOR	SME MASTER Plus	VALOGReg
<b>Occupational standard</b>	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes
<b>Educational standard</b>	No	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Assessment standard</b>	No	Yes	Yes	-	Yes	-	-	Yes	-	No	No
<b>Validation standard</b>	No	Continuing process	-	-	-	-	-	-	-	No	No
<b>Certification standard</b>	No	No	-	-	-	-	-	-	-	No	No

#### Definitions

Occupational standard: the activities and tasks related to a specific job and to its practice; educational standard: statements of learning objectives, content of curricula, entry requirements as well as resources required to meet the learning objectives; assessment standard: statements of the learning outcomes to be assessed and the methodology used; validation standard: statements of the level of achievement to be reached by the person assessed, and the methodology used; certification standard: statements of the rules applicable for obtaining a certificate or diploma as well as the rights conferred.

*Source:* Information collected by the pilot projects leaders.

#### 3.4.2.2. Units and qualifications in projects

ECVET ASSET, N.E.T.WORK, O.P.I.R., VaLOGReg projects do not create new qualifications but work with existing ones. ECVET ASSET, at the operational level, seeks to identify, in each of the national contexts, a qualification corresponding to the defined job profile. N.E.T.WORK and O.P.I.R. stress improving the transparency of the existing qualifications. The qualifications are already designed in most of the

regional areas concerned by the VaLOGReg project; it is foreseen that qualifications will be described based on a grid using the description of the activity and task and the learning outcomes. Recomfor and OPIR analyse professional activities and define units at the level of activities as those are understandable to employers and learners as well as suitable for validating all forms of learning (formal, non-formal and informal).

Be-TWIN, CREDCHEM, RECOMFOR, SME MASTER Plus projects work on designing new qualifications. They plan to produce descriptions of qualifications in units of learning outcomes and associated ECVET credit points. As projects work with different qualifications across countries, there are difficulties with these differences. The Be-TWIN approach to learning outcomes depends on the three different case studies running in the framework of the project. In two studies the learning outcomes are mainly identified through existing qualifications using knowledge, skills and competence; third study (training of trainers) more readily uses the occupational profile of the trainer.

There are difficulties in the different ways of describing learning outcomes and different assumptions of what units of learning outcomes are in various contexts (national, as well as VET and HE). Such aspects are key points for ECVET future success and will be kept under scrutiny for the further implementation stages

#### 3.4.2.3. *The approach by matrix*

The competence levels matrix approach has been incrementally developed since the VQTS I project (2003-06) for developing a structured description of work-related competences. It was further developed with the VQTS II project (2007-09) to include the electronics/electrical engineering sectors. Both SME Master (Skilled-Mobile-European-MASTER, 2007) and SME-Master plus (one of the 12 ECVET pilot projects) are building on the VQTS model. Further projects inspired by this approach are EASCMF (designing a sectoral competence framework for the automotive sector), the MAP:ECVET project (health professions), the VQTS-PH project (public health), the ECVET-Tour project (tourism and mobility) or the PERMEVET project.

The matrix approach includes different grounding statements by the experts engaged in the projects. Training programmes are different throughout Europe, even within the same trade (in the SME-Master case, master crafts person in bakery), though the job specifications of master crafts person are similar. Qualifications and training programmes follow different approaches: qualifications follow an outcome-based approach whereas the training programmes follow an input-oriented approach. Further, the training programmes incorporate learning contents and learning periods but not acquired decision-making skills and sense of responsibility (Luomi-Messerer, 2009).

Despite differences, several overlaps can be identified in the structure and contents of master craftsperson training. For a vocationally-specific area (identical for all the master craftsperson training programmes in a country), in which particular emphasis is placed on imparting business administration plus teaching and training skills, the training involves a technical area in which the trade-specific competences of a vocation or a sector are taught. As mentioned in the ECVET-Tour partnership, analysis of competence brings out differences in categories of learning outcomes and professional competences. These depend on the formal training model (school-based versus workplace based training) and impact on career development opportunities. The development of social skills varies with the age of the graduates entering the labour market for the first time (Thalmaier, 2010).

Within SME Master, the job specifications of master craftsperson are quite similar in all four partner countries: an entrepreneurial qualification for SMEs, combining commercial and personnel management skills as well as technical and vocationally-specific know-how. From training regulation documents, job profiles/descriptions, curricula and consultation with trade experts, all projects in this group can set out typical core tasks. In the example of VQTS II (occupation: mechatronic), a list of nine core tasks is established, describing the work content of a given profession; context characteristics are not included at this stage.

