

n<mark>at does i</mark>t mean to be awarded X ECVET points?Credit Transfer and Accumulation What is credit?o What edit a<mark>ccumulation? Is the pri</mark>nciple of accumulation compatible with the use of a final as**sessment? Ho**w is credit ie framework of ECVET partnerships? What is meant by a home institution and a hosting institution? Who organises the omes? W**here are the assessment requiremen**ts described? Who validates the assessed learning **outcomes? How** can ECVET surance of assessment? Is it possible to transfer learning outcomes that do not correspond to a full unit? How is credit transfer organized ie fram**ework of ECVET** partnerships? ECVET and Non-formal and Informal Learning Is ECVET applicable to non-formal and informal lear s ECV**ET facilitate v**alidation of non-**formal and inf**ormal learning? Memorandum of Understand**ing What is a Memora**ndum of Understa a Memorandum of Understanding needed? Who concludes a Memorandum of Understanding? Is it possible to use Memoranda of Und side geographical mobility? What does a Memoran dum of Understanding contain? Is there a template for a Memoran dum of Understa ECV**ET be used ou**tside a Memorandu**m of Understa**nding? Is it p**ossibl**e to us**e Eur**opass doc**uments as** par**t of the Mem**orandum of Un nin**g Agreement W**hat is a Learning agr**eement? Why** is a Learni<mark>ng</mark> ag**ree**me**nt ne**eded? Who signs the L</mark>earn**ing agreem**ent? What does ee**ment contain?** What is the difference between a Learning agreement and a MoU? o Personal Transcript What is a Personal transcript personal transcript? How does it differ from a Learning agreement? Is it possible to use Europass mobility as personal transcript? ttions Who are the competent institutions involved in ECVET? Is there an accreditation process to designate competent institutions wh ET **points?Learni**ng outcomes What are **learning outc**omes**? H**ow are learning <mark>ou</mark>tcomes d**escribed? H**ow are le**arning outco**mes used in it is a unit and how does it relate to a qualification? Why does ECVET require the use of units? How can ECVET be used in a qualification ues **not use units?** How can learning ou**tcomes be gr**ouped to create units? What information can be used as a reference for designing a ould units be described when using ECVET? Who defines units? What is the link between units and formal education and training prog re an **'ideal' size f**or a unit? Are there **different type**s of units? **Do units hav**e a level? Is it possible to transfer units across qualification vels? **How are unit**s used in the framework of ECVET partnerships for mobility? ECVET Points What are ECVET points? How many ECVET ullocate**d to a qualific**ation and how **is it done? Ho**w many ECVET points are allocated **to units and** how is this done? Who allocates ECV ien and **how are learners a**war**ded ECVET points?** What is the role of ECVET points in **the transfer** and accumulation **process? Ho**w are E ed for tran**sfer and accumulation in systems wh**ich already use credit points? What **is the differe**nce between ECVET **points and c**redit? Dints always worth o ECVET points? What does it mean to be awarded X ECVET points? Credit Transfer and Accumulation What is credit dit transfer? o What is credit accumulation? Is the principle of accumulation compatible with the use of a final assessment? How is credit accumulation compatible with the use of a final assessment? anised in the framework of ECVET partnerships? What is meant by a home institution and a hosting institution? Who organises the as rning outcomes? Where are the **assessment requirements** described? Who validates the assessed learning outcomes? How can ECVE<sup>-</sup> quality assurance of assessment? Is **it possible to transfe**r learning outcomes that do not correspond to a full unit? How is credit trans tside the framework of ECVET partnerships? ECVET and Non-formal and Informal Learning Is ECVET applicable to non-formal and inform does ECVET facilitate validation of non-formal and informal learning? Memorandum of Understanding What is a Memo

The European Credit System for **Vocational Education and Training ECVET** 

Get to know ECVET better **Questions and Answers** 



**Revised February 2011** 

Dossier 2011.3115			
Titre de travail: ECVET Questions and answers			
Langue	Numéro de catalogue	ISBN-13	DOI
EN	NC-30-11-070-EN-N	978-92-79-19916-5	10.2766/15437

#### The European Credit System for Vocational Education and Training

ECVET

**GET TO KNOW ECVET BETTER** 

### **Questions and Answers**





Education and Culture

EUROPEAN COMMISSION

**Education and Culture** 

Lifelong learning: Policies and Programme Professional training; Leonardo da Vinci

The document was approved by the ECVET Users' Group, which brings together representatives of EU Member States and associated countries as well as representatives of European social partners.

It was written by an expert sub-group of the users' group whose members were: Hanna Autere (Finnish National Board of Education), Mounir Baati (European Training Foundation), Alain Bultot (Ministère de l'enseignement obligatoire, Communauté française – Belgium), Gabriela Ciobanu (National Center for Technical and Vocational Education and Training - Romania), Isabelle le Mouillour (Cedefop), Richard Maniak (Ministère de l'éducation nationale – France acting on behalf of the ECVET Support team), Anne Potters (CINOP on behalf of the ECVET thematic networks of National Agencies for the Lifelong Learning Programme), Peter Thiele (Bundesministerium für Bildung und Forschung -Germany), Brigitte Trocmé (Ministère de l'éducation nationale – France), Christian Sperle (UAPME - European Association of Craft, Small and Medium-sized Enterprises).

The group was supported by GHK Consulting, Brussels (Daniela Uličná). Coordination: Michel Aribaud and Erik Hess (European Commission, DG EAC). February 2011.

In addition, these experts contributed to a previous version of the document: Stefan Eliasson (Elof Lindalus Gymnasium – Sweden), Didier Gélibert (Association Nationale pour la Formation Automobile – France), Angela Lambkin (Further Education and Training Awards Council – Ireland), Jos Noesen (Ministère de l'éducation nationale et de la formation professionnelle – Luxemburg), Maria Brosch (Bundesministerium für Bildung und Forschung -Germany), Sabine Tritscher-Archan (Institut für Bisdinsforschung der Wirtschaft – Austria).

# **Introduction to this document**

The European Credit System for Vocational Education and Training (ECVET) is a European instrument to support lifelong learning, the mobility of European learners and the flexibility of learning pathways to achieve qualifications.

Following its adoption by the European Parliament and by the Council (18 June 2009)<sup>1</sup>, ECVET is now in a phase of progressive implementation.

ECVET concepts and principles will be tested and introduced to ensure that conditions for the gradual application of ECVET to VET qualifications are in place across Europe by 2012. In this perspective, this questions and answers document is designed to support and encourage projects, initiatives and experimentations in ECVET at European, national and regional levels. It is based on the Recommendation of the European Parliament and of the Council (in particular its annexes). It enables the stakeholders concerned to become familiar with ECVET.

The ECVET Recommendation asks the European Commission to develop users' guides and tools on ECVET. This questions and answers document is the first in a series of guidance documents for all stakeholders involved in ECVET implementation. It will be followed by additional documents focusing on the use of ECVET in a specific context (e.g. geographical mobility) or addressing a specific target audience (e.g. training providers: schools or enterprises). This guidance will be evolving following the progress in ECVET implementation, as new examples will become available, new questions and needs will arise.

When using this document it is important to bear in mind that:

- The questions and answers document is not a manual for ECVET implementation. Given the diversity of qualifications systems in Europe and the different possible uses of ECVET concepts and processes, it is neither possible nor desirable to design such a manual at European level.
- It has been written from a European perspective and it therefore outlines different possibilities and options for interpreting and using the ECVET concepts and principles. It is possible that in a specific qualifications system only some of these options will be applicable.

#### Whom is the questions and answers document for?

This document is intended for the use of people engaging in experimentation or implementation of ECVET. These can be policy-makers, competent institutions in charge of designing and awarding qualifications, VET providers (such as training centres or enterprises) or any other stakeholders.

#### What can be found in this document?

The questions and answers document explains and illustrates the key ECVET concepts and processes. It contains examples of possible approaches experienced in ongoing projects and initiatives.

It uses a question-and-answer format. The list of questions, each referring to key aspects of ECVET, can be found at the beginning of the document. Readers can use the questions to navigate through the document.

#### What is the structure of the document?

The questions and answers document has three parts:

**Part A** – Contains explanations of key concepts and processes

**Part B** – Presents the functions of ECVET competent institutions

**Part C** – Highlights some examples and possible approaches to the concrete application of ECVET concepts and processes presented in Part A. These examples are intended to illustrate the explanations made and they do not contain an exhaustive set of possible approaches to a given issue. They should be adapted to specific situations when used to inspire further practice. The examples were written in 2009-2010 based on documentation existing at the time, using ongoing ECVET pilot projects and initiatives, but also building on examples from qualifications systems where some of the ECVET principles are already in place.

The text in *italics* denotes that it has been directly abstracted from the Recommendation of the European Parliament and of the Council on the establishment of ECVET.

# Index

Introduction to this document	5
List of Questions	8
Part A – Key Concepts and Processes	12
Learning Outcomes	12
Units	14
ECVET points	
Credit Transfer and Accumulation	26
ECVET and non-formal and informal learning	29
Memorandum of Understanding (MoU)	30
Learning Agreement	32
Personal Transcript	33
Part B – Functions of ECVET Competent Institutions	34
ECVET Competent Institutions	34
The ECVET users: the possible roles of VET schools, training centres, and enterprises	36
Examples of how ECVET functions are covered by competent	
institutions involved in ECVET pilot projects	37
Part C – Examples and Illustrations	40
C1. Describing qualifications using learning outcomes	41
C2. Who defines units?	48
C3. The relationship between units and full qualifications:	
example of units common to several qualifications	50
C4. Clustering learning outcomes into units	52
C5. Key competences and units	55
C6. The link between units and education and training programmes	57
C7. Different types of units	59
C8. Units and levels	60
C9. Use of key activities for comparing qualifications	61
C10. Units in the framework of ECVET partnerships for mobility	63
C11. ECVET unit descriptions	70
C12. Allocation of ECVET points to qualifications	74
C13. Allocation of ECVET points to units	75
C14. Example of a description of assessment criteria	78
C15. Example of validation and recognition of learning outcomes that do not	
correspond to a full unit in the home qualifications system	82
C16. Items in a Memorandum of Understanding	83
C17. Items in a Learning Agreement	84
C18. The possible use of Europass mobility as personal transcripts	85
C19. Example of the application of ECVET and the use of credit transfer and accumulation	86

# **List of Questions**

Learning Outcomes	12
What are learning outcomes?	12
How are learning outcomes described?	13
How are learning outcomes used in ECVET?	13
Units	14
What is a unit and how does it relate to a qualification?	14
Why does ECVET require the use of units?	14
How can ECVET be used in a qualifications system that does not use units?	14
How can learning outcomes be grouped to create units?	15
What information can be used for designing a unit?	16
How should units be described when using ECVET?	17
Who defines units?	18
What is the link between units and formal education and training programmes?	18
Is there an 'ideal' size for a unit?	19
Are there different types of units?	20
Do units have a level?	20
Is it possible to transfer units across qualifications framework levels?	21
How are units used in the framework of ECVET partnerships for mobility?	21
ECVET points	22
What are ECVET points?	22
How many ECVET points are allocated to a qualification and how is it done?	22
How many ECVET points are allocated to units and how is this done?	23
Who allocates ECVET points?	23
When and how are learners awarded ECVET points?	23
What is the role of ECVET points in the transfer and accumulation process?	24
How are ECVET points used for transfer and accumulation in systems which already use credit points?	24
What is the difference between ECVET points and credit?	24
Are 10 ECVET points always worth 10 ECVET points?	25
What does it mean to be awarded X ECVET points?	25
Credit Transfer and Accumulation	26
What is credit?	26
What is credit transfer?	26
What is credit accumulation?	26
Is the principle of accumulation compatible with the use of a final assessment?	26
How is credit transfer organised in the framework of ECVET partnerships?	27
What is meant by a home institution and a hosting institution?	27
Who organises the assessment of learning outcomes?	27
Where are the assessment requirements described?	27
Who validates the assessed learning outcomes?	28
How can ECVET strengthen the quality assurance of assessment?	28
Is it possible to transfer learning outcomes that do not correspond to a full unit?	28
How is credit transfer organised outside the framework of ECVET partnerships?	28

ECVET and non-formal and informal learning	29
Is ECVET applicable to non-formal and informal learning?	29
How does ECVET facilitate validation of non-formal and informal learning?	29
Memorandum of Understanding (MoU)	30
What is a Memorandum of Understanding?	30
Why is a Memorandum of Understanding needed?	30
Who concludes a Memorandum of Understanding?	30
Is it possible to use Memoranda of Understanding outside geographical mobility?	30
What does a Memorandum of Understanding contain?	31
Is there a template for a Memorandum of Understanding?	31
How can ECVET be used outside a Memorandum of Understanding?	31
Is it possible to use Europass documents as part of the Memorandum of Understanding?	31
Learning Agreement	32
What is a learning agreement?	32
Why is a learning agreement needed?	32
Who signs the learning agreement?	32
What does the learning agreement contain?	32
What is the difference between a learning agreement and a MoU?	32
Personal Transcript	
What is a personal transcript?	33
Who keeps the personal transcript?	33
How does it differ from a learning agreement?	33
Is it possible to use Europass mobility as personal transcript?	33
is it possible to use Europass mobility as personal transcript:	33
ECVET Competent Institutions	34
Who are the competent institutions involved in ECVET?	34
Is there an accreditation process to designate competent institutions which can award ECVET points?	34

	What do you mean by?	
Term	Definition/explanation	
Assessment of learning outcomes*	Methods and processes used to establish the extent to which a learner has at- tained particular knowledge, skills and competence.	
Competence**	The proven ability to use knowledge, skills and personal, social and/or meth- odological abilities in work or study situations and in professional and personal development.	
Competent institution*	Institution which is responsible for designing and awarding qualifications or recognising units or other functions linked to ECVET, such as the allocation of ECVET points to qualifications and units, assessment, validation and recognition of learning outcomes under the rules and practices of participating countries.	
Credit accumulation	Process through which learners can acquire qualifications progressively by suc- cessive assessments of learning outcomes.	
Credit for learning outcomes (credit)*	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.	
Credit transfer	Process through which learning outcomes achieved in one context can be taken into account in another context. Credit transfer is based on the processes of as- sessment, validation and recognition.	
ECVET points*	Numerical representation of the overall weight of learning outcomes in a qualifi- cation and of the relative weight of units in relation to the qualification.	
Formal learning***	Is learning that occurs in an organised and structured environment (e.g. in an education or training institution or on the job) and is explicitly designated as learning (in terms of objectives, time or resources). Formal learning is intentional from the learner's point of view. It typically leads to validation and certification.	
Knowledge**	The outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices that are related to a field of work or study.	
Learning agreement	Individualised document which sets out the conditions for a specific mobility period. It specifies, for a particular learner, what learning outcomes s/he should achieve and how they will be assessed, validated and recognised.	
Learning outcomes*	Statements of what a learner knows, understands and is able to do on comple- tion of a learning process defined in terms of knowledge, skills and competence.	
Learning (education and training) programme***	Inventory of activities, content and/or methods implemented to achieve educa- tion or training objectives (acquiring knowledge, skills and/or competences), organised in a logical sequence over a specified period of time.	
Memorandum of Understanding	An agreement between competent institutions which sets the framework for credit transfer and accumulation. It formalises the ECVET partnership by stating the mutual acceptance of the status and procedures of competent institutions involved. It also establishes partnerships' procedures for cooperation.	