Table 11. **Core tasks for mechatronic**

1.	Maintaining and assuring the reliability of mechatronic systems
2.	Installing and dismantling mechatronic systems and facilities
3.	Installing and adjusting mechatronic components in systems and production lines
4.	Designing adapting, and building mechatronic systems and facilities based on client needs and site plans
5.	Putting mechatronic systems into operation and providing clients with technical and economic support
6.	Supervising and evaluating both the process sequences of mechatronic systems and facilities and the operational sequence (including quality assurance)
7.	Installing, configuring, programming and testing hardware and software components for control and regulation of mechatronic systems and facilities
8.	Preparing and distributing the technical information for adjustment of each enterprise's mechatronic systems
9.	Diagnosing and repairing malfunctions, and modifying and expanding mechatronics systems

Source: Luomi-Messerer, 2009.

In the project MAP:ECVET the core tasks are further specified in work processes to which a mix of key competences, knowledge, hard and soft skills are allocated



(Mas, 2008). The project ECVET-Tour agrees within its partnership on three core tasks for cooks and four for hotel and restaurant commercial assistant.

The competence-levels matrix indicates in the first row a list of core tasks, and then vertically the levels of proficiency in terms of 'competence' that can be achieved by mastering the tasks. The matrix enables extrapolation of learning outcomes from the list of tasks following a project-own approach. As stressed by the project members, considering work processes does not allow learning outcomes to be split along the descriptors of knowledge, skills and competence. Consequently each task is described in expected competence levels. One given task can be carried out at different competence levels (from novice to expert levels).

Table 12. **Example of task and related expected competence levels**

Core tasks	Expected competence levels	
Inspecting and configuring electrical and electronic systems and machines in industrial appliances	1	He/she can carry out basic and scheduled maintenance tasks, inspections and checks on electrical equipment. Adjusting electronic appliances can be undertaken according to predefined instructions. He/she can use the necessary measuring and testing tools.
	2	He/she can carry out and document preventive maintenance works and setting tasks on industrial electric appliances and systems according to established quality assurance methods.
	3	He/she can analyse and determine the availability and the condition of electrical/electronic systems.
	4	He/she can develop and document maintenance and inspection methods for electrical/electronic systems on the basis of analyses of the production process as well as develop maintenance, inspection and quality assurance plans from this

Source: adapted from Becker, 2009.

The levels of competence refer both to content-related and context-related elements of tasks. One example of a context-related element is the description of tools used for tasks (e.g. in the full version of the matrix the electrical equipment is further detailed in terms of industrial plants, switching and control systems, electrical machinery).

The projects offer working assumptions on how to deal with learning outcomes, qualifications and units. Those assumptions could be refined as follows:

- (a) occupations can be described by a range of five to 25 core tasks, each in turn being assigned two to six competence levels (VQTS I; Luomi-Messerer and Markowitsch, 2006). The competence levels definition follows the Dreyfus model of skill acquisition, focusing on actual performance and outcomes (Dreyfus and Dreyfus, 1980);
- (b) the matrix contains tasks and learning outcomes corresponding to those in the qualification in the partner countries. Learning outcomes specific to existing

qualification profiles (and not common to all countries) such as language skills in France are left outside the matrix. The result is definition of the smallest common denominator to all qualifications, a core occupation profile for each of the qualifications concerned, as in the baker master in SME-Master (Tritscher-Archan and Hafner, 2008). The qualification profile of the master baker also includes competences or learning outcomes that were acquired in initial vocational education and training and as a direct result of the working process, and are thus equally recognised and recorded;

- (c) the size of a unit depends on the complexity of the core task; the unit is weighted in comparison to the full qualification as existing in partner countries (see table 13);
- (d) the units are tools for developing transparency as they are built within the project partnership and correspond to the current state of the vocational profile for a master qualification. The units are designed to be updated to fit into labour market changes and to offer possibilities for integrating learner mobility (avoiding the redundant acquisition of learning outcomes that have already been acquired abroad);
- (e) national specific units do not belong to the common set of units, mainly concern soft skills and would be considered for qualification awarding in the systems where they are usually part of the qualification or can be integrated in additional or complementary examinations (Tritscher-Archan and Hafner 2008).