Non-formal and informal learning****	<i>Non-formal learning</i> is not provided by an education or training institution and typically does not lead to certification. However, it is intentional on the part of the learner and has structured objectives, times and support.
	<i>Informal learning</i> results from daily activities related to work, family life or leisure. It is not structured and usually does not lead to certification. In most cases, it is unintentional on the part of the learner.
Qualification*	Formal outcome of an assessment and validation process which is obtained when a competent institution determines that an individual has achieved learn- ing outcomes to a given standard.
(National) qualifications system**	All aspects of a Member State's activity related to the recognition of learning and other mechanisms that link education and training to the labour market and civil society. This includes the development and implementation of institutional arrangements and processes relating to quality assurance, assessment and the award of qualifications. A national qualifications system may be composed of several subsystems and may include a national qualifications framework.
(National) Qualification Framework**	An instrument for the classification of qualifications according to a set of criteria for specified levels of learning achieved, which aims to integrate and coordinate national qualifications subsystems and improve the transparency, access, progression and quality of qualifications in relation to the labour market and civil society.
Recognition of learning outcomes*	The process of attesting officially achieved learning outcomes through the awarding of units or qualifications.
Skills**	The ability to apply knowledge and use know-how to complete tasks and solve problems.
The Personal Transcript	Document containing information on credit (positively assessed learning out- comes) the learner has achieved. It is a record of his/her learning achievements.
Unit of learning outcomes (unit)*	Component of a qualification, consisting of a coherent set of knowledge, skills and competence, which can be assessed and validated.
Validation of learning outcomes*	The process of confirming that certain assessed learning outcomes achieved by a learner correspond to specific outcomes which may be required for a unit or a qualification.
Vocational education and	Any organisation or individual providing education or training services.
training provider***	Education and training providers may be organisations specifically set up for this purpose, or they may be other, such as employers, who provide training as a part of their business activities. Training providers also include independent individuals who offer training services.

\* Definition adopted as part of the ECVET Recommendation

\*\* Definition adopted as part of the EQF Recommendation

\*\*\* Definition extracted from Cedefop (2008) Terminology of European education and training policy. Luxembourg: Office for Official Publications of the European Communities<sup>2</sup>.

\*\*\*\* Definition from the DG EAC web-site on validation of non-formal and informal learning<sup>3</sup>.

3

### **Part A – Key Concepts and Processes**

	Learning Outcomes
What are learning outcomes?	<i>Learning outcomes are statements of what a learner knows, understands and is able to do on completion of a learning process</i> (see the 2008 Recommendation on the European Qualifications Framework - EQF <sup>4</sup> ).
	Learning outcomes can be used for various purposes such as to establish descrip- tors of qualifications frameworks, define qualifications, design curricula, assess- ment, etc. Learning outcomes are set out in various levels of detail depending on their purpose and context.
	Learning outcomes are developed in the process of designing qualifications. There are different approaches to identifying and describing learning outcomes depending on the qualifications system. For an illustration see Section C.1.
	Learning outcomes may be acquired through a variety of learning pathways, modes of delivery (school-based, in-company, etc.), in different learning contexts (formal, non-formal and informal) or settings (i.e. country, education and training system ).
	Usually, qualifications frameworks indicate the overall level of learning outcomes in a qualification. For ECVET purposes the European Qualifications Framework (EQF) is used as a reference for levels.

How are learning	Learning outcomes are described using the terminology and descriptors existing in
outcomes described?	the qualifications system.
	The European definition of learning outcomes, which uses the terms of knowledge, skills and competence (see the EQF Recommendation), is the common denominator that fits with the diversity of existing approaches to describing learning outcomes.
	ECVET does not provide a template or a taxonomy concerning the format of learning outcomes descriptions. Such templates or classifications may exist at national, re- gional or system level (for example as part of national qualifications frameworks).
	<ul> <li>However, it is essential in implementing ECVET, to ensure that learning outcomes for qualifications and units are clearly identified and described to enable mutual understanding of qualifications and judgments on:</li> <li>Whether the qualifications covered in the framework of a partnership for mobility lead to the same or similar occupation;</li> </ul>
	• Whether learning outcomes, as described in one setting or context, are comparable with those expected in another setting or context.
	Examples of different approaches to describe learning outcomes are presented in Section C.1.
	For further information about the description of units in terms of learning outcomes see the sections on Units.
	<ul> <li>For partnerships using ECVET in the framework of transnational mobility it may be useful to devise tools such as grids or templates to identify which learning outcomes can be addressed by mobility and to describe them in a consistent manner, in order to:</li> <li>Define what the learner is expected to achieve after the mobility period in a manner which is understandable to all: the education and training provider(s) or a training company and the learner.</li> </ul>
	<ul> <li>Compare qualifications across the different qualifications systems.</li> </ul>
	<ul> <li>Highlight the similarities between qualifications and learning outcomes among the partner institutions.</li> </ul>
	• Identify which learning outcomes are not foreseen as part of the qualifications awarded by the partner institutions.
	However the use of such tools depends on the needs of the partnerships.
How are learning outcomes used in ECVET?	To implement ECVET it is necessary that qualifications are described using learn- ing outcomes. Learning outcomes are grouped to create units (see the section on Units).
	Assessed learning outcomes constitute credit. Credit is the basis for enabling the transfer between learning contexts and for the accumulation of learning outcomes (see the section on Credit Transfer and Accumulation).
	In ECVET, learning outcomes are used as a basis for credit transfer and accumula- tion. Learning outcomes are not dependent on the learning process, the content of teaching or the learning context in which they have been achieved and there- fore it is possible to use them to identify whether what the learner has achieved in one learning setting or context is comparable to what s/he is expected to have achieved in another setting or context.
	For an example on how learning outcomes (based on the identification of key oc- cupational activities) can be used to identify commonalities between qualifications from different systems see Section C.9.

	Units
What is a unit and how does it relate to a	A unit is a component of a qualification, consisting of a coherent set of knowledge, skills and competence that can be assessed and validated.
qualification?	Units enable progressive achievement of qualifications through transfer and ac- cumulation of learning outcomes. They are subject to assessment and validation which verify and record that the learner has achieved the learning outcomes ex- pected.
	Depending on the existing regulations, units may be common to several qualifica- tions or specific to one particular qualification (for examples see Section C.3). Units are accumulated based on the requirements to achieve qualifications. These re- quirements may be more or less restrictive depending on the tradition and practice of the qualifications system and the way qualification standards are designed.
	Units can also be used to structure the formal education and training programme (see below).
Why does ECVET require the use of units?	The objective of ECVET is to facilitate the transfer, recognition and accumulation of assessed learning outcomes of individuals who are aiming to achieve a qualifica- tion.
	<ul> <li>This is possible because each unit is documented and the learning outcomes it contains are assessed, and validated. Hence learners can:</li> <li>Progressively (unit-by-unit or set of units by set of units) accumulate learning outcomes in view of achieving a qualification;</li> </ul>
	<ul> <li>Obtain recognition for their learning outcomes achieved in other contexts with- out new assessment (i.e. units can be transferred because the learner can pro- vide the receiving institution with evidence that s/he has been successfully as- sessed and has achieved the concerned learning outcomes).</li> </ul>
How can ECVET be used in a qualifications system	In countries where qualifications are not designed in terms of units or where they do not allow for the accumulation of units, it is possible to use ECVET for mobility purposes by creating units used only for mobility.
that does not use units?	In this case, the unit(s) used for mobility do(es) not structure the qualification. It is a set of learning outcomes, which are part of the qualification the learner is prepar- ing, that the learner will achieve during a mobility period, which will be assessed abroad. The credit achieved for these units can be transferred and the learning outcomes will be validated by exempting the learner from the corresponding part of the education and training pathway in the home institution (meaning s/he will not have to undergo the learning process again). However, these learning outcomes will only be recognised when the final assessment, leading to the award of the qualification, is successfully completed by the learner.
	For an illustration see some of the examples of the work of ECVET pilot projects in Section C.10.

How can learning outcomes be grouped	Units should be constructed and organised in a coherent way with regard to the overall qualification.
to create units?	<ul> <li>To group the learning outcomes into units it is necessary to identify those outcomes that relate to each other. There are different criteria according to which learning outcomes can be grouped into units and the choice of which criteria to use depends on the qualifications system. Examples include:</li> <li>The fact that the learning outcomes relate to the same set of occupational activities/tasks (for example the learning outcomes in a unit entitled "shampooing and hair treatment");</li> <li>The fact that they are related to the same product or production technique (such as the learning outcomes in a unit entitled "prepare grilled dishes");</li> <li>They can also be grouped according to the stages in the production process or process of performing a service (for example the learning outcomes in a unit called "informing the client about the nature of maintenance intervention"); or</li> </ul>
	<ul> <li>They can be grouped in a unit because they relate to the same field of knowledge, skills or competence (for example the competence in foreign language can form a separate unit).</li> </ul>
	For examples on grouping learning outcomes to units see Section C.4.
	VET qualifications can contain learning outcomes that are clearly linked to the ca- pacity of a person to carry out a specific activity on the workplace, but they often also contain learning outcomes referring to the key competences <sup>5</sup> . It is up to the qualification system to decide whether the learning outcomes directly related to a specific occupational activity are grouped into units together with the key com- petences or whether (some of) the learning outcomes related to key competences form separate units.
	Finally, as a general rule, the learning outcomes in a qualification should be as- sessed only once (unless the expected level of the learner's performance is higher). Therefore the same learning outcome is normally not integrated into several differ- ent units. However, in some cases it may be necessary to define some knowledge, skills and competence that are related to all or a group of units. For example, those concerning health and safety; environmental protection; hygiene; or in some cases key competences. Even if these learning outcomes are common or transversal to the whole qualification, they should be clearly identified in the unit description.
	For examples on how key competences can be grouped into units see Section C.5.

<sup>5</sup> The European Framework for Key Competences defines these eight 'key competences': 1) communication in mother tongue 2) communication in foreign languages 3) mathematical competence and basic competences in science and technology 4) digital competence 5) learning to learn 6) social and civic competences 7) sense of initiative and entrepreneurship 8) cultural awareness and expression. For more information on the European Framework for Key Competences see: http://ec.europa.eu/education/lifelonglearning-policy/doc42\_en.htm

What information can be used for designing a unit?	The ongoing ECVET pilot projects emphasise the importance of using occupational activities, tasks or processes as the reference for designing units. This is especially useful when the units concern learning outcomes related to specific occupations and professions.
	<ul> <li>The use of information which expresses the reality of profession(s) for which the qualification prepares as the basis for the design of units has several advantages:</li> <li>While qualifications' descriptions differ very much from system to system and from country to country, the tasks, activities or processes undertaken on the workplace are often very similar.</li> </ul>
	• The ongoing ECVET pilot projects show that identification of transferable parts of qualifications is relatively easy when the partner institutions discuss what activities/tasks/processes the qualification prepares for, while it may become complex if, for example, the taught curricula are the basis of discussion.
	• This also facilitates the communication of the content of the qualification to stakeholders outside the area of education and training: for example employers.
	• Use of activities, tasks and processes is also compatible with the assessment of learning outcomes in the work place or in work-related situations.
	• It is also particularly suitable for assessment, validation and recognition of learning outcomes achieved through non-formal or informal learning.
	The occupational activities, tasks or processes are often defined in the job profiles for which the qualification prepares. In which case, the occupational profile can be taken as the basis for defining units. However, there are qualifications that prepare for several occupations and hence a single occupational profile cannot be identi- fied. In the case of these qualifications it is still possible to refer to activities, tasks or processes though these may be less directly related to a single occupational profile.

#### How should units be described when using ECVET?

Units should be *described* in legible and understandable terms by referring to the knowledge, skills and competence contained in them.

Unit descriptions are crucial for the success of ECVET processes because they are the basis for the transparency of qualifications. The unit description enables competent institutions and VET providers from different qualifications systems as well as the employers to understand the characteristics of units and of the assessment which has taken place in another context. Two aspects are important: the clarity of the terminology used as well as the way the text is organised in a user-friendly manner.

Unit specifications should include:

• the generic title of the unit;

In case of units concerning learning outcomes directly related to the exercise of specific activities/tasks or processes on the workplace, the title should be meaningful from the point of view of the labour market. It should also indicate the learning outcomes-based approach of the unit, in other words be encompassing of knowledge, skills and competence (rather than being related to a taught subject).

The clarity of units' titles is particularly crucial for communication to employers.

- the generic title of the qualification (or qualifications) to which the unit relates, where applicable,
- the reference of the qualification according to the EQF level and, where appropriate, the national qualifications framework level, with the ECVET credit points associated with the qualification,
- the learning outcomes contained in the unit;

The amount of detail contained in the unit description should suit the purpose for which the description is being used and for whom it is intended. If the description is used to communicate about the content of the qualification to learners or employers, less detail will be needed than if the same description is also used to guide the assessment process.

It can be envisaged that a unit description has two parts: an abstract containing a broad description of the learning outcomes (used for general communication) and the detailed description with information such as the assessment criteria (used by the teaching staff, assessors, etc.).

- the procedures and criteria for assessment of these learning outcomes,
- *the ECVET points associated with the unit* (for more information see the section about ECVET points),
- the validity in time of the unit, where relevant.

If the national standards specify additional requirements or restrictions for units and their description, for example restricted validity in time, these will also be contained in the unit specification.

Two examples of units following these criteria can be found in Section C.11.

Who defines units?	<ul> <li>This depends on the institutional structures and the roles of competent institutions in the qualifications system (see Section C.2 for illustrations). For example:</li> <li>In some systems, units are defined as part of the qualification standard. They are hence defined at the central level by competent institutions in charge of developing qualifications (e.g. ministries, sectoral organisations).</li> </ul>
	<ul> <li>In other systems VET providers may have the responsibility for defining units based on the qualifications standard defined at central level.</li> </ul>
	<ul> <li>Intermediary approaches also exist where a certain number of units in the qualification are defined by the competent authority in charge of designing the qualification at central level and another part of these units is defined by another type of institution (at regional level or at provider level). It is also possible that at national level the competent authorities in charge of designing qualifications define the overall requirements for units, but the detailed understanding of these units (possibly including the design of sub-units) is done at provider level.</li> </ul>
	When using ECVET for transnational mobility, units are sometimes adapted or de- scribed in the framework of networks (national or transnational) by the partners involved. This cooperative approach ensures that units are suitable for the purpose of credit transfer in the context of geographical mobility among the partner institu- tions concerned. If units are being defined in this manner, in order to enable that the credit for these units is recognised when the learner returns to his/her home institution, it is important that there is a clear framework through which the part- ner institutions are empowered to develop or describe transferable units for mobil- ity.
What is the link between units and formal education and training programmes?	As defined above, units are components of qualifications. As such, they determine the content and possibly the structure of the programme. The content of teaching and all the learning activities that constitute the programme are developed, so as to enable learners (according to their needs, capabilities and previous achieve- ments) to develop the learning outcomes defined in the units and for the qualifica- tion.
	Therefore, for the same qualification, different education and training programmes and individual pathways may exist (see Section C.6).
	An education or training programme is composed of different learning activities such as taught modules, on-the-job placements, project work, etc. A curriculum is related to these learning activities (specifying the learning objectives, content, assessment methods and material, etc). The programme structures the way in which the learning activities are organised. The relationship between units and these sets of learning activities depends on the qualifications system. For example, a set of learning activities could correspond to one unit, a number of units or even part of a unit (see Section C.6).
	Sometimes, programmes are designed so that they lead to the progressive ac- quisition of units. For example, the learning activities the learner is expected to undertake in the first months of his/her training lead to one or a small number of units. Then another set of learning activities, which lead to other units, is pursued. In other systems, the units are only achieved after the whole learning programme has been completed. Intermediary situations also exist, where continuing assess- ment is combined with a final assessment.

Is there an 'ideal' size	There is no ideal size for a unit.
for a unit?	Some systems use units that are relatively small in size. This means that they com- bine a small number of learning outcomes and a qualification would contain many units.
	<ul> <li>Advantages:</li> <li>Units can be obtained in a rather short period of learning (provided that the pre-requisites are met) and therefore are particularly suitable for geographical mobility.</li> </ul>
	• They can also be suitable for adult learners who combine learning and employ- ment or learners who are at risk of dropping out from longer programmes.
	Disadvantages:
	<ul> <li>Because of the greater number of units in a qualification, this approach implies putting in place a large number of assessments.</li> </ul>
	• Fragmentation of qualifications and of assessments may make it more difficult to identify whether the learner can combine all the knowledge, skills and competence in a more complex manner.
	Other systems conceive units as large sets of learning outcomes and typically qualifications would only contain a small number of units.
	<ul> <li>Advantages:</li> <li>Assessment of a larger unit enables learners to demonstrate their capacity to combine knowledge, skills and competence in view of delivering a more complex service or a product.</li> </ul>
	• The number of summative assessments is small.
	Disadvantages:
	<ul> <li>More substantial amount of learning activities is required to prepare for a unit. Hence it may be difficult to achieve a full unit in the context of a short transna- tional mobility period.</li> </ul>
	• The duration of learning activities preparing for the unit may be too substantial for learners outside initial VET to be able to benefit from accumulation.
	The size of units will therefore depend on the practice in the qualifications system and also on the purpose of the unit. For example, units that are designed to be meaningful on the labour market (e.g. as partial qualifications), are likely to be large. On the other hand, if units are designed specifically for mobility purposes or
	if they are designed for specific target groups such as adults, they may be smaller.