Table 13. **Unit ‘Marketing and Sales Management’**

Title of the Qualification	Master Baker Craftsperson			U6	
EQF Level	(a)				
Generic Title of the Unit	Marketing and Sales Management				
ECVET points/Relative weight	AT	DE	FR	NO	SI
	(b)	(c)	(d)	(e)	(f)
Learning outcomes					
S/he is able to interpret analyses and studies of supply and selling markets.	S/he is able to perform a target group specific market analysis considering, e.g. clients, suppliers, competitors, etc		S/he is able to use marketing instruments for price, conditions, product, assortment and service policies, such as branding, etc. S/he is able to assess the effects of marketing actions.		
	S/he is able to draw up a marketing plan.				
S/he is able to negotiate and to handle contracting.	S/he is able to use sales and after-sales techniques.				

Source: Sperle, 2010, (Project SME Master Plus).

#### 3.4.2.4. *The approach by common reference*

The second identified approach is the creation of common reference, as in the EQUIP project. This aimed at creating a European core qualification profile for home care qualifications in Europe to support labour mobility. It has the twin objectives of designing a sector-specific qualifications framework and developing conditions for applying ECVET.

The project developed a common understanding on how professional tasks should be carried out, providing a sociocultural context to the project work: 'good care is defined as care intended to give clients customised care, tailored to their needs, aimed at empowerment and keeping their autonomy, and characterised by an attitude of warm-hearted respect. Care workers want to be able to organise their work according their own professional view, well supported by a home care organisation' (Salonen, 2009, p. 23).

The next step was to define occupational requirements in care work. The project carried out a content analysis of national material (curricula and legal regulations) combined with inductive category formation, and defined different categories of learning outcomes. It uncovered differences due to learning locations: a college-based formal learning would emphasise knowledge elements whereas a work-based learning environment would emphasise practical or experiential skills. Bundling the learning outcomes into units has been, according to the project promoters, a lengthy process. The project partners agreed on a compromise and defined units as 'themes into which all the learning outcomes of a chosen programme could be clustered'. The eight main units are given a weight expressed in points in their respective national contexts.

Table 14. **The eight units for home care qualifications**

1.	Nursing and health care
2.	Communication and interaction
3.	Organisation and administration
4.	Promoting well-being and safe-guarding
5.	Personal and professional development
6.	Health and safety in the workplace
7.	Values of care
8.	Personal and domestic support

Source: Salonen, 2009.

The commonalities between existing qualifications were established using questionnaires and interviews, panels and testing with home care practitioners, teachers and students. Each of the seven steps for developing the units has been

accompanied by consulting experts in the field. The whole process includes six steps.

1.	Describing national qualifications in home care
2.	Choosing the most common and typical qualification in each country (EQF level 3, 2 to 4 in practice, across the project partners)
3.	Describing the content of qualification in competences and tasks
4.	Translating the content, competences, and tasks to learning outcomes (KSC)
5.	Mixing all different national learning outcomes (units of analysis) together
6.	Clustering those units of analysis into main units on the basis of similarities and differences

*Source:* Salonen, 2009.

The COMINTER project shares with EQUIP the objective of creating a common reference qualification for 'import/export sales assistant'. However, while in EQUIP the common core qualification should be used, for COMINTER this reference is a tacit one within the European project partnership but not necessarily implemented in one of the countries represented in the project. The project steps combine research activities on the occupational profile (in terms of activities and tasks) with defining knowledge, skills and competence attached to the qualification of 'import/export sales assistant'. Both data collection activities allow for grouping the learning outcomes into reference units (and later their crediting). The project is characterised by a concern to develop a sustainable methodology for updating qualifications and training programmes in the respective countries (Maniak, 2007).

The common reference trade/occupation profile includes elements common to the partners, not necessarily existing as such in any of the countries. The profile has been established within the partnership based on analysis of the professional context and the level of responsibility. It includes five main activities: carrying out studies and business monitoring, export selling, import buying, coordinating services for successful import buying and export selling, managing relations and contacts in different contexts and cultures). The common profile is consequently described in activities and tasks, and completed with the requirements in terms of knowledge, skills and competence for qualification award. The learning outcomes are then grouped into units capable of being used for mobility agreements and qualification awarding.

Table 15. From occupational profile to training unit

Steps	Focus			
1	Professional activity	Carrying out studies and business monitoring		
2	Tasks	1. Permanent market monitoring	2. Collecting information abroad	3. Preparing decision making
3	Qualifications units	Q1. Market research and market planning on foreign markets		Q2. The business information system
4	Credit points allocated	10%		10%
5	Learning outcomes attached to qualifications unit Nr 1	<p><b>Skills</b> Collecting information through permanent market monitoring (desk research) and field research abroad and checking reliability. Analysing and selecting relevant commercial information and regulation on constraints about foreign markets. Formulating requirements for the subcontracting of studies and following up on the studies on foreign markets. Proposing a general outline for a concrete action plan based on the commercial policy of the company and the SWOT analysis. Making a summary and communicating to superiors to prepare decision making</p> <p><b>Competence</b> Organising and planning work activities, being autonomous Being alert to opportunities and threats Applying commercial insight</p> <p><b>Knowledge</b> International marketing., computing, economics, geopolitic, laws and regulations, management tools, communication</p>		
6	Training units	T1. International marketing		T2. Managing information system
7	Number of hours	112		112

Source: Maniak, 2007.

Envisaging transparency includes in that project setting up procedures to establish equivalence in the common reference units with units existing in national systems, adapting the common reference units to units existing in national systems, and actualising the common reference units along the changes in the national occupational and qualification standards. A further step, envisaged by some project members, is to transpose these units of learning outcomes in their qualifications systems, meaning that they would be part of a certification (if they exist as such in a given system, partial qualification), be transferred and recognised as part given qualifications, or be split into different existing qualifications. The results of the Cominter project have been further developed within the Recomfor project (one of the 2008 European pilot projects). Interestingly, the effort to secure transparency and recognition of learning outcomes led both projects to secure the involvement of key stakeholders in the design of reference qualification: ministries, national boards, sectoral organisations, employers' federations, chambers of commerce, industry professionals). The Recomfor project builds on Cominter as it takes over the

stakeholder partnership to design training programmes and secure mutual recognition of the learning outcomes (Ciobanu, 2009). Efforts are invested in building up a European network of providers and competent bodies in that field

These projects echoed the methodology elaborated during the 2001 professionalisation durable project. Professionalisation durable aimed at identifying the common structure of (and for) vocational qualifications with a view to setting up a common qualification; access to qualification and delivery of certificates would remain a matter at Member State level. Credit transfer and validation are mentioned within this project, which set up definitions for key activities and key tasks:

- a logical and/or chronologically ordered group of tasks executed by a person, and which contributes to one or several functions within a company according to prescribed operating conditions;
- the 'work to be done', whether really done or not, in a given physical and social environment, according to certain expected standards of organisation and performance, regardless of persons involved. The focus is on the end result of the activity, not the way of going about it (Asseraf and Dossou, 2003).

### **3.4.3. The potential of partnerships**

The projects are characterised by the involvement of institutions and stakeholders competent in VET and qualifications, and by a sectoral approach: hairdressing, automation, live performing arts, automobile services, floristry, tourism, chemistry, commerce, aeronautics, and fitness. There is also close articulation with associated mobility projects, including approaches focusing on regions with important cross-border mobility, adult education and training in sectors where mobility is important, economic sectors where internationalisation is present (e.g. automobile industry) and SMEs with strong requirements for transversal skills (European Commission, Cedefop, 2008).

The balance between top-down (from European Recommendation to national/regional context implementation) and bottom-up (from experiments to agenda and policy progress) is a challenge to ECVET implementation, and acknowledged as such in the Recommendation. The ECVET pilot projects are important in guiding the implementation work for the adoption of ECVET. Promoters and partners of these projects share their work and their results.

The capacity or potential for partnership builds from the remits and involvement of project partners with ECVET relevant characteristics. It feeds from their capacity to deal with setting up standards, designing qualifications, delivering training, and developing validation mechanisms. The capacity for partnership is well illustrated by the project CredChem (see table 16).

Table 16. The CredChem partnership

Remits in national context	Partner countries				
	SK	BG	IT	CZ	DE
Designing qualifications	x	x		x	x
Delivering education and training			x		x
Elaborating teacher training programmes	x				x
Elaborating assessment procedures	(x)	x		(x)	(x)
Validation/recognition					
Involvement of schools/enterprises	x	x	x	x	x
Advisory activities (for instance to ministries)	x	x		x	x

Source: Eberhardt, 2009.

Strategies for ECVET implementation build on involvement in national and international projects. The FINECVET initiative includes multi-level activities; it liaises with national and European projects and activities on mobility, recognition and credits. It also involves stakeholders from the higher education sector. It gathers a multiplicity of stakeholders and contributes to acculturating them to ECVET and having them act as multipliers of VET European policy and ECVET.