Are there different types of units?	Yes. The relationship between the unit and the qualification standard may differ. Depending on the qualifications system or even depending on the qualification, units may be compulsory, optional (learners can choose from a restricted set of units) or "free choice" (learners have full freedom in choosing any units).
	Some units are compulsory to achieve the qualification. This means that all hold- ers of the qualification have to have achieved those units.
	Other units can be optional. This means that the learners can choose from a pre- defined range of units. When designing a qualification, optional units can be used to enable different specialisations (e.g. qualifications preparing for the occupation of waiter and that of a barman can share a common basis – the compulsory units - and some optional units). Optional units are also commonly used to give learners the choice of foreign language.
	Furthermore, in some qualifications systems, units that are fully open to learn- ers' choice (free choice) exist. This means that the learner can choose some units that are not core to the qualification s/he prepares and s/he can choose any unit s/he wants. Free choice units can be used in order to enable learners to discover aspects of a profession/field of study that are not related to the qualification they are preparing.
	The use of optional or free choice units can provide more flexibility for learners to design their learning pathways. It can also provide an opportunity to recognise learning outcomes that correspond to innovations when it comes to new technology or processes. While in general their use depends on the qualifications system, it is also possible that within one system, some qualifications use options and free choice units, while others do not. This can depend on the level or type of qualification or the occupational area (it may be appropriate to use a common set of core units and optional units in certain sectors, while not in others).
	For examples see Section C.7.
Do units have a level?	The ECVET Recommendation does not define whether units have a level or not. In practice, there are qualifications systems where this is the case and each unit is assigned a level (not necessarily the same as the overall qualification) and others where only a full qualification is assigned a level. It depends on the rules in the qualifications system.
	This choice is likely to be influenced by the way units and NQF levels are used in the qualifications system. For example, if units can at the same time be used as partial qualifications they can be assigned a level. Units can also have levels in systems where the same unit can be used as part of several qualifications (includ- ing qualifications at different levels). On the other hand, in systems where each unit is specific to a single qualification or if it can only be part of qualifications at the same level, then it may be preferable not to assign a level to units.
	For illustrations see Section C.8.

Is it possible to	This also depends on the rules in the qualifications system.
transfer units across qualifications framework levels?	As said above, in some systems, where each unit is assigned a level, it is not nec- essary that all units are at the same level as the qualification. Consequently, a unit can be transferred from one level to another if it is considered (by the competent authority) as relevant for the qualification.
	In systems where units alone do not have an explicit level it is also possible to transfer units across levels (if the rules enable so) based on a comparison of learn- ing outcomes. In other systems this may not be possible and credit transfer can only take place between qualifications at the same level.
	<ul> <li>In a transnational perspective, it is possible that qualifications preparing for the same profession will be described through different EQF levels. This can be due to several issues, such as:</li> <li>EQF is not designed to describe single qualifications but qualifications systems. It is levels of national qualifications systems or frameworks that are referenced to EQF levels (not single qualifications). Therefore the positioning of a qualification with regard to EQF levels, will depend on how the qualification is referenced to the national qualifications framework or where is it situated in the national qualifications system.</li> <li>While the professions for which the qualifications prepare, seem the same at the first glance, in reality the activities and tasks undertaken by the persons on the work place are not the same. The level of autonomy or the complexity of tasks may vary across countries. This may result in a difference of levels of qualifications.</li> </ul>
	The ECVET pilot projects are often faced with this issue. Based on their work it appears that it is possible to organise credit transfer for units that are part of qualifica- tions described through different EQF levels, provided that the activities and tasks for which the unit prepares are comparable (and hence also the learning outcomes).
How are units used in the framework of ECVET partnerships for mobility?	In order to be able to transfer credit achieved in different contexts, the competent institutions agree that the learning outcomes of a unit and the assessment standards in the host setting are comparable to those of a unit in the home setting. For an example on how qualifications can be compared by using key occupational activities see Section C.2.
	<ul> <li>When using ECVET for mobility, as experimented in the current ECVET pilot projects, partnerships have developed several approaches to identifying comparability of learning outcomes in units across the different countries/systems. These approaches can be grouped as follows:</li> <li>Identifying comparable units – units that exist in the qualifications systems of the partnership, which are considered comparable and can be transferred.</li> <li>Designing units 'open to mobility' – units designed specifically for geographi-</li> </ul>
	cal mobility purposes. They do not necessarily correspond to a full unit in the qualifications systems of the partnership (not all the qualifications systems concerned use units).
	<ul> <li>Creating 'reference units' – a reference structure of units to which partners can relate units existing in their qualifications systems following certain rules. Designing 'common units' – units that are shared by the competent institutions in the partnership: i.e. the same unit can be found in all qualifications concerned by the partnership. The overall learning outcomes of each unit are the same across the partnership but not necessarily every detail of the unit.</li> </ul>
	These approaches are further explained and described through examples in Section C.10.

	ECVET points
What are ECVET points?	ECVET points are a numerical representation of the overall weight of learning out- comes in a qualification and of the relative weight of units in relation to the qualifi- cation.
	Together with units, descriptions of learning outcomes and information about the level of qualifications, ECVET points can support the understanding of a qualifica- tion. The number of ECVET points allocated to a qualification, together with other specifications, can indicate for example, that the scope of the qualification is nar- row or broad.
	The number of ECVET points allocated to a unit provides the learner with informa- tion concerning the relative weight of what s/he has accumulated already. It also provides the learner with information concerning what remains to be achieved.
How many ECVET points are allocated to a qualification and	Allocation of ECVET points to a qualification is based on using a convention ac- cording to which 60 points are allocated to the learning outcomes expected to be achieved in a year of formal full time VET.
how is it done?	For a given qualification, one formal learning context is taken as a reference and on the basis of 60 ECVET points per year of formal full time VET, the total number of ECVET points is assigned to that qualification.
	In a number of European countries qualifications' descriptions are independent of the education and training programme preparing for these qualifications. Fur- thermore, it is also possible that the same qualification can be prepared through various programmes. Therefore ECVET allocates credit points to qualifications and not to education and training programmes. However, to decide on the number of ECVET points allocated to a qualification, one formal learning programme is chosen as a point of reference. It is up to the competent institutions in charge of design- ing qualifications to decide which specific programme will be chosen as a point of reference (e.g. the initial VET or the most common programme). The duration of the selected reference programme together with the ECVET convention on ECVET points, will give the number of ECVET points allocated to the qualification (see Section C.12).

How many ECVET	From the total number of ECVET points allocated to a qualification, each unit is
points are allocated to	allocated a number of ECVET points based on its relative weight within the quali-
units and how is this	fication. The relative weight of a unit is established using one or a combination of
done?	these approaches:
	<ul> <li>the relative importance of the learning outcomes which constitute the unit for labour market participation, for progression to other qualification levels or for social integration;</li> <li>This method of allocating ECVET points is based on how different actors "value"</li> </ul>
	the different units which are part of the qualification. For example, some units may be core to the professional profile that the qualification leads to. It can be decided that such core units would have a higher number of ECVET points than the others. It is also possible that some units would enable progression to other qualifications levels (e.g. general knowledge, skills and competence to enable progression to higher education).
	• the complexity, scope and volume of learning outcomes in the unit;
	This approach is based on evaluating the complexity, scope and volume of knowledge, skills and competence in a unit, with regard to those in the quali- fication. It can be based on indicators such as the level of performance for as- sessment of learning outcomes. For example: the body of technical, technologi- cal, scientific and general knowledge that have to be mobilized in order to ex- ecute the skills and competences expected; the number of procedures or meth- ods to follow, the complexity of combinations of these procedures or methods; the variety and complexity of material and documentation resources to use.
	• the effort necessary for a learner to acquire the knowledge, skills and competence required for the unit;
	This method of allocating ECVET points is based on the education and train- ing programme taken as a point of reference and on the estimation of learners' effort (which can be also translated as workload or notional learning time) to achieve the expected learning outcomes.
	Examples of approaches to allocate ECVET points to units are described in Section C.13.
Who allocates ECVET points?	Allocation of ECVET points is normally part of the design of qualifications and units. The allocation of ECVET points to qualifications and/or to units is carried out by the institution competent for the design of qualifications or the institution empowered to allocate ECVET points within a country or a qualifications system.
	In the context of the current ECVET pilot projects, the range of institutions experi- menting with ECVET points allocation is wide and ranges from ministries, sectoral organisations or social partners to training centres.
When and how are learners awarded	The successful achievement of a qualification or of a unit triggers the award of the associated ECVET points, independently of the actual time required to achieve them.
ECVET points?	Hence when a learner satisfies the criteria for a unit or a qualification, meaning s/he has achieved the expected learning outcomes and these are assessed and validated, s/he is awarded the corresponding ECVET points. These are recorded, together with the learning outcomes and units, in his/her personal transcript.

What is the role of ECVET points in the transfer and accumulation process?	Usually the transfer of a unit entails the transfer of the corresponding ECVET points so that they are included when the transferred learning outcomes are recognised, in acceptance with national or regional rules. It is up to the competent institution to reconsider, where necessary, the ECVET points to be taken into account, as long as the rules and methodologies which are laid down for this purpose are transparent and underpinned by quality assurance principles.
	In line with the ECVET Recommendation (see quotation above) and as presented in the section on Credit Transfer and Accumulation, the transfer of credit concerns the validation and recognition of learning outcomes assessed in a different context. The transcription of ECVET points in personal transcripts accompanies this process, but ECVET points are not the subject of credit transfer. Similarly, the process of accumulation concerns the assessed and validated learning outcomes and not the ECVET points.
	ECVET points contribute to informing the institution in charge of transferring learn- ing outcomes and their recognition about the relative weight of the units/qualifi- cation the learner has already achieved (especially when transfer is taking place outside the context of recognised mobility).
	In practice, when learners' credit is transferred and accumulated the number of ECVET points, together with the unit specifications and information on the learning outcomes, are recorded in the personal transcript.
How are ECVET points used for transfer and accumulation in systems which already use credit points?	In countries where there is already a national system of credit points, the compe- tent institutions establish arrangements for the conversion of national credit points to ECVET points.
What is the difference between ECVET points and credit?	ECVET points are not to be confused with credit. While credit designates the learn- ing outcomes the learner has achieved (see section below on Credit Transfer and Accumulation), ECVET points provide information about the qualification and the units. In other words, while credit is related to a person and his/her personal achievement (credit does not exist on its own without someone having achieved it), ECVET points are linked to the qualification structure and description (independent of whether someone has achieved the qualification or not).
	Credit can be transferred and accumulated if the competent institution recognises that the credit the learner has achieved is relevant and can be taken into account as part of the qualification the learner is preparing (or seeks recognition for). ECVET points provide information about the credit the learner has transferred and accu- mulated (e.g. what is the relative weight of units the learner has already achieved).

Are 10 ECVET points always worth 10 ECVET points?	In general, the amount of ECVET points allocated to a unit does not have an ab- solute value. This means that 10 ECVET points for one unit in qualification A do not necessarily equal 10 ECVET points for another unit in qualification B. Only the learning outcomes should be compared.
	In the framework of organised mobility the partner institutions agree on the num- ber of ECVET points that will be allocated to the unit(s) concerned by mobility in advance. Consequently, when the learner returns to the home institution s/he will be awarded this agreed number of ECVET points for the credit achieved abroad.
	Outside such organised learners' exchanges, it is possible that the competent institution fully recognises learners' credit without necessarily awarding him/her the same amount of ECVET points as s/he has been awarded in the host institution. This can be due, for example, to the fact that the relative weight of the unit differs between the two systems.
What does it mean to be awarded X ECVET points?	For a <b>qualification</b> , the fact that it is described with 120 ECVET points means that the learning outcomes of that qualification are typically achieved in two years of formal learning. This does not mean that all those who hold the qualification have spent two years studying to prepare it.
	Shorter or longer programmes leading to that qualification may exist. Further- more, an individual learner can take more or less time to achieve the given learning outcomes.
	In the case of qualifications where there is no formal learning programme that prepares for the learning outcomes defined (i.e. the qualification is only prepared through different non-formal learning activities or through the recognition of non- formal and informal learning), this means that the qualification is comparable, in size, to a qualification that would normally be achieved in two years of formal learning.
	For a unit, the fact that it is allocated 5 ECVET points is not meaningful without in- formation about the number of ECVET points allocated to the qualification and the other units.

	Credit Transfer and Accumulation
What is credit?	Credit for learning outcomes (i.e. credit) designates <i>individuals' learning outcomes</i> which have been assessed and which can be accumulated towards a qualification or transferred to other learning programmes or qualifications.
	Credit refers to the fact that the learner has achieved the expected learning out- comes which have been assessed positively and the outcome of the assessment was documented in a personal transcript. Based on this documentation, other in- stitutions can recognise learners' credit.
	Credit is a different concept than ECVET points. For the distinction between credit and ECVET points see the section on ECVET points.
What is credit transfer?	Credit transfer is the process through which learning outcomes achieved in one context can be taken into account in another context. Credit transfer is based on the processes of assessment, validation and recognition.
	In order to be transferred, learning outcomes have to be assessed. The outcome of the assessment is recorded in a learner's personal transcript and constitutes credit. On the basis of the assessed outcomes, the credit can be validated and rec- ognised by another competent institution.
	Two cases of credit transfer exist: Transfer in the framework of partnerships
	Transfer outside partnerships
	These are further explained below:
	When the credit transfer takes place in the framework of organised mobility, un- derpinned by a learning agreement, if the assessment is positive, credit should be validated and recognised automatically.
	For an illustration of the application of ECVET for credit transfer and accumulation see the 'life stories' in Section C.19.
What is credit accumulation?	Credit accumulation is a process through which learners can acquire qualifications progressively by successive assessments and validation of learning outcomes.
	Accumulation of credit is decided by the competent institution responsible for the award of the qualification. When the learner has accumulated the credit required and when all the conditions for the award of the qualification are fulfilled, the learner is awarded the qualification.
	In ECVET accumulation is enabled by the use of units of learning outcomes that can be progressively assessed, validated and recognised. It is based on qualification systems' rules and requirements on accumulation. These rules define which learn- ing outcomes are accumulated towards which qualification and how they are as- sessed and validated.
	For illustration of the application of ECVET for credit transfer and accumulation see the 'life stories' in Section C.19.
Is the principle of accumulation compatible with the use of a final assessment?	Yes, it is possible to combine the assessment for each unit and the consequent accumulation of units with a final assessment. The role of such final assessment is not to verify again that every learning outcome already assessed, has been achieved. The final assessment aims to verify that learners can combine the learn- ing outcomes achieved in different units in view of performing complex tasks or developing products/ projects.

How is credit transfer organised in the framework of ECVET partnerships?	In the framework of ECVET partnerships, credit transfer is foreseen in the learning agreement (see Section C.17). This agreement specifies which learning outcomes are to be achieved during the mobility and how these will be assessed. If the learner has been positively assessed by the hosting institution it implies that the learning outcomes expected for units concerned have been achieved. This is recorded in the learner's personal transcript. The home institution validates and automatically recognises the learner's credit, as specified in the learning agreement.
	In the case of learning outcomes achieved in other settings and contexts and that are only corresponding to part of the unit in the home system, it is possible to vali- date and recognise the assessment results as part of the continuing assessment (if it exists). In any case, the learner should be exempted from the part of the pro- gramme that corresponds to the learning outcomes concerned.
What is meant by a home institution and a hosting institution?	The "home" institution is the institution which will validate and recognise learning outcomes achieved by the learner. In the context of ECVET partnerships it is the home institution that sends the learner out and where the learner comes back to.
	The "hosting" institution is the one that delivers training for the learning outcomes concerned and assesses the achieved learning outcomes. In the context of ECVET partnerships it is the hosting institution that receives the mobile learner and provides learning activities (modules, courses, placements etc.), as well as assessment.
	In practice, the functions of the hosting institution may be shared by more than one organisation: the competence to provide learning activities and that to assess learners' achievements may be executed by different organisations. Similarly, the functions of the home institution, such as validation and recognition, may be shared by more than one organisation.
	All relevant information on the home and hosting institutions should be presented in a Memorandum of Understanding (MoU).
	See Part B on competent institutions and ECVET functions.
Who organises the assessment of learning outcomes?	The hosting institution organises the assessment of learning outcomes as speci- fied in the Learning agreement. The assessment can be done by teachers, trainers, employers, etc. depending on the education and training and assessment arrange- ments and procedures that are used in the host context.
	However, it is important that the hosting and home institutions discuss, prior to the mobility, the assessment methods used and the profile of assessors to make sure that these meet the quality assurance requirements expected by the home institution, which will validate the credit (note that this does not mean that the as- sessment methods and profile of assessors should be the same between the home and the hosting institution).
Where are the assessment requirements	Prior to the mobility period the partners discuss and agree the way(s) in which learning outcomes will be assessed during the mobility period. They also agree on who and how the quality of this process is ensured.
described?	The requirements on assessment are described in the learning agreement and may be formalised in a MoU (see Sections C.16 and C.17).