An important aspect of the project's work process is the involvement of stakeholders and creating partnerships. Agreements and debates with relevant stakeholders and partners stimulate and assist the design, understanding and adoption of the system. Partnerships are the cornerstone of credit transfer. The architecture of partnerships involved in testing ECVET varies a great deal, depending on the methodology and the objectives of each pilot project. While some projects involve training centres from the very beginning, others start with cooperation at the level of institutions competent in designing qualifications, such as ministries or chambers (see for more details the ECVET bulletin on partnerships, July 2009).

## CHAPTER 4

## Conclusions

With the ECVET Recommendation the European Parliament and the Council of the European Union (2009b) recommend the Member States to 'create the necessary conditions and adopt measures so that as from 2012 it is possible for ECVET to be gradually applied to VET qualifications at all levels of the EQF and used for (...) transfer, recognition and accumulation of individuals' learning outcomes achieved in formal and (...) non-formal and informal contexts' at the same time it endorses the European Commission to support Member States (...) by facilitating testing, cooperation, mutual learning, promotion' (European Parliament and Council of the European Union, 2009b, p. 13-14). This paper offers evidence of ECVET developments within national education and training systems.

ECVET is developing across Member States; even though progress might appear modest it has continued since the 2003 mandate to the European ECVET working group. For implementation, ECVET needs technical support from other mechanisms such as validation, learning outcomes, level indicators which would support crediting and valuing learning across borders of systems and institutional limits; currently those are not all in place within VET. It also requires common quality criteria for describing the learning outcomes, defining units, etc.

Enabling transfer and progression of learners depends on drivers which might be external to qualifications systems, such as financial resources, level of bureaucracy, and the motivation of different stakeholders to cooperate. Designing and implementing pathways across education and training sectors, and especially allowing for credit transfer, requires regulatory statements from qualifications systems about the right to access and new forms of agreement between stakeholders (Cedefop, 2010a). This depends much upon the tradition of education and training systems and would lead to diverse grades of formal agreements. A second approach suggests that ECVET requires a specific social-cultural context including a language common to VET stakeholders.

The development of qualifications frameworks and the intake of the learning outcome approach at European level (Cedefop, 2009a) have led to the development of a set of definitions which allow communication on qualifications, on professions, and on study programmes. The foundations of that work have been set in the development of Europass. However, the difficulties encountered within European projects, as well as the technical input needed to bridge the divide between formulating for regulatory or legal documents and formulating to enable mobility or



assessment and validation, show that the terminology issue is essential. Language and terminology is definitively part of the learning culture of ECVET and should not be reduced to elaborating a terminology 'limited' to a group of administrators within a specific community; the scope of ECVET is wide and includes every stakeholder engaged in mobility and learning pathways. This is underlined by the Recommendation which suggests that Member States 'ensure that stakeholders and individuals in the area of VET have access to information and guidance for using ECVET (...) that the application of ECVET to qualifications is properly publicised by the competent authorities and that associated 'Europass' documents issued by the competent authorities contain explicit relevant information' (European Parliament and Council of the European Union, 2009b).

ECVET requires networking between VET stakeholders and a change in the cultural setting of VET systems opening up to mobility and permeability: from policy statement to practice. The implementation of ECVET involves a wide range of stakeholders operating in the VET and qualifications systems, such as competent authorities, awarding bodies, assessment board, training providers, as shown by ECVET initiatives and projects. These stakeholders fulfil different roles and assume different functions in the ECVET process: designing the qualifications in units of learning outcomes, allocating ECVET points, carrying out assessment of learning outcomes, awarding credits, validating the learning outcomes, and organising mobility and transfer of credit. The diversity of the VET and qualifications systems in Europe, the various stages of development of validation, and the difficulties of implementing mobility in VET, require one further important aspect of ECVET: partnerships or cooperative aspects. Strategies are further underpinned by resources. Setting-up working groups or initiatives is not always self-evident