Who validates the assessed learning outcomes?	The home institution validates the learning outcomes assessed by the hosting in- stitution. In this process the home institution uses a learner's transcript of record to verify that the learning outcomes defined for the mobility period have indeed been positively assessed in the hosting institution.
	Concerning the validation of formal, non-formal or informal learning, outside a partnership, it is the competent institution which is empowered to award qualifica- tions or units or to give credit that validates (possibly after organising an assess- ment) the learning outcomes of a learner.
	The partnership should ensure that learners who are assessed in another context and whose credit is transferred are not disadvantaged compared to other learners in the home system. If, for example, the home system uses grades for condoning, the partnership should find a way to ensure that the mobile learner will receive grades that correspond to his/her performance.
How can ECVET strengthen the quality assurance of assessment?	<ul> <li>Each unit contains a description of learning outcomes and assessment criteria (see Sections C.11 (first example) and C.14). The use of units of learning outcomes strengthens the quality of the assessment process because:</li> <li>The assessor can easily make the link between the content of the unit and the assessment criteria clear;</li> <li>The indicators and criteria of satisfactory achievement by the learner can be ex-</li> </ul>
	pressed clearly.
Is it possible to transfer learning	Yes it is possible, depending on the rules concerning assessment, validation and/ or recognition in the qualifications system.
outcomes that do not correspond to a full unit?	Especially in the case of geographical mobility, it may be difficult to achieve learn- ing outcomes that correspond to a full unit.
unit?	Some ECVET pilot projects have envisaged solutions to transfer learning outcomes that do not correspond to a full unit. However, the way in which these parts of units can be validated and recognised in the home system differs from one qualifications system to another.
	Some examples are provided in Section C.15.
How is credit transfer organised outside the framework of ECVET partnerships?	For applying ECVET to learning outcomes achieved in a non-formal and informal learning context or outside the framework of a MoU [Memorandum of Understand- ing], the competent institution which is empowered to award qualifications or units or to give credit should establish procedures and mechanisms for the identification, validation and recognition of these learning outcomes through the award of the corresponding units and the associated ECVET points.
	Outside the framework of partnerships, no learning agreement exists. Therefore the decision on recognition lies fully in the hands of the competent institution in the system in which the learner wants his/her credit recognised. This institution should examine whether the learning outcomes the learner has achieved and which were assessed (as possibly documented in the personal transcript) are com- parable to the requirements of their system (e.g. are they comparable to the quali- fication standards?). If so, the competent institution may decide to validate and recognise learners' credit.
	In cases where learning outcomes have not been previously assessed, the compe- tent institution may ask the learner to undergo a procedure for validation and rec- ognition of formal, non-formal and informal learning.

	ECVET and non-formal and informal learning
Is ECVET applicable to non-formal and informal learning?	<ul> <li>Yes, the Recommendation states that:</li> <li>ECVET facilitates the development of flexible and individualised pathways and also the recognition of those learning outcomes which are acquired through nonformal and informal learning.</li> <li>For applying ECVET to learning outcomes achieved in a non-formal and informal learning context or outside the framework of a MoU, the competent institution which is empowered to award qualifications or units or to give credit should establish procedures and mechanisms for the identification, validation and recognition of these learning outcomes through the award of the corresponding units and the associated ECVET points.</li> </ul>
How does ECVET facilitate validation of non-formal and informal learning?	<ul> <li>The validation process for non-formal and informal learning in view of achieving a qualification typically follows these phases<sup>6</sup>:</li> <li>Identification of knowledge, skills and competences developed during personal activities, while living in a community or working, etc.</li> <li>Documentation of these learning outcomes through the collection of evidence such as descriptions of previous working activities, development of a portfolio or assessment.</li> <li>Validation of these learning outcomes against standards, referential or list of expected learning outcomes.</li> <li>Award of a qualification or part of a qualification (recognition of learning outcomes).</li> <li>ECVET facilitates this process because it:</li> <li>Describes the knowledge, skills and competence required for a qualification and the associated units. This makes it easier for the competent institution to identify what learners have already achieved in comparison to what is required in view of a qualification.</li> <li>Can be used to enable learners to achieve some units through validation of nonformal and informal learning and others through formal learning.</li> <li>Facilitates the documentation of learning outcomes achieved through the use of tools such as personal transcripts.</li> <li>ECVET therefore enables learners to achieve qualifications partly by having non-formal and informal learning validated and recognised and by achieving the remaining units through formal learning.</li> </ul>

	Memorandum of Understanding (MoU)
What is a Memorandum of Understanding?	A MoU is an agreement between competent institutions which sets the framework for credit transfer. It formalises the ECVET partnership by stating the mutual ac- ceptance of the status and procedures of competent institutions involved. It also establishes partnership's procedures for cooperation.
Why is a Memorandum of Understanding needed?	Credit transfer is supported by mutual trust between the competent institutions involved. As stated in the ECVET Recommendation, this should be promoted by establishing MoU.
	In order to recognise credit, the competent institution in charge needs to be con- fident that the required learning outcomes have been assessed in a reliable and valid manner. It also needs to trust that learners' credit does concern the learning outcomes expected and that these are at the appropriate level.
	By setting up a MoU, competent institutions should acknowledge their partners' approaches to designing units, assessment, validation, recognition as well as quality assurance. Through this process, they make informed judgements about the conditions under which they can recognise credit achieved in partner systems.
Who concludes a Memorandum of Understanding?	MoU are concluded by competent institutions, each of which is empowered, in their own setting, to award qualifications or units or to give credit for achieved learning outcomes for transfer and validation.
	It is important to note that one institution can be competent for more than one function in the qualifications system as well as in ECVET, depending on the set up of the particular qualification system. These may be ministries, qualifications au- thorities, regional authorities, employers' representatives or chambers, etc.
Is it possible to use Memoranda of Understanding outside geographical mobility?	<ul> <li>Yes. Partnerships for credit transfer using ECVET can be set up for the purpose of trans-national geographical mobility but also for other purposes. ECVET principles and the use of agreements in form of MoU are <b>one of the methods</b> that can facilitate the process of recognition of learning outcomes in a lifelong learning perspective for purposes such as:</li> <li>Horizontal progression of learners (at the same level): MoU can exist between competent authorities in different qualifications systems to enable learners with a qualification from one qualification system (for example for adult learning) to get recognition if they desire to obtain a similar qualification from another qualifications system (for example a broader qualification normally prepared through initial education and training);</li> <li>Vertical progression of learners (across levels): MoU can exist between competent authorities governing qualifications at different levels to enable recognition of credit for learners passing from one level to another in cases where the lower level qualification. This is possible in qualifications systems where qualifications are designed in terms of pathways with multiple entry and exit points. It can also be possible to progress from tertiary VET (in some systems at EQF level 5) to higher education qualifications at EQF level 6.</li> </ul>

What does a Memorandum of	<ul> <li>A MoU contains statements through which the parties concerned:</li> <li>accept each other's status as competent institutions,</li> </ul>
Understanding contain?	<ul> <li>accept each other's quality assurance, assessment, validation and recognition criteria and procedures as satisfactory for the purposes of credit transfer, This agreement is based on transparency of information concerning the above processes.</li> </ul>
	<ul> <li>agree the conditions for the operation of the partnership, such as objectives, duration and arrangements for review of the MoU,</li> <li>Such conditions will depend on the purposes and the context of partnerships.</li> </ul>
	<ul> <li>agree on the comparability of qualifications concerned for the purposes of credit transfer, using the reference levels established by EQF,</li> <li>The level of detail regarding this point will vary depending on the partnership.</li> </ul>
	• <i>identify other actors and competent institutions that may be involved in the process concerned and their functions.</i>
	MoU define the roles of other competent institutions with regard to functions such as signature of learning agreements, assessment, issuing of learners' personal transcripts, etc.
	For a comparison of what ECVET pilot project include in their MoU see Section C.16.
Is there a template for a Memorandum of Understanding?	There is not yet common template for a MoU.
	Competent institutions may decide on the format and structure best suited for their needs as long as they respect the guidelines described above.
	Examples of MoU will be developed as part of the work of ECVET pilot projects. In view of developing a common template for such a document it is first necessary to test several options, assess their advantages and disadvantages and reach an agreement on the most suitable format.
	Some examples of MoU developed by the ECVET pilot projects can be consulted on the common web-site of projects <sup>7</sup> .
How can ECVET be used outside a Memorandum of Understanding?	Establishment of MoU is recommended for cases of organised mobility. However, if the institutions concerned (e.g. VET providers) already have trust in each other's procedures and they are competent to recognise credit without the agreement of another institution (e.g. ministry, employers' representatives or regional authority), they can put in place exchanges directly using the learning agreement.
	Thus, it is possible to transfer credit without establishing a MoU. This may also concern ad-hoc cases of learners who have not participated in an organised mobil- ity but want to have their learning outcomes recognised. In such cases the compe- tent institution <i>should establish procedures and mechanisms for the identification,</i> <i>validation and recognition of learning outcomes concerned</i> . For more information see the section on ECVET and non-formal and informal learning.
Is it possible to use Europass documents as part of the Memorandum of Understanding?	The Europass certificate supplement, which contains a description of the qualifi- cation prepared by the learners who are to undergo mobility (including learning outcomes and possibly units), is a useful document to include in the MoU. Its use avoids having to describe the qualifications of the partner systems.

	Learning Agreement
What is a learning agreement?	A learning agreement is an individualised document which sets out the conditions for a specific mobility period. It specifies, for a particular learner, which learn- ing outcomes and units should be achieved together with the associated ECVET points.
	The learning agreement also lays down that, if the learner achieves the expected learning outcomes and these are positively assessed by the "hosting" institution, the "home" institution will validate and recognise them as part of the requirements for a qualification. Therefore the learning agreement constitutes a commitment to the learner that his/her achievement, if in line with the expectations, will be recognised.
Why is a learning agreement needed?	Recognition of credit achieved during organised mobility is facilitated by the use of learning agreements. These ensure that the hosting and the home institutions as well as the learner, have information about the objectives and conditions of the mobility period as well as their roles. Compliance with the learning agreement ena- bles automatic recognition of credit upon the learner's return. This is done without additional assessment or examination of the mobility period content.
Who signs the learning agreement?	<ul> <li>The learning agreement is always signed by these parties:</li> <li>The home institution (the institution which will validate and recognise learning outcomes achieved by the learner)</li> </ul>
	<ul> <li>The hosting institution (that delivers training for the learning outcomes concerned and assesses the achieved learning outcomes)</li> <li>The learner</li> </ul>
What does the learning agreement contain?	The learning agreement contains information concerning: <ul> <li>The identity of the learner</li> </ul>
	Duration of the mobility period
	<ul> <li>Learning outcomes to be achieved by the learner and the associated ECVET points (as corresponding to the relative weight of the unit in the home system)</li> </ul>
	Additional information, for example in relation to assessment learning activities, may be provided.
	Examples of learning agreements will be developed as part of the work of ECVET pilot projects. For a comparison of what ECVET pilot projects include in the learning agreement see Section C.17.
	Examples of learning agreements can be found on the ECVET pilot projects' web- sites <sup>8</sup> .
What is the difference between a learning agreement and a MoU?	The MoU is a framework document that defines the conditions under which credit achieved in partner systems can be recognised. It can concern a group or even a large number of qualifications.
	The learning agreement is a more specific document. It is written for a particular case of mobility and describes the learning outcomes concerned as well as how these will be assessed.

	Personal Transcript
What is a personal transcript?	The personal transcript is a record of learning achievements. It contains informa- tion on <i>learners' assessed learning outcomes, units and ECVET points awarded</i> . It also specifies the identity of the learner and the competent institution(s) that as- sessed, validated and recognised learners' credit.
Who keeps the personal transcript?	The personal transcript is a document that belongs to the learner.
How does it differ from a learning agreement?	While the learning agreement describes what the learner is expected to achieve, the personal transcript documents what s/he has achieved.
Is it possible to use Europass mobility as personal transcript?	The Europass mobility document contains the identification of the home and host- ing institution as well as a description of learning outcomes achieved. It can be used as part of the personal transcript though additional information – such as the title of the unit and information on assessment are needed. For an example on how Europass mobility can be combined with the personal tran- script see Section C.18.

### Part B – Functions of ECVET Competent Institutions

	ECVET Competent Institutions
Who are the competent institutions involved in ECVET?	"Competent institution" means an institution which is responsible for designing and awarding qualifications or recognising units or other functions linked to ECVET, such as allocation of ECVET points to qualifications and units, assessment, valida- tion and recognition of learning outcomes, under the rules and practices of partici- pating countries.
	The main challenge for the introduction of a common methodological framework like ECVET in the European VET environment, is the broad range of bodies involved with the different functions of qualifications systems. Depending on the system, the same function (e.g. design of qualifications and of units) may be the responsi- bility of different types of actors (e.g. national or regional ministries, social part- ners, VET providers).
	To overcome this complexity, ECVET refers to the different functions of a qualifica- tions system rather than to the types of institutions involved. Institutions involved in implementing and running ECVET are referred to as competent institutions.
	Users of ECVET therefore need to first clarify their role(s) with regard to their own qualifications system. They have to reflect on their competences in their qualifications system and how these relate to the main functions of ECVET. The functions of ECVET and how these relate to the responsibilities in the qualifications system are described in Table 1.
	In addition to the functions that relate to qualifications design and award (listed in Table 1), a number of 'support' functions can be identified. The support functions concern for example, the provision of information and guidance or aspects such as funding of mobility, training of teachers and assessors, etc.
	When using the Table 1 it is important to be aware of the fact that one institution can be competent for more than one function in the qualifications system as well as in ECVET. This depends on the set up of the particular qualifications system.
Is there an accreditation process to designate competent institutions which can award ECVET points?	There is no such accreditation process at European level. Competent institutions can award ECVET points if they are entitled to do so in their qualifications systems.
	Private providers who are competent for design and award of qualifications can also use ECVET to describe their qualifications and to recognise learners' credit. When it comes to the recognition of credit that learners achieve in these institu- tions, it depends fully on the partnerships and Memoranda of Understanding pri- vate VET providers have with other competent institutions. Outside partnerships and MoU no recognition of credit is guaranteed.

The lear tho:	: tabl rning se in	The table shows, for example, that the institutions that have the competence to design qualifications are normally competent for describing learning outcomes and their descriptions in terms of ECVET points. However, these institutions can delegate this function to other compete those in charge of setting up a framework for the implementation of ECVET to clarify 'who does what' with regard to ECVET in their systems.	tt the institutions th riptions in terms of mework for the imp	at have the competenco ECVET points. However elementation of ECVET to	e to design qua , these instituti o clarify 'who do	lifications are normally ons can delegate this fu ons can delegate this fu oes what' with regard to	competent for describing nction to other competen ECVET in their systems.	The table shows, for example, that the institutions that have the competence to design qualifications are normally competent for describing qualifications in terms of units of learning outcomes and their descriptions in terms of ECVET points. However, these institutions can delegate this function to other competent institutions. The table enables those in charge of setting up a framework for the implementation of ECVET to clarify 'who does what' with regard to ECVET in their systems.
For	an e	For an example on how this table can be used in the framework of ECVET partnerships see the example of the project Recomfor below.	can be used in the f	ramework of ECVET par	tnerships see tl	he example of the projec	ct Recomfor below.	
W			<b>Conception functions</b>				<b>Realisation functions</b>	
Qualifications syste	Governance and fund	Design of qualifications	Design of formal or non-formal programmes	Design of assessment/ validation process and procedures	Carrying out the formal or non-formal programme	Assessment of learning outcomes (formal, non-formal and informal)	Validation of learning outcomes (formal, non- formal and informal)	Certification/recognition of learning outcomes (including the award of qualification, certificate, diploma)
			ð	Quality assurance (both ir	n qualifications	n qualifications systems and with regard to ECVET)	d to ECVET)	
		Support funct	ions (both in qualifi	Support functions (both in qualifications systems and <b>w</b>	vith regard to EC	CVET): information, guid	vith regard to ECVET): information, guidance, documentation and communication	l communication
		Desi	Design of ECVET elements	nts		Use of ECV	Use of ECVET for accumulation and Transfer	<b>Fransfer</b>
ECVET functions	Sovernance and funding	Description of quali- fications in terms of units of learning out- comes Allocation of ECVET points to qualifications and to units	Link between units of learning outcomes and the formal or non-for- mal programme	Link betweel sessment/va tion processe achievement o of learning out and award of a ated ECVET p	Practical use of learning outcomes and credit for mobility	Establishment of learning agreements Assessment of learn- ing outcomes and award of correspond- ing credit	Recording of assessed learning outcomes and credit in the personal transcript Validation of learning outcomes and of cor- responding credit Award of correspond- ing ECVET points to the learner	Recognition of learning outcomes and process for taking credit into account for the award of qualification (i.e. transfer and accumulation)
				Establi	shment of Mem	Establishment of Memoranda of Understanding	- - - -	
			(a	Ill actors may be involve	ed in the establi	(all actors may be involved in the establishment of a MoU directly or by delegation)	ly or by delegation)	

This table shows the different functions competent institutions can have in qualifications systems (in white) and the functions they have with regard to ECVET (pale blue). Some

functions (dark blue) apply to the implementation of ECVET but are also present in qualifications systems.

Table 1 | ECVET and the various functions in VET qualifications systems and VET provision

	The ECVET users: the possible roles of VET schools, training centres, and enterprises
What different roles can VET schools and training centres play in using ECVET?	<ul> <li>VET schools and training centres and their staff may have different roles in using ECVET, for example:</li> <li>Be a sending (home) institution. For example, they may want to give their learners the possibility to learn in another country or they may identify learning needs that can be best addressed by taking part in learning activities abroad, in a partner organisation. They will also validate and recognise learners' credit on their return.</li> <li>Be a host institution and receive foreign learners. As a host institution they can provide learning activities preparing for the learning outcomes agreed and carry out the related assessment. But they can also cooperate with another organisation(s) who will provide the learning activities (e.g. an enterprise) and they would have a role in the quality assurance of the learning activities and the assessment.</li> <li>Be an institution where learners seek the recognition of credit that they have achieved in another context, country or institution. They will examine the evidence about the learning outcomes they have achieved and about their assessment and decide on whether credit can be validated and recognised.</li> <li>Be a VET provider whose education and training offer enables learners to accu-</li> </ul>
What different roles can enterprises and other labour market representatives play in using ECVET?	<ul> <li>mulate credit in a lifelong learning perspective.</li> <li>Enterprises, social partners or other labour market representatives may also have a number of roles in using ECVET, for example: <ul> <li>Be a sending institution. Like VET schools and training centres, they may be regular providers of formal VET and they may engage in learners' exchanges with partners in other countries or other systems.</li> <li>They may also work with VET schools and training centres and encourage them to develop learners' exchanges. They may be aware of the skills needs on labour market that can be addressed through mobility and work with VET schools and training centres to develop partnerships through which they can address these needs by sending learners abroad.</li> <li>Be a host institution that receives foreign learners. Enterprises may receive foreign learners and provide them with the opportunity to develop the expected learning outcomes through on-the-job learning.</li> <li>Be a sending institution. Like VET schools and training centres, they may be regular providers of formal VET and they may engage in learners' exchanges with partners in other countries or other systems.</li> </ul> </li> <li>These organisations may also have a role in planning learning activities, training, assessing, validating and recognising learners' learning outcomes and awarding certificates as well as in processes leading to definition of qualifications and units of learning outcomes.</li> </ul>
	Examples of how ECVET functions are covered by competent institutions involved in ECVET pilot projects
-----------------	---
ECVET ASSET	The project ECVET ASSET brings together, as main partners, VET training centres preparing for qualifications in the automobile sector.
	<ul> <li>With regard to the ECVET functions presented in the table above, these training centres are mainly responsible for:</li> <li>Carrying out the formal programme,</li> <li>Assessment of learning outcomes;</li> </ul>
	• In some of the partner countries (e.g. Finland) they are also responsible for the validation and recognition of learning outcomes;
	• In other partner countries (e.g. France or Romania), validation and recognition also involves other competent institutions such as validation juries in France or external examination centres in Romania.
	In all partner countries the training centres are not responsible for the design of qualifications or units. They may be partially responsible for the design of pro- grammes and assessment and validation procedures. The overall responsibility for the conception function is in the hands of national institutions (e.g. ministries, national VET institutes, or the representatives of the sector).
	The approach of the ECVET ASSET project is therefore to closely associate the insti- tutions competent for the conception functions to the ECVET testing project. These competent institutions validate the unit descriptions made by the training centres. They also set up the MoU through which they create the overall framework for mo- bility and credit transfer. The validation and the MoU engagement guarantee that when learners achieve the units abroad the training centres (possibly jointly with other institutions concerned) will be able to validate and recognise their credit.
	For more information see the ECVET pilot projects website part on ASSET <sup>9</sup> .
SME Master Plus	The SME Master Plus project has four main partners from the Chambers of Skilled Crafts in the participating countries.
	<ul> <li>Depending on the country and the qualifications system the Chambers are responsible for the conception functions but also for elements of the realisation function, namely:</li> <li>Design of qualifications, education and training programmes and assessment and validation processes (e.g. in the dual system in Germany or concerning the protocol provide the function).</li> </ul>
	<ul> <li>sectoral qualifications in France);</li> <li>Assessment and validation of learning outcomes (also the case in the dual system in Germany);</li> </ul>
	• In other systems the assessment and validation may be the role of training cen- tres (e.g. in the Netherlands).
	The Chambers are typically not delivering the training themselves but this is done by training centres.
	To ensure that the instruments (units, MoU and learning agreements) designed by the Chambers are suitable for mobility, the SME Master Plus project closely as- sociates a network of training centres. These will test and provide feedback on the unit descriptions as well as the conditions for mobility set up in MoU and learning agreements.
	For more information see the ECVET pilot projects web-site part on SME Master <sup>10</sup> .

9 http://www.ecvet-projects.eu/Projects/ProjectDetail.aspx?id=9
 10 http://www.ecvet-projects.eu/Projects/ProjectDetail.aspx?id=10

#### Recomfor

The Recomfor project brings together institutions that are, at national and/or sectoral level, in charge of designing qualifications in the area of international trade. These are ministries, public agencies in charge of VET or sectoral organisations (e.g. chambers, sectoral councils).

These organisations are competent for:

- Designing qualifications and can consequently refer their qualifications to the 'reference units' designed by the Recomfor partnership (see also Section C.4);
- Depending on the qualifications system, they are in some cases also competent for recognition of credit and/or for the design of rules regarding assessment and validation.

These institutions are in general not in charge of delivering the training or undertaking the assessment. Therefore each competent institution in the partnership brings together a national/regional network of training centres which will organise recognised mobility in the framework established by the partnership.

For more information see the ECVET pilot projects web-site<sup>11</sup>.

In the MoU developed by the project Recomfor each competent institution has to indicate their functions in their qualifications system. The functions presented in the Table 1 above are used for this purpose. Rather than asking each institution to describe in their roles and remits, the partners are asked to use the below codes to indicate what their main responsibilities are.

Conception functions	Design of ECVET elements	Realisation functions	Use of ECVET for accumulation and transfer
A1 Design of qualifications	B1 Description of qualifications in terms of units of learning outcomes allocation of ECVET points to qualifica- tions and to units	C1 Carrying out the formal or non-for- mal programme	D1 Practical use of learning outcomes and credit for mobility
A2 Design of formal or non- formal pro- grammes	B2 Link between units of learning outcomes and the formal or non-for- mal programme	C2 Assessment of learning outcomes (formal, non-formal and informal)	D2 Establishment of learning agreements of learning outcomes and award of corresponding credit
A3 Design of assessment/ validation pro- cess and proce- dures	B3 Link between assessment/vali- dation processes, the achievement of units of learn- ing outcomes and award of associated ECVET points	C3 Validation of learning outcomes (formal, non-formal and informal)	D3 Recording of as- sessed learning out- comes and credit in the personal transcript validation of learning outcomes and of corre- sponding credit
		C4 Certification/ recognition of learning outcomes (incl. the award of qualification, cer- tificate, diploma)	D4 Recognition of learn- ing outcomes and pro- cess for taking credit into account for the award of qualification (i.e. transfer and accu- mulation)

CAPE-SV project	<ul> <li>The project partnership of CAPE-SV brings together education and training providers in the area of performance arts. The providers have different status: there is one university, one college, private education and training providers specialised in performance arts and also training institutions that operate under the governance of sectoral or regional authorities. What characterises all these project partners is very large autonomy with regard to all the functions involved in the implementation of ECVET, in line with the rules in which they operate:</li> <li>The providers decide on the way they design their qualifications and units;</li> <li>They also decide autonomously on the education programme and on modes and methods for assessment and validation;</li> <li>Finally they themselves carry out the teaching, the assessment, validation and recognition.</li> <li>Consequently, in this example, the education and training providers are competent for nearly all the functions outlined in Table 1. The exception being the function of quality assurance as all these competent institutions are quality assured by another body (e.g. some are accredited by a sectoral organisation, others are accredited by a ministry).</li> </ul>
	For more information see the ECVET pilot projects web-site part on CAPE- SV <sup>12</sup> .

# **Part C – Examples and Illustrations**

#### Introduction:

This section illustrates the ECVET principles and processes with concrete examples. As stated in the introduction, the range of alternatives presented in form of examples is certainly not exhaustive. The objective of this illustrative section is to provide the reader with an illustration of the concrete application of ECVET. The examples can be used to inspire further experimentation and consequent implementation, but they are not meant to offer a guide to ECVET implementation.

#### **Caveat:**

The examples were written in the period 2010-2011. They are based on two types of sources:

- Ongoing ECVET pilot projects which have not yet been completed and a full evaluation of their findings is not yet available. Consequently the examples present the preliminary conclusions of their work; or
- Qualifications systems that already use some principles and processes of ECVET. Where examples are taken directly from qualifications systems (rather than from projects) these do not represent an example of ECVET implementation as such. Most of the systems used to illustrate the ECVET principles use only some aspects of ECVET and mainly for internal purposes (within the system), never for the purpose of transnational mobility.

Consequently, as said above, the examples should be considered as illustrations and possible sources of inspiration for other initiatives and projects. In any case, the approaches should be adapted to the needs of specific contexts or partnerships.

Examples and illustrations presented here are by no means meant to represent an exhaustive inventory of approaches to implement ECVET.

More examples are progressively being made be available on: www.ecvet-projects.eu

# C1. Describing qualifications using learning outcomes

Depending on the qualifications system, different methods and approaches to identify and describe learning outcomes are used. Learning outcomes are also used for different purposes (qualifications, programmes, assessment). These differences are illustrated below.

How learning outcomes are used to design qualification in a selection of EU countries

## // The Netherlands //

The Advisory Committee on Education and Labour Market in the Netherlands published a proposal in 1999 entitled *Shift to core competences* in response to the employers' argument that the skills required for work are better obtained through work rather than formal education. Detailed competence profiles have been defined for 291 occupations, specifying in each case a broad job description and vocational competences with associated success criteria divided into core functional or technical tasks and core behaviour. These are further subdivided into specific competences associated with the job, some of which are a hybrid of functional and behavioural aspects. Each job competence is classed as having one or more of the following 'dimensions':

- the profession-specific method or process dimension refers to professional competences such as techniques with which to carry out core functions and core tasks in an appropriate manner;
- the administrative-organisational and strategic dimensions refer to professional competences directed at professional functioning in the context of work organisations; the social-communicative dimension refers to professional competences directed at establishing and maintaining contacts, cooperation, teamwork, etc.;
- the development dimension refers to professional competences that contribute to the development of an individual, team, occupation, organisation or business.

*Source:* Cedefop (2009): The shift to learning outcomes. P.73<sup>13</sup>. Further information: Brochure about the Dutch qualification system in English<sup>14</sup>

The competences in VET qualifications are described in Part C of the qualification file through:

- a set of 25 competences that are generic to all VET qualifications
- core tasks that are specific to the given profession and that are sub divided into work processes Each work process is detailed in a table that contains:
- The title of the core task
- The title of the work process
- The desired outcome of the work process
- The competences involved
- Components of the competences (detailing them in the context of the work process)
- Performance indicators
- Professional knowledge and competencies: because the educational system is competence based, knowledge is always seen in the context of practical use.

<sup>13</sup> http://www.cedefop.europa.eu/EN/publications/12900.aspx

<sup>14</sup> http://www.colo.nl/publications.html?file=tl\_files/publicaties/publicaties%202010/colo-bro-preparedforthefuture2010.pdf

The full qualification is described through 5 core tasks and 22 work processes. The extract below shows the description of one work process falling under the core task entitled 'receives and processes goods'.

Core task 1 Receives and processes goods					
1.1 Work process: receives goods					
Description	The salesman in retail, in cooperation with colleagues, sets out the appliances and return and makes sure the delivery space is freely accessible.				
	When receiving goods, he checks the delivery using the accompanying documents. He counts the delivery and reports deviations on the delivery documents and to his superior.				
	He gives the returns to	the supplier/deliverer.			
Desired	The quantity and qualit	y of the delivered goods is checked.			
outcome	The goods were receive	ed safely and according to regulations (arb	00).		
	In case of deviations, th	ne salesman has acted according to proce	edures.		
Competence	Component(s)	Desired outcomes	Professional Knowledge		
(Dutch: Competentie)		The salesman in retail:	and Competences (Dutch: Vakkennis en vaardigheden)		
Collaborate and consult	Consult with others	When receiving goods, he consults with colleagues repeatedly and in a timely manner, making sure that the sequence of tasks, distribution of tasks and priorities are clear.	<ul> <li>In relation to the specific branch where the practi- cal period takes place:</li> <li>General knowledge of retail</li> </ul>		
Use of materials and resources	Effective use of ma- terials and resources and their appropriate choice	Chooses the right appliances for re- ception of goods and uses them in an appropriate manner that minimizes the chances of loss of goods and results in an efficient reception of goods.	<ul> <li>Knowledge of</li> <li>how to avoid loss of goods</li> <li>accompanying documents</li> <li>means of transport</li> </ul>		
Delivering quality	Monitor the levels of quality and produc- tion Achieve a level of production Work systematically	Receives and checks the goods in a structured and accurate manner and reports deviations, trying to work in an appropriate pace, with the proper conduct and method in order to pre- vent loss of goods as much as pos- sible.			
Follow instructions and procedures	Follow instructions Work according to set procedures	Shows discipline by sticking to instructions, pointers and set pro- cedures, making sure goods are re- ceived safely and according to regula- tions (Dutch: arbo wet) and according to procedures.			

Note: The above is not the official translation. *Source:* Kenniscentrum Handel<sup>15</sup>

<sup>15</sup> Detailed information in Dutch is available http://www.kchandel.nl/kch/Beroepskwalificaties/kwalificatiedossiers-handel-2010-2011/ Pages/Verkoper.aspx

## || France ||

In France vocational qualifications that fall under the different Ministries<sup>16</sup> in charge of qualifications, are created or revised by vocational consultative commissions (CPC). They differ slightly from one Ministry to another, but always bring together: representatives of the Ministry, employers, employees and special experts. These are the main stages through which learning outcomes are formulated:

- Needs analysis: A needs analysis which can be requested by any of the stakeholders takes into account: the evolution of the branch, recruitment patterns of the industry involved, the prospects which the qualification offers, the different modes of learning best suited to it, and the relevance of the request in relation to existing diplomas.
- Occupational standard: This involves the 'construction of the identity of the qualification'. This standard is defined according to the competences required to exercise the profession and involves substantial input from the professionals.
- Standards of competence: This stage involves interpreting professional activities into competences to be acquired (knowledge and skills). The role of teachers is essential here.
- Assessment standards: This phase is under the responsibility of the competent Ministry. The examination regulations (contents, length, weighting of the subjects), any prerequisites for the qualification, and the number of teaching hours are defined.