The institutional environment in which ECVET operates is undergoing changes which lead to new definitions of responsibilities, of autonomy in decision making and practices, and decentralisation/regionalisation and mergers (Cedefop, 2009c). In some countries, institutional autonomy also involves funding (Bulgaria, Germany, Austria) where VET providers can increasingly take independent budgetary decisions. Estonia, Latvia, Lithuania, and Slovakia have merged state-owned VET schools to optimise financial and human resources as well as increasing quality of, and accessibility to, VET. To reduce large-scale fragmentation of the IVET structure, the government of Hungary offered financial support to voluntary emerging VET-development associations and societies. In Denmark vocational colleges and labour market training centres were encouraged to merge to improve interaction with local and regional business and to strengthen dialogue among training providers and end-users, including both VET learners and business. In Northern Ireland, further education colleges were consolidated to provide high quality customer focused

education and training, able to meet the needs of individuals and employers. Finnish development plans (2003-08 and 2007-12) aim at strengthening VET provider networks, removing overlaps and supporting high-quality units. The economic crisis has placed constraints on public funding at European and national level, with potential impact for ECVET implementation.

ECVET foresees common convention and diverse levels of agreement between the stakeholders. European, national, regional, local and sector stakeholders, including learners, are parts of ECVET partnerships. These partnerships are formalised in a memorandum of understanding and a learning agreement; the latter directly concerns the learner and VET providers. These aspects have, since the European consultation on ECVET, raised fears of over-regulation and administrative burden on all stakeholders, especially mobility practitioners. This is still a major concern and requires a balancing act between ensuring quality and allowing for flexibility in ECVET implementation.

While it is interesting to examine the technical features of ECVET and map out how they could work out or to consider the drive for efficiency or competitiveness within globalised education and training, looking at both together is more difficult. Neither qualifications frameworks nor credit systems are neutral to education and training systems (Cedefop, 2010). They might even change the way we approach education; increasingly the term qualifications system is in use, further linking education and training to the labour market.

The different strategies and the creation of governance structures for ECVET implementation and testing demonstrate tacit endorsement. ECVET initiatives and projects allow for identifying factors supportive of ECVET implementation in terms of strategy:

- (a) a policy decision (agenda setting, initiative, etc.) fed by evidence (feasibility study, results from European projects);
- (b) establishment of legal basis (regulations, legislations, gentlemen agreements);
- (c) technical and practical features;
- (d) evaluation and feed-back loop.

These factors evolve according to the characteristics of VET systems and their governance patterns. Ownership and trust might not be traditional aspects of governance but they are essential in the context of European VET policy making. In the course of ECVET elaboration, mutual trust has been defined as an agreement between individuals, enterprises and other organisations on the delivery, recognition and evaluation of learning outcomes. It offers practical help with decisions about the value of qualifications and certifications, further learning and recruitment into employment (Cedefop, Coles and Oates, 2005). However, ECVET implementation cannot occur *ex cathedra* due to the complexity and interconnectivity of VET

processes and stakeholder remits. We need to focus more on the contexts for implementation and the attributed role of ECVET for geographic and/or professional mobility and progression in education and training to draw best possible support to European and national policy making and practices.

## List of abbreviations

ACVT	Advisory Committee on Vocational Training
ADAM	Project and product portal for Leonardo da Vinci
AEROVET	Project under EU lifelong learning programme: Identification of sector-related qualifications according to common demands of being employed by enterprises of the European aeronautic and space industry
ANKOM	Accreditation of vocational skills in higher education courses <i>Anrechnung beruflicher Kompetenzen auf Hochschulstudiengänge</i>
AT	Austria
Be-TWIN	Project under EU lifelong learning programme: Testing a joint ECVET-ECTS implementation
BIBB	Federal Institute for Vocational Education and Training (Germany) Bundesinstitut für Berufsbildung
BMBF	Federal Ministry of Education and research (Germany) Bundesministerium für Bildung und Forschung
BMUKK	Federal Ministry for Education, Art and Culture (Austria) Bundesministerium für Unterricht, Kunst und Kultur
BMWA	Federal Ministry for Economic Affairs and Labour (Austria) Bundesministerium für Wirtschaft und Arbeit
BMWF	Federal Ministry for Science and Research (Austria) Bundesministerium für Wissenschaft und Forschung
CAPE-SV	Project under EU lifelong learning programme: <i>Capitalisation des Acquis Professionnels dans l'Europe du Spectacle Vivant</i> (Capitalisation of learning outcomes in Europe's live performing art)
CIMO	Centre for International Mobility (Finland)
COMINTER	Project under EU Leonardo da Vinci Programme: <i>Création et mise en oeuvre d'un diplôme professionnel européen commun en commerce international</i> (Creation and implementation of a common European qualification in international trade)
CREDCHEM	Project under EU lifelong learning programme: Developing and testing a credit transfer system to improve mobility in the chemical sector