Source: Cedefop (2009): The shift to learning outcomes. P.76

French VET qualifications under the Ministry of Education are described through:

- Competences; and
- Associated (technical) knowledge

Competences and associated knowledge are grouped into larger sets (see Table 3 below). Units are composed of one or several sets of competences. To understand the qualification descriptions, it is important to bear in mind that the set of knowledge does not necessarily correspond to a single set of competences, but one set of knowledge may contribute to several sets of competences.

This is illustrated in the example extracted from the qualification in the construction sector entitled 'Public works' presented in Tables 3 and 4 below.

#### context of construction acts **Construction and technical** approach to construction Health and safety at wok **Construction technology** Administrative and legal <u>Associate knowledge</u> Scientific and technical communication Users' comfort sets of) (Sets of) competences To collect and file information • • • • ••• To read technical documents • • • • ... To organise the construction site • • • • • ••• To choose equipment, materials and tools • ••• Quantify the needs of a team ••• Assess costs • • ••• .....

 Table 3 | Relationship between sets of competences and sets of knowledge

 (Baccalaureat Professionnel – Public Works - France)

16 These are ministries in charge of: agriculture, education (compulsory education and initial VET), higher education, employment, social affairs, health and sports.

Unit 21 – Quantitative management of needs and resources				
Competence set	Be capable of (competence)	Conditions (for assessment)	Assessment criteria	
Quantify the needs of a team	Quantify the materials needed for the completion of the construction	Execution plan Altimetric plans	The inventory of compo- nents is complete	
	Assess the surface needed for stocking the material	Packaging of material to be used	The surface calculated enables secure stocking of material	
	Plan the materials needed ac- cording to the progress on the construction site	Planning	Continuity of work is en- sured	
Assess costs	Divide a construction into el- ementary units	Market record Construction record	The division is coherent with the market record	
	Estimate or prepare a ratio (time per unit etc)	Market record	<ul> <li>The estimation takes into account:</li> <li>The resources available</li> <li>Enterprise data</li> <li>etc</li> </ul>	
	Establish, for a construction or part of a construction, the costs of: • Human resources • Material • Equipment	Rental price Delivery orders	All parameters are taken into account	
	Describe the mode of calcula- tion of a sale price		All units of a sale price are taken into account	

# Table 4 | Description of two sets of competences that form one unit(Baccalaureat Professionnel – Public Works - France)

Source (in French): Bac Pro Travaux Publics (not an official translation)<sup>17</sup>

## || Spain ||

In Spain each qualification is made up of competence units on the one hand, and on the other hand, of professional modules (see also Section C.6). The competence units are the link between qualifications of different competent authorities (Ministry of Education and Employment). While the competence units are defined in terms of occupational activities the professional modules are defined in terms of learning outcomes. The set of learning outcomes of each professional module (learning units) is seen as a contextualized competence. Each learning outcome is expressed and assessed as a whole (knowledge, skills and competence are not described separately); including personal and social competences. The set of contents coexist in an integrated way: procedural, conceptual and attitudinal. Table 5 below shows an example of a learning outcomes description of a professional module – extract from a qualification of Higher Technician in Building Construction projects. The extracts were chosen to illustrate learning outcomes descriptions that concern units (professional modules in the Spanish terminology) which are closely linked to professional; activities, as well as key competences (entrepreneurship) and transversal learning outcomes (on the job training).

Professional module	Learning outcomes
Installations in Construction	<ul> <li>Configures plumbing and sanitation installations representing schemes, measuring their elements and applying specific regulations.</li> <li>Configures electricity and telecommunications installations, representing schemes and measuring their elements.</li> <li>Configures ventilation installations representing schemes and measuring their elements.</li> <li>Configures gas and heating installations representing schemes and measuring their elements.</li> <li>Configures air-conditioning installations, representing schemes and using normalised symbols.</li> <li>Configures fire detection and extinction, representing schemes and measuring their elements.</li> <li>Represents special installations (lifts, domotics, lighting conductor, photovoltaic solar energy and central air intake, among others), using the appropriate examples and embranes.</li> </ul>
Business and Entrepreneurial Initiative	<ul> <li>symbols and applying current legislation.</li> <li>Recognises skills related to entrepreneurial initiative, analysing the requirements derived from job positions and business activities.</li> <li>Defines the opportunity of creating a small enterprise, assessing the impact on the performance setting and incorporating ethic values.</li> <li>Carries out the activities for the setting-up and implementation of a company, choosing the legal structure and identifying the associated legal obligations.</li> <li>Carries out basic administrative and financial management activities of an SME, identifying the main accounting and tax obligations and filling in documentation.</li> </ul>
On the job training	<ul> <li>Identifies the company's structure and organization relating the same with the type of service provided.</li> <li>Applies labour and ethic habits in his/her professional activity according to the characteristics of the job position and the procedures established by the company.</li> <li>Obtains information for the development of construction projects and works, analysing technical information and gathering data in order to locate, configure and describe significant elements.</li> <li>Develops construction projects, proposing solutions and preparing the graphical and written documentation.</li> <li>Configures facilities of construction projects, pre-dimensioning their elements and representing schemes and plans.</li> <li>Assesses projects and construction works taking measurements of work units and preparing estimates and certificates.</li> <li>Collaborates in the planning of construction projects and works, preparing, adapting or updating plans and programmes.</li> <li>Manages documentation of construction projects and works, reproducing it and filing it in accordance with the established quality criteria.</li> </ul>

Source: Spanish Ministry of education

As illustrated in Part A, in partnerships for transnational mobility, project partners often describe learning outcomes for the units to be concerned by mobility jointly to ensure a common understanding and transparency of the content of units used for mobility. Such an example is presented here based on the approach used by the project OPIR.

The partners in the project OPIR first identified the key activities for the given occupations that were common to the partner institutions (see also Section C.9). After identifying which key activities were common to the qualifications in the partner countries, these were described in terms of learning outcomes using the categorise of knowledge, skills and competence. The learning outcomes for the key activity 'Make temporary hair styles (brushing, hair dry, etc.) for women and men' are presented in Table 6.

Knowledge	Skills	Competence
C.1.S.1. Hair properties (tensile strength, elasticity, porosity, reac- tion to water, electrical proper-	C.1.A.1 Identify hair properties. C.1.A.2. Suggest and adapted hair style to the client.	C.1. In an autonomous and respon- sible manner, advice the client in order to agree an adapted hair cut.
ties,). C.1.S.2. Types of hair cuts in rela- tion to the morphology and hair types C.1.S.3. Techniques of hair styles: straighten, curl, brushing, etc.	C.1.A.3. Choose the hair style technique in line with the cho- sen hair cut.	Advice a new or established client in a responsible and autonomous manner in order to agree an adapt- ed hairstyle taking into account her wishes or characteristics.
C.2.S.1. Criteria for positioning of a client (adapted and comfortable). C.2.S.2. Protection equipment (apron, cape).	C.2.A.1. Position the client. C.2.A.2. Choose the protection equipment for the client. C.2.A.3. Place the protection equipment for the client.	<ul> <li>C.2. Appropriately prepare the client for the realisation of the hair style, taking into account hygiene, health and safety rules and procedures.</li> <li>Taking into account the agreed hairstyle, select the techniques necessary for its realisation.</li> </ul>
<ul> <li>C.3.S.1. Protection elements for the hairdresser.</li> <li>C.3.S.2. Instruments (brushes, combs, hair grips).</li> <li>C.3.S.3. Devices (hair dryer, curling iron, straightening iron,).</li> <li>C.3.S.4. Controls necessary to ensure the good functioning of devices.</li> </ul>	<ul> <li>C.3.A.1 Protect the hairdresser</li> <li>C.3.A.2. Select the necessary tools and devices.</li> <li>C.3.A.3. Verify the functioning of the devices.</li> <li>C.3.A.4. Dispose the products and the devices at the work place.</li> </ul>	C.3. Undertake the preparation necessary for the chosen hair style, the devices, materials, products, respecting the hygiene, health and safety rules Appropriately prepare the client for the realisation of the hairstyle, taking into account the security, hygiene and protection measures, with full autonomy.
<ul><li>C.3.S.5. Organisation of the work place.</li><li>C.3.S.6. Hygiene rules (disinfection of devices) and security rules for the client and the hairdresser.</li></ul>		

## Table 6 Learning outcomes description for the key activity - making temporary hair styles (OPIR<sup>18</sup>)

<sup>18</sup> The OPIR project is a pilot project funded by the funded by the centralised actions of the Lifelong Learning Programme in the period 2008-2010. For more information see: http://www.ecvet-projects.eu/Projects/ProjectDetail.aspx?id=8

Knowledge	Skills	Competence	
C. 4-5.S.1. Hair style techniques: hair straightening, hair curling,	C.4-5.A.1. Use the instruments and devices.	C.4. Apply the necessary tech- niques corresponding to the hair	
brushing, C. 4-5.S.2. Hair drying techniques: manual hair dryer, helmet hair dryer,	C. 4-5.A.2. Put the hair in the form according to the chosen technique (straighten, curl, brush).	form, the client expectations, hair type and the state of the hair, mor- phological characteristics and the chosen haircut.	
C. 4-5.S.3. Brushing techniques: using combs, brushes, hands.	C. 4-5.A.3. Dry the hair. C. 4-5A.4. Realise the hair style.	Autonomously carry out the prepa- ration for the agreed hairstyle, the tools, materials and products	
C. 4-5.S.4. Quality criteria for a good hair style.	C. 4-5.A.5. Choose the hairdress- ing and finishing products.	respecting the security, hygiene and protection measures, with full	
C. 4-5.S.5. Repairing the volume ac- cording to the morphology.	C. 4-5.A.6. Apply these prod- ucts.	autonomy. C.5. Use the most adequate de-	
C. 4-5.S.6. Brushing and finishing products.	C. 4-5.A.7. Apply hygiene and security rules.	vices and products applying the appropriate ergonomic positions.	
C. 4-5.S.7. Notions of ergonomics for the hairdresser (position, oper- ating devices).	C. 4-5.A.8. Adopt ergonomic attitudes.	Autonomously realise the hairstyle using the adapted techniques, material and products adapted to the agreed hairstyle	
C.6.S.1. Advice to the client: main- tenance of the hair style at home.	C.6.A.1. Advice the client for follow-up at home.	C.6. Advice the products and treat- ments to be used in order to favour or maintain the results.	
		Autonomously advice the practices and the products in order to main- tain the obtained hairstyle.	

Source: OPIR (translated from French)

## C2. Who defines units?

The questions and answers part of this document presents several alternatives to the question of who defines units. In general, the response to the question depends on the division of competences among stakeholders operating in qualifications systems. The paragraphs below show different alternatives from existing qualifications systems.

Units are designed by the same authority that designs the full qualification:

- In France, for qualifications defined by the ministries in charge of qualifications, tri-partite committees (vocational consultative commissions) design and approve qualifications. Units are defined through the same process. Each VET qualification contains several units and these are defined as part of the qualifications standard.
- In Germany, full qualifications are not defined in terms of units, but experimental actions exist. One example
  is the work done by the Federal Institute for Vocational Education and Training to define common units (in
  German the term 'training modules' is used) for qualifications in the dual system related to 14 occupations.
  These units (called 'training modules' in Germany) are nationally standardised, certifiable and transferable.
  They are related to qualifications preparing for recognised training occupations. They have been designed
  focusing on particular groups of persons, namely young people who apply for apprenticeships in the dual
  system but do not find a placement. These young people enter the system of preparatory training and the
  objective of this initiative is to enable recognition of the units young people achieve through preparatory VET
  in the dual system when they find a placement later in their learning pathway. These training modules are
  presently being tested in the BMBF Programme Jobstarter-Connect<sup>19</sup>.
- In England, for VET qualifications that are accredited in the Qualifications and Credit Framework, the awarding bodies that define qualifications also design the units. Units and qualifications are designed following an approval process of sectoral councils. When defining a qualification, the awarding bodies can use already existing units (that have been developed as part of other qualifications) and they can also define new units that are specific to the new qualification that they propose.

The qualification standard is defined at a central (system level) and units can be designed by other actors, for example VET providers:

- This approach is currently being tested in the German DECVET pilot initiative<sup>20</sup>. This BMBF-Initiative aims to
  explore in ten pilot projects, if a unit-based credit system could increase transparency and encourage vertical and horizontal permeability within and between the different German VET systems. The Initiative concentrates on the following four key subsystems of German VET which are currently regarded as having substantial deficiencies in crossover mobility and mechanisms for transition between tracks:
  - passing from vocational preparation into dual-system initial vocational training,
  - transfer at the interface between joint cross-cutting VET qualifications of a single occupational field within dual-system initial vocational training,
  - passing from full-time school-based to dual-system initial vocational education and training,
  - legally regulated advanced vocational training with recognition of learning outcomes from the dual-system, additional qualifications and/or professional experience.

19 For more information about the programme Jobstarter Connect (in German) see: http://www.jobstarter.de/de/1208.php

20 For more information on the DECVET initiative see: http://www.decvet.net/en/Home/site\_\_2/

Based on the statutory training regulations and framework curricula which define qualifications in Germany, the DECVET projects identify core activities of the particular qualifications and define these in terms of transferable units. It is important to note, that in this initiative, units are designed only for the purpose of transfer and recognition, but they are not certified elements of qualifications. In other words, learners who prepare the qualifications concerned through the traditional pathway are not "awarded" these units. The units are only used to identify what the learners who want to move from one system to another, can gain recognition for.

Finally, some mixed situations exist as well:

• In Slovenia, 70% of the qualification standard and the related units are defined at national level by sectoral councils supported by the National VET institute and approved by the Ministry of Education, Youth and Sport. The remaining 30% of the qualifications standard and associated units are defined directly by the VET providers. They have full autonomy to decide what learning outcomes these 30% will correspond to, as well as how the learning will be organised, assessed and validated. This flexibility was introduced in order to enable providers to adapt their offer to the local and regional skills needs and also to enable them to define more specific graduate profiles.

# C3. The relationship between units and full qualifications: example of units common to several qualifications

As discussed in Part A of this document, some units can be common to several qualifications. The examples from the Romanian initial VET and Finish VET show such a cases.

## || Romania ||

In the Romanian initial VET (IVET) systems all qualifications are based on units of learning outcomes. The document describing each qualification is called the "Training Standard" and has the following structure:

- The titles of units of learning outcomes
- The level of qualification
- Number of credit points
- The learning outcomes
- The performance criteria
- The requirements for assessment

For each qualification there are three "types of units":

- Units that are common to all IVET qualifications at the same level. These units concern key competences like: communication in foreign languages, critical thinking and problem solving, ICT, personal development, entrepreneurial skills, etc.
- Units that are common to all IVET qualifications within a given occupational area at the same level. For example, all qualifications in the area of Commerce at level 4 EQF contain these units: Marketing, Financing, Human Resources, Business Environment, and Operational Planning.
- Units that are specific to a particular qualification.

This approach is illustrated in the figure 1 below

## Figure 1 | Structure of qualifications in Romania



Figure 2 | Example of units in the Romanian qualification "Technician in commercial activities" (level 4 EQF)



Source: National Centre for Vocational and Technical Education (Romania)

## || Finland ||

In Finland, vocational qualifications are made up of units, which are either compulsory or optional and the optional units include free electives. In addition, it is also possible for learners to achieve more qualification units than the required minimum (this enhances the qualification) in order to meet sector specific working life requirements or local vocational needs and to enrich the candidate's vocational skills. There are a number of units that are common to all VET qualifications at the same level. These are units that concern learning outcomes related to general education fields such as: Mother tongue (4 Finish credit points); Second national language (1 Finish credit point); Mathematics (3 Finish credit points); etc (in total 20 Finish credit points). There are also common units that concern learning outcomes that are more specific to VET such as entrepreneurship (10 Finish credit points). A range of optional units proposed, is also common to all qualifications. This means that learners preparing for any qualification of this type can choose from units such as: workplace instructor training (2 national credit points), ICT (up to 4 national credit points), environmental studies (up to 4 national credit points), etc.

# C4. Clustering learning outcomes into units

As discussed in Part A of this document, there are different criteria according to which learning outcomes can be grouped into units. The examples below illustrate approaches where learning outcomes were grouped into units according to:

- Key occupational activities
- Competence areas
- Product or service.

#### *Key activities approach (Cominter*<sup>21</sup>*)*

One approach to clustering learning outcomes to units is by grouping them according to the key activities of the job profile to which they contribute (see also the example from the OPIR project in C1).

For example the Cominter project<sup>22</sup> identified that the occupation of Import and Export Sales Assistant can be described through five key activities which are:

- · 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

These activities can be further subdivided into tasks. For example, for the activity carrying out studies and business monitoring, has these core tasks:

- Permanent market monitoring
- Collecting information abroad
- Preparing decision making

Based on these occupational activities and tasks, the project described the following qualification units (and sub-units). The units are clearly related to the key activities. The sub-units refer to distinct working methods, activities or products that form the activity (see Table 7).

Each unit describes the learning outcomes in terms of knowledge, skills and competence necessary to carry out the activities at the level of a graduate recruit (not an experienced professional).

<sup>21</sup> The Comiter project was a pilot project funded by the centralised actions of the Lifelong Learning Programme in the period 2006-2007 (the project was continued by the project Recomfor). For more information see: http://www.cominter-europe.org/

<sup>22</sup> http://www.recomfor.eu

## Table 7 Grouping learning outcomes into units according to key activities (Cominter project)

Units	Sub-Units	
International Marketing	Market research and market planning on foreign markets	
	Business information system	
Export Selling	Prospecting and customer/partner follow up	
	Negotiating	
Import Buying	Identifying potential suppliers and sourcing	
	Organising the negotiation	
Managing International Trade	Choosing and working with service providers	
Operations	Managing the international business administration	
Working in a Multicultural Context	Business English language A	
	Business foreign language B	
	Intercultural management and communication	

Source: Cominter Complete profile of the «Import and export sales assistant» common certification

## *Competence areas approach (VQTS<sup>23</sup>)*

Another approach to group learning outcomes into units is by referring to broader areas of competence. The VQTS project approach defines a number of competence areas for a certain occupational field (these are further described in terms of steps of competence development). One competence area comprises various forms of knowledge, skills and competence necessary for completing core work tasks in a certain occupational field. These core work tasks must be derived empirically from the working world (work practice/work place). Only holistic competences that actually exist in the world of work are to be described and differentiated. Just as core work tasks have a complex relationship to the work process, competence areas also represent a certain complexity.

Based on the key activities (or core work tasks), a varying number of competence areas are defined, depending on the complexity, range of activities or job opportunities within a certain occupation.

The VQTS project identified the following competence areas for the occupational field of Mechatronics:

- Maintaining and assuring the reliability of mechatronic systems;
- Installing and dismantling mechatronic systems and facilities;
- Installing and adjusting mechatronic components in systems and production lines;
- Designing, adapting, and building mechatronic systems and facilities on the basis of client needs and site plans;
- Putting mechatronic systems into operation and providing clients with technical and economic support;
- Supervising and evaluating both the process sequences of mechatronic systems and facilities and the operational sequence (including quality assurance);
- Installing, configuring, programming and testing hardware and software components for control and regulation of mechatronic systems and facilities;
- Preparing and distributing the technical information for adjustment of each enterprise's mechatronic systems;
- Diagnosing and repairing malfunctions with mechatronic systems and facilities, advising clients on avoiding malfunctions, and modifying and expanding mechatronic systems;

For more information and the full description of the VQTS competence matrix please refer to the VQTS Project website<sup>24</sup>.

<sup>23</sup> VQTS was a project funded by the decentralised actions of the Lifelong Learning Programme in the period 2005-2006 and continued by VQTS II in 2007-2009. More information can be found on: http://www.vocationalqualification.net/vqts/

<sup>24</sup> http://www.vocationalqualification.net

Another approach to clustering learning outcomes to units, is according to the different products or services provided by persons holding the qualification concerned. The Baltic Education project identified the following units for the qualification of painter and wallpaper hanger:

- Paintwork (indoor and outdoor);
- Glue and wallpaper hanger work;
- Object lacquering and metal painting;
- Dam work;
- Floor covering work;
- Plaster work;
- Dry mortarless construction work;
- Designing and renovation work.

*Source:* Baltic Education: Vocational Education and Training in the Baltic Sea Region (BSR) – The Modularisation of Qualification Units for the Core Profession "Painter and wallpaper hanger"

25 The Baltic Education project was funded by the centralised actions of the Lifelong Learning Programme in the period 2006-2007. More information can be found on http://www.baltic-education.eu/index.html

## C5. Key competences and units

Part A of the document presents different options for integrating key competences into units of learning outcomes in VET qualifications. These options are illustrated in three examples below.

## || Ireland ||

In the Irish vocational qualifications governed by FETAC, certain key competences or transversal skills (for example the ones related to communication in mother tongue) and competences are systematically grouped into separate units. For example, for a qualification in *Chemical Processing*, the person needs to achieve all of these qualification components (each component is composed of units)<sup>26</sup>:

- *Pumps, Compressors and Prime Movers* (contains these units: Health and Safety, Pumps, Movers, Compressors, Prime movers)
- *Vessels, Piping, Valves and Steam Traps* (contains these units: Health and safety, Vessels, Piping, Valves, Stream traps)
- **Communications** (contains these units: Listening and Reading, Reading and Writing, Non-Verbal and Visual Communication, Communications Technology)
- Work experience (contains these units: Planning and Preparation, Experience, Review and Evaluation)

In addition to these four components the person needs to achieve three more components in a predefined range of options. The above list shows that learning outcomes linked to key competences like communication, are grouped in separate qualification components and are defined in separate units. For illustration, the general learning outcomes of the component communications are presented in Table 8 below. A more detailed description of learning outcomes for this unit can be found on the FETAC web-site<sup>27</sup>.

# Table 8 | Learning outcomes description for key competences under the qualification component of'Communication' (Ireland)

General learning outcomes definition for the qualification component 'Communications'

- develop an awareness of the essential role played by communication in human interaction
- acquire communication skills relevant to vocational and personal development
- understand the communicative principles and practices involved in gathering and relaying information
- acquire the skills and confidence to convey and interpret meaning, in writing, orally and visually
- develop a critical awareness of communications messages and media
- explore the use of modern communication and information technology, and its application in personal and vocational life.

26 For more information about the qualification see: http://www.fetac.ie/fetac/awardsDirectory. do?method=getMajorAwardDetails&majorAwardId=5404&fromPage=awardsByNFQLevel

27 http://www.fetac.ie/doc/WelcomeServlet?DocId=0901df9e80002207

# Specific learning outcomes for the unit 'Listening and speaking' (one of four units under the above component)

Learners should be able to:

- understand key terms used in communications theory such as sender, receiver, message, code, channel, communicate, noise, feedback, context, with particular reference to working life
- recognise the kinds of listening required in different contexts e.g. understanding, interpreting, receiving information
- demonstrate a range of listening behaviours appropriate to the context such as eye contact, facial expression, encouragement, control of own responses
- practise communications techniques relevant to different situations in work and leisure, such as: conversations, interviews, formal presentations, message taking/giving and telephone dialogues
- participate effectively in group discussion and negotiated decision making
- co-operate and contribute effectively in formal meetings
- prepare and deliver an oral presentation and answer questions.

Source: FETAC<sup>28</sup>

## || Finland ||

In Finland upper-secondary VET qualifications contain so called 'vocational units' and 'core subject units'. The 'core subject units' contain learning outcomes that supplement vocational skills with the aim to provide students with the competences, skills and knowledge that they will need at work, in further studies and as citizens, and they can be replaced with general upper secondary school studies. Compulsory core subject units include key competences such as languages, mathematics, physical education as well as arts and culture.

However, some key competences are also integrated into the 'vocational units'. The Nation Requirements for vocational qualifications governing different upper secondary vocational qualifications determine the key lifelong learning skills, which are included in the vocational skills requirements set for vocational units and core subjects. These key lifelong learning skills include learning and problem-solving, interaction and cooperation, occupational ethics, sustainable development, aesthetics, communication and media competence, as well as active citizenship and different cultures.

# C6. The link between units and education and training programmes

As discussed in Part A of this document, units are elements of qualifications and not of education and training programmes. However, the programme and its learning activities prepare for the qualification and the units and consequently there can be a clear link between the units and the programme.

## || Belgium – French Speaking Community ||

In the French speaking community of Belgium the autonomy of education and training providers, in organising the learning provision, is a key pillar of the education and training system (this pedagogical autonomy is guaranteed in the Constitution). Consequently, the authorities in charge of the qualifications system cannot define the way in which providers will organize the learning pathway. In the ongoing reform of qualifications, the intention is to:

- ensure the coherence of qualifications at national level by defining commonly agreed units for each qualification; and
- safeguard the autonomy of providers by letting them decide in full autonomy how they will define the learning pathway leading to the given units and qualifications.

## || Spain ||

In the Spanish qualifications system the 'competence unit' is a minimum combination of professional competencies that can be recognized and given partial accreditation. These 'competence units' are the common point of reference for the different education and labour departments which develop qualifications. They are the basis for developing VET qualifications and related education and training programmes. The qualifications of the Ministry of Education are based on a modular structure. The education and training programmes are organized into professional modules, which can be of two types: those associated with a 'unit of competency' (the most specific) and transversal or basic modules that help to build basic transversal skills related to the professional competency underlying that particular qualification. The professional modules are made up of areas of theoretical and practical knowledge. If the professional profile for a qualification requires it, professional modules are included that provide training in information and communication technologies, languages and workplace risk prevention. In all other training courses, this type of training is included transversally in the professional modules that make up the qualification.

There are different ways in which professional modules relate to 'competence units' in Spain:

- there can be a one-to-one relationship whereby one module prepares for one specific 'competence unit';
- but a module can also prepare for several 'competence units' or several modules can prepare for one 'competence unit';
- some modules do not relate to a particular 'competence unit' but may be transversal to several of them;

The professional modules are quite large (see example below) and can be further sub-divided into training modules by the VET providers when they define the specific education and training programme.

Source: Refernet Spain (2009) Spain: VET in Europe - Country Report<sup>29</sup>

The example of a qualification description of Higher Technician in Building Construction projects below illustrates this relationship between 'competence units' and modules.

## Table 9 Higher technician in building construction projects (Spain)

**General competence:** To draw up technical documents of building construction projects, to elaborate building redesigns and to manage and control documents for its execution, accomplishing legal rules and environmental, health & safety regulations

Competence Units (in the National Catalogue of Professional Qualifications	Professional Modules	Teaching hours	Type of module
none	0562. Construction Structures.	100	
	0573. Professional Training and Guidance.	90	Validated by the Educational Sys-
	o574. Business and Entrepreneuri- al Initiative.	60	tem
UCo638_3: Develop building represen- tations	o563. Construction Representa- tions.	290	
UCo639_3: Implement and monitor development of building projects	0570. Development of Residential Construction Projects.	160	
UCo876_3: Manage documentation systems for construction projects	0571. Development of Non-Resi- dential Construction Projects.	120	Directly associ- ated to Compe- tence Units
UCo874_3: Track construction planning	0566. Construction Scheduling.	80	
UCo875_3: Process control construc- tion costs	o564. Construction Measurements and Assessments.	80	
UCo879_3: Redesigning construction projects	o565. Construction Work Setting out.	130	
UC1195_3: Assist in the process of building energy certification	0569. Energy Efficiency in Con- struction.	60	
UCo64o_3: Represent building facilities			
UC1162_3 Develop plans of thermal facilities	0568. Installations in Construc- tion.	130	
UC1280_3: Develop plans of fluid dis- tribution system and networks			
	0567. Design and Building Con- struction.	130	Deduced from professional pro-
none	0572. Project on Construction.	40	file. Cut across
	0575. On the Job Training.	400	several CU

Source: Spanish Ministry of Education

# C7. Different types of units

In Part A the distinction is made between units that are:

- Compulsory
- Optional
- "Free-choice"

#### Example: Compulsory and Optional units (Ireland)

In Ireland for the qualification (major award) in Pharmaceutical processing, the learners have to:

- achieve these **compulsory components** (each is composed of units): Fundamental Pharmaceutical Skills; General Pharmaceutical Operations
- Choose one of these three **optional components**: Active Pharmaceutical Ingredient processing; Finished Pharmaceutical Processing; Biopharmaceutical Processing

#### Example: Free choice units (Finland)

In Finland, upper secondary vocational qualifications (120 credit points<sup>30</sup>) are comprised of vocational qualification modules (90 credit points) and core subject units to supplement vocational skills (20 credit points), which may be compulsory or optional, as well as free-choice units (10 credit points).

- Vocational units are based on work and functional units found in the world of work and they include at least 20 credit points for on-the-job learning. In addition, all qualifications include vocational units covering vocational skills requirements relating to key competences such as entrepreneurial competence and capabilities as well as those geared towards enhancing health and working capacity. Each qualification also includes a final project. The vocational units are divided into the following categories:
  - Basic and field-specific study units (compulsory and common for all qualifications in a given field)
  - Specialized study units (partly optional: if the learner wants to prepare a specific specialization s/he has to choose these units)
  - Other optional units (it is the VET provider who decides which other optional units they will offer to learners)
- **The core subject units** to supplement vocational skills, aim to provide students with the skills and knowledge that they will need at work, in further studies and as citizens, and they can be replaced with general upper secondary school studies. Compulsory core subject units include languages, mathematics, physical education as well as arts and culture. These units are common to all VET qualifications of the same type.
- Free-choice units may be vocational units, core subjects units, or general or interest-oriented units.

Learners may also choose to include modules from other vocational, further or specialist qualifications as part of their upper secondary vocational qualifications. This will result in them achieving additional credit. In addition, they may improve their eligibility for further studies by taking a general upper secondary school course and the general upper secondary school matriculation examination, or by individually including more vocational units than required by the scope of the qualification.

Learners may also choose to complete one or more qualification units at a time, as appropriate for their individual learning abilities, life circumstances or employment. In such cases, VET providers draw up a plan for learners to complete the entire qualification working in cooperation with their workplaces if possible.

An example of how this structure of qualifications and the different types of units enable individual learning pathways in Finland, is presented in the Section C.19.

Source: Finish National Board of Education

<sup>30</sup> Note that this refers to the national system of credit points

## **C8.** Units and levels

As presented in Part A of this document, this depends on the qualifications system and the way the level and units are used, for example:

- In the Czech Republic, full qualifications can contain several partial qualifications. These partial qualifications could be considered as units as they can be accumulated in view of obtaining the full qualification. But each partial qualification is also relevant for the labour market on its own, for example, sometimes the trade licence is conditioned by the achievement of a partial qualification. That is the reason why each partial qualification has a level. The partial qualification can be: one level below, at the same level or one level above the level of the full qualification.
- In the United Kingdom, in the Qualifications and Credit Framework, each unit has a level and each unit is 'in the framework' (the framework is underpinned by a database of units as well as a database of qualifications). The reason for this is that units are used to contribute to different qualifications (there are a lot of units that are common to several qualifications). When designing a new qualification, the awarding body can use the existing units and add new units. Units can be at a different level than the full qualification. For example, a unit like *Speaking in French*, which is at a level 3 of the QCF (level 4 EQF), could very well be part of qualifications at a higher level. However, at least 50% of the units in the qualification (50% in terms of credit points) have to be at the same level as the full qualification.
- In France, only full qualifications have a level and not units. There are equivalences between units in different qualifications, meaning that in some cases it is possible to receive recognition for a unit that was part of qualification A if the person prepares another qualification. However, this is only possible among qualifications at the same level. Furthermore, units cannot be transferred towards another qualification if the full qualification has not been achieved.

# C9. Use of key activities for comparing qualifications

In order to enable transfer of credit between different qualifications systems (e.g. in two different countries), partner institutions need to identify whether the learning outcomes from one system are suitable/ acceptable for the other system. This is a condition for the recognition of credit.

A first step in this comparison is to identify whether the qualifications concerned are similar. This is done by looking at their level (using EQF), the occupation these qualifications lead to and the learning outcomes of the qualification.