CVET	Continuing vocational education and training
DE	Germany
DECVET	German pilot initiative: Development of a credit system for vocational education and training in Germany ( <i>Leistungspunktesystem für die berufliche Bildung</i> )
DGVT	Directors General for Vocational Training
EASCMF	Project under EU Leonardo da Vinci Programme: European automotive sector competence meta-framework
ECCTIS	Education Counselling and Credit Transfer Information Service (United Kingdom)
ECTS	European credit transfer and accumulation system
ECVET	European credit system for vocational education and training
ECVET-ASSET	Project under EU lifelong learning programme: ECVET automobile service sector ECVET testing
EQARF	European quality assurance reference framework
EQAVET	European quality assurance reference framework for vocational education and training
EQCM	European quality charter for mobility
EQF	European qualifications framework
EQUIP	Project under EU lifelong learning programme: European Framework for qualifications in home care services for older people
ERASMUS	EU programme for mobility of higher education students
ESF	European Social Fund
EWNI-UK/QCF	Qualifications and credit framework for England, Wales and Northern Ireland
FETAC	Further Education and Training Awards Council (Ireland)
FINECVET	Development of a credit system for vocational education and training in Finland
FNBE	Finnish National Board of Education
FQ-EHEA	Framework of qualifications for the European higher education area
FR	France
FREREF	Fondation des Régions Européennes pour la Recherche en Education et en Formation (Network of Interregional Cooperation in the Field of Education and Training)
HE	Higher education

IFTS	<i>Istruzione e Formazione Tecnica Superiore</i> (Higher VET in Italy)
IVET	Initial vocational education and training
KSC	Knowledge, skills and competence
M.O.T.O	Project under EU lifelong learning programme: Model of transferability of learning outcome units
MAP:ECVET	Project under EU lifelong learning programme: Medical assistance professions : ECVET
MOBIVET-REGIO	Project under EU lifelong learning programme: Mobility of apprentices and the young in initial vocational education and training ( <i>Forum Interregional pour la mobilité européenne des jeunes en formation professionnelle initiale</i> )
MoU	Memorandum of understanding
N.E.T.WORK	Project under EU lifelong learning programme: ECVET system for 'No borders in tourism hospitality' European training and work
NCP	National coordination point
NEC	National Europass centre
NO	Norway
NQF	National qualifications framework
O.P.I.R.	Project under EU lifelong learning programme: <i>Outils Pratiques InterRégionaux pour ECVET</i> (Practical and interregional tools for ECVET)
PERMEVET	Project title: Permeability in post-secondary VET
QCF	Qualifications and credit framework
RECOMFOR	Project under EU lifelong learning programme: European network for mobility in import/export sales vocational training
ReferNet	Cedefop network for VET in Europe
SCQF	Scottish credit and qualifications framework
SL	Slovenia
SME	Small and medium-sized enterprise
SME Master	Project under EU lifelong learning programme: Skilled mobile-European
SME MASTER Plus	Project under EU lifelong learning programme: Skilled mobile-European master plus
SWOT	Strengths, weaknesses, opportunities, and threats

UK	United Kingdom
UK NARIC	National Academic Recognition Information Centre (United Kingdom)
UK-EWNI	United Kingdom-England, Wales and Northern Ireland
VALOGReg	Project under EU lifelong learning programme: Value the learning outcomes in the 'Grande Région'
VET	Vocational education and training
VQTS	Project under EU Leonardo da Vinci Programme: Vocational qualification transfer system
VQTS-PH	Project under EU lifelong learning programme: Vocational qualifications transfer system in public health

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## The development of ECVET in Europe

The first Cedefop overview of the development of a European credit system for vocational education and training (ECVET) confirms the uptake of ECVET in Europe in strategic terms but also the multiplicity of purposes and perspectives attached to credit systems in VET in Europe. Implementing ECVET is not solely a matter of transparency but concerns core issues such as qualifications, provision of education and training and VET traditions and understanding. This report relates ECVET to the development of the learning outcomes approach, to validation, to education and training standards and regulations, and the development of qualifications frameworks; it also looks at changes in VET governance and the changing roles of different stakeholders, from qualifications authorities, to social partners and VET providers. It opens up potential dialogue on the role of credit systems in VET in a lifelong learning perspective.

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