The two examples below (Tables 10 and 11) presents an approach where the partner institutions identify similarities and differences across qualifications based on the following steps:

- 1. By reading the learning outcomes of the qualifications concerned, the key activities for the specific profession/occupation are identified;
- 2. The different qualifications from the partner systems are then mapped against these key activities enabling the identification of commonalities.

As shown in the two tables, the differences can very much vary according to the qualification – it appears that the qualifications for hairdressers were very similar across the partner systems while many more differences were revealed for the qualifications in the areas of car mechanics.

# Table 10 | The key activities for the occupation of hairdresser as present in the qualifications preparing forthis profession in the partner systems (OPIR<sup>31</sup> ECVET pilot project)

	Key activities common to all project partners
cati fica	se key activities were identified by a team of experts who have in depth knowledge of the national qualifions concerning this occupation in their own system. Some key activities can be identified in all the quali- tions within the partnership while others are specific to one or a few qualifications. The key activities nbered 1 to 8 are common to all qualifications concerned.
1	<ul> <li>Make shampooing and hair treatment (diagnose the hair and scalp type, select appropriate products for the hair and scalp type and the technique that will follow)</li> <li>Prepare and clean up the workstation</li> <li>Employ hygiene, security, environmental protection and ergonomics techniques</li> </ul>
2	<ul> <li>Make simple (basic) hair cuts for men and women</li> <li>Prepare and clean up the workstation</li> <li>Employ hygiene, security, environmental protection and ergonomics techniques</li> </ul>
3	<ul> <li>Make temporary hair styles (brushing, hair dry, etc.) for women and men</li> <li>Prepare and clean up the workstation</li> <li>Employ hygiene, security, environmental protection and ergonomics techniques</li> </ul>
4	<ul> <li>Make permanent hair styles :</li> <li>perm, water perm,</li> <li>Prepare and clean up the workstation</li> <li>Employ hygiene, security, environmental protection and ergonomics techniques</li> </ul>

31 The OPIR project is a pilot project funded by the funded by the centralised actions of the Lifelong Learning Programme 2008 call for proposals. For more information see: http://www.ecvet-projects.eu/Projects/ProjectDetail.aspx?id=8

5 7 8	Dye, decolour, make highlights <ul> <li>mix, apply, rinse products</li> <li>Prepare and clean up the w</li> <li>Employ hygiene, security, or</li> </ul> Communicate with the client Organise the work and planning	vorkstation environment	al protectior	n and ergono	mics technic	ques		
	Key act	ivities speci	fic to certai	n countries i	n the partne	rship		
		ES – Andalusia	ES - Catalonia	BE – French Speaking Community	IT – Lombardy	RO	Æ	CH – French Speak- ing region
9	Make beard and moustache treatments and cuts							
10	Suggest a hair cut appropri- ate for the style of the client and provide advice on ser- vices Note: this activity is exercised but not assessed in some systems							

Source: Opir (ECVET pilot project)

# Table 11 | The key activities for the occupation of car mechanic as present in the qualifications preparing forthis profession in the partner systems (OPIR<sup>32</sup> ECVET pilot project)

	Key activities	ES – Andalusia	ES - Catalonia	BE – French Speaking Com- munity	T – Lombardy	Q	R	CH – French Speak- ing region
1	Plan and organize the pro- duction.							
2	Prepare machines and sys- tems.							
3	Ensure the projection of the product (planning).							
4	Ensure the preparation of production (inventory data, configuration, testing and setting).							
5	Ensure the quality of produc- tion.							
6	Participate in quality im- provement.							
8	Implement the legislation in terms of health and safety.							
9	Read and interpret technical documents (plans, stand-ards, records).							
10	Using CAD software (CAD) for drawing.							

32 The OPIR project is a pilot project funded by the funded by the centralised actions of the Lifelong Learning Programme 2008 call for proposals. For more information see: http://www.ecvet-projects.eu/Projects/ProjectDetail.aspx?id=8

# C10. Units in the framework of ECVET partnerships for mobility

As discussed in Part A, there are different ways in which partnerships for transnational geographical mobility can use units to support mobility. The examples below show the following three cases:

- Partnerships agree that the units (learning outcomes) as existing in the qualifications of the national qualifications systems are equivalent and hence suitable for transfer;
- Based on the analysis of commonalities among qualifications in the partner systems, partnerships define a small number of units that group learning outcomes that are present in all qualifications, but do not necessarily form units in the partner systems. These 'units open to mobility' are designed to be particularly suitable for mobility;
  - The partnership defines a set of common reference units to which each partner refers the qualification and units that exist in their qualification system. These reference units serve as a translation tool;
  - The partnership defines a set of common units that can be found in the qualifications of all the partner systems. At a general level, the learning outcomes for these units are the same among the partner systems and hence can be recognised.

## Agreeing equivalence between learning outcomes (VaLOGreg<sup>33</sup>)

The VaLOGreg project is not concerned with designing common units or references, but it directly analyses existing qualifications to agree equivalence of learning outcomes across the units (where these exist) or qualifications (where the system does not use units).

For this purpose, the project first identifies which qualifications in the areas concerned by the partnership (mechanics and electro-technicians), are broadly comparable. This is done by analysing the job profile, its field of activity and key occupational tasks.

Each qualification is then analysed by a group of national experts (concerning that specific qualification) with regard to the ECVET criteria. This means that each expert group provides a description of the national qualification that follows the ECVET specifications (e.g. units have a title and learning outcomes for each unit are described, etc.).

In the third stage the experts in each area discuss and produce a common statement on the compatibility or congruence, but possibly also differences in learning outcomes across the qualifications in the partner countries. This outcome is then validated by a steering group. As a result, a decision is taken on which learning outcomes in the existing qualifications can be achieved during ECVET mobility.

In countries involved in the partnership where units do not exist in the qualifications system, learning outcomes comparable to those in other partner countries are grouped into units specifically for the purpose of mobility.

Source: VaLOGreg

<sup>33</sup> VaLOGreg was a pilot project funded by the centralised actions of the Lifelong Learning Programme in the period 2008-2011. More information can be found here: http://www.ecvet-projects.eu/ProjectProjectDetail.aspx?id=16

The project ECVET ASSET defines a small number of units that are common to the partners involved and which are suitable for mobility purposes. Similar to the example above, the project first identifies which qualifications are comparable across the partner systems.

In analysing the qualifications in terms of key occupational activities, the partners identify areas which are common to the qualifications in the partner systems. Afterwards only the areas (at this stage defined in terms of occupational activities) that are suitable for mobility are selected (see below). These are described in terms of learning outcomes and agreements are designed concerning their assessment and validation. These units are described as 'open to mobility' because they have been designed to fit the mobility context of this specific partnership.

The criteria for designing these units 'open to mobility' are:

- Convergence among the qualifications in countries concerned: this means that the content of the unit (the learning outcomes) is present in the qualifications of all the partner countries;
- The dimension (size) of the unit: the number and the complexity of learning outcomes in the unit have to be suitable for a mobility period of three weeks;
- The chronology (pedagogical progression): the partnership has agreed that the mobility will take place in the second part of the training (equivalent to the second year in some of the systems). Therefore the learning outcomes in these units have to be at the level (in terms of complexity) of what is expected to be achieved in the second part of the education and training programme.

An example of a unit designed by ECVET ASSET that fits the above criteria is presented below in Table 12.

In order to be able to complete the unit during the mobility period the following pre-requisites have to be met:

Technical pre-requisites:

• Before starting the training course preparing for this unit, the student must be able to complete the maintenance on a standard braking system (excluding ABS)

Methodology pre-requisites:

- Before starting the training course preparing for this unit, the student must be able to:
  - Read an electrical diagram
  - Identify the interactions of the peripheral systems
  - Use an oscilloscope to visualise the signals from vehicle's systems
  - Do tests with the help of a diagnostic tool
  - Choose the appropriate documents for the job to be done

Source: ECVET ASSET

## Table 12 | Example of a unit 'open to mobility' from the project ASSET

Vehicle S	Stability Management Systems (ECVE	T ASSET)
Knowledge	Skills	Competences
<ol> <li>Wheel anti lock brake systems:</li> <li>1.1: Theory of Operation         <ul> <li>Integrated system</li> <li>Additional system</li> </ul> </li> <li>1.2: Study of the Circuits         <ul> <li>Electrical Circuit (input/output)</li> <li>Hydraulic Circuit</li> </ul> </li> </ol>	<b>S1:</b> Identify the elements constituting the wheel anti lock brake system, the electrical and hydraulic connections and the particularities of the antiskid system and stability control	<ul> <li>C1: Diagnose and repair a vehicle stability management system</li> <li>C2: Organise the work respecting health and safety rules</li> </ul>
<ul> <li>1.3: Strategy of the logic controller</li> <li>1.4: Diagnostic, maintenance and servicing</li> </ul>	<b>S2:</b> Establish a diagnostic procedure taking into account the possible interactions between the peripheral systems	
<ul> <li>2: Antiskid systems:</li> <li>2.1: Theory of Operation</li> <li>2.2: The electrical circuits (inputs/outputs)</li> </ul>	<b>S3:</b> Apply a testing procedure	
<ul><li>2.3: The hydraulic circuits</li><li>2.4: Interaction between the auxiliary systems</li></ul>	<b>S4:</b> Choose the nature of the action to be taken	
<ul><li>2.5: Diagnostic, maintenance and servicing</li><li>2.6: Particularities of the control of the all-wheel drive system</li></ul>	<b>S5:</b> Repair / Replace the components of vehicle stability management systems	
<b>3:</b> Stability control systems: 3.1: Theory of Operation 3.2: The electrical circuits		
<ul><li>3.4: The hydraulic circuits</li><li>3.5: Sensors (inputs/outputs)</li><li>3.6: Diagnostic, maintenance and servicing</li></ul>		

The common reference units approach follows these main steps:

- Defining a reference job profile at European level (among the partner institutions). In the case of the Recomfor and Cominter projects this concerns the « import export sales assistant ». The profile is described in terms of activities and tasks. The design of this profile involves consultation with representatives of the sector. The profile takes into account different national specificities but its main objective is to highlight the key activities;
- 2. Defining knowledge, skills and competence learners need to master in order to obtain the qualification;
- 3. Grouping these learning outcomes into units based on these key activities.

Flexible procedures have been put in place to adapt the reference units to the reality of national qualifications:

The common reference units allow for a flexible adaptation to each national system. There are different ways in which the common description can be used:

- It makes up the national qualification: in this case all the reference units are retained at national level and there are no additional national units/learning outcomes;
- The reference units make up a part of a broader qualification: other units can thus be added to the common reference units;
- The reference units can be part of several qualifications: only part of the common reference units is thus retained and these make up a qualification in itself.

Reference units, as they have been defined, are coherent groupings of learning outcomes, but it is always possible to find other coherences. In this case, reference units can be grouped together to form larger units, or reference units can be subdivided to form a set of smaller units. Therefore, it is important to respect a few simple rules to maintain compatibility with other systems and enable mobility possibilities (illustrated below). To facilitate recognition from one system to another, it is not advised to divide learning outcomes from one reference unit to several units, together with learning outcomes from other reference units (see second example below).



#### Figure 3 | From reference units to wider national units (Recomfor project)

35 Recomfor project (preceded by the Comiter project) was a network project funded by the centralised actions of the Lifelong Learning Programme in the period 2008-2012. More information can be found here: http://www.recomfor.eu/

#### From reference units to smaller units



It is not advised to divide learning outcomes from one reference unit into several national units if this leads to building disparate units.

Learning outcomes from one reference unit can be spread out into several national units,

of the reference unit.

Combined solutions can be envisaged if the integrity of reference units is preserved.

Through this mechanism, qualifications can be compared across the systems and comparable units can be easily identified and recognised.

## Figure 4 | Common reference units and the relationship with national qualifications



Source: Recomfor

The SME Master project defines units that are common to the qualifications of Master Baker across the participating countries. These units and their learning outcomes are defined at a rather general level so as to enable for variations at national level. Furthermore, the list of units defined by the project represent the current status quo of the master craftsperson qualification. In order to take into account future developments of this qualification profile and to remain open to other countries, the learning outcome matrix can be extended by adding new units. The existing units must be regularly reviewed and, if necessary, amended or removed altogether.

The SME Master project observed that the job specification of master craftsperson are quite similar in all the partner countries: an entrepreneurial qualification for SMEs, combining commercial and personnel management skills as well as technical and vocationally-specific know-how.

Correspondingly, despite all differences across the countries, several overlaps were identified with regard to the structure and contents of master craftsperson training and qualifications. In addition to a vocationally-specific area (identical for all the master craftsperson education and training programmes of a country) in which particular emphasis is placed on imparting business administration as well as teaching and training skills, the training involves a technical area in which the trade-specific competences of a vocation or a sector are imparted.

In a first step, two major areas of activity – "management" and "technology" – are identified. These are then subdivided into several units. Following a further differentiation, ten units have been established corresponding to the essential areas of activities of the master craftsperson. These ten units are:

- Accounting and Controlling;
- Budgeting and Calculation;
- Entrepreneurship and Financial Management for SME;
- Human Resources Management;
- Tutoring;
- Marketing and Sales Management for SME;
- Production of Bakery Products;
- Food Safety and Hygiene;
- Quality and Security Management;
- Vocationally-specific Business Administration;

Consequently the learning outcome matrix represents those learning outcomes featured in the master craftsperson qualification of all SME Master partner countries. Specific competences of individual qualification profiles (e.g. foreign language skills in France) remain unconsidered. The result is thus a learning outcome oriented representation of the "smallest common denominator", i.e. of a "core qualification profile" of the Master Baker.

#### Source: SME Master<sup>37</sup>

<sup>36</sup> SME Master and SME Master Plus were pilot projects funded by the centralised actions of the Lifelong Learning Programme in the period 2006-2007 and 2008-2011. More information can be found here: http://sme-master.schnittsteller.de/ and here: http://www.ecvetprojects.eu/Projects/ProjectDetail.aspx?id=10

<sup>37</sup> http://stage.sunbeam-berlin.de/zdh/uploads/media/SME-Master\_Manual\_o1.pdf

The majority of partners engaged in the Credchem project all operate in qualifications systems which do not define qualifications in terms of units (for example Germany or Slovak Republic). However, there is still a willingness to use ECVET to facilitate mobility of learners and to support the quality of the mobility experience. The key to the project approach is:

- A shared methodology for identifying and describing learning outcomes that are part of the qualifications in all the partner countries; and
- The use of 'mobility units' or units for mobility.

The mobility units are a set of learning outcomes that are agreed and defined between two partner institutions (home and host). The learning outcomes of these units are present in the qualifications of both systems, but they do not form a unit at the system level. Therefore the 'mobility units', as used in the Credchem project, are a construct that supports learners mobility but they are not an entity that structures a qualification.

The 'mobility units' in this project cannot be validated and recognised in the home system as a unit. They are validated as part of the education and training pathway of a learner and the learning outcomes are only recognised once the learner achieved the full qualification.

The project partners perceive a great added value of using such 'mobility units' for learners' learning abroad:

- The quality of the mobility is enhanced: the agreement on and transparency of learning outcomes that a learner is to achieve abroad make it clear what the host institution is expected to 'deliver' for the learner(s).
- The common work on identifying learning outcomes and analysing qualifications in terms of groups of learning outcomes leads to development of mutual trust among competent authorities in the chemical sector.

Source: ECVET Magazine issue 4 (March 2011)<sup>38</sup>

# C11. ECVET unit descriptions

Part A presents the items that should be used to describe units of learning outcomes in order to support transnational mobility using ECVET. Two examples of such descriptions from ECVET pilot projects are presented here.

#### ECVET pilot project OPIR<sup>39</sup>

Generic Title of the Unit: Making Temporary Hairstyles

**Title of the Qualification:** The full title will depend of the country concerned – the occupation for which the qualification prepares is hairdresser

**EQF Level:** Not yet defined (depending on the qualifications system)

ECVET points: Will depend on the qualifications system

**Learning outcomes description:** The learning outcomes description of this unit is given in Section C.1 (Table 5) and is not repeated here.

**Criteria and indicators for assessment:** Table 13 below describes the assessment criteria and indicators. It is normally also accompanied by indication of the weighting of each competence in the assessment process (not presented here): points (percentage) are allocated if the assessor can respond yes to each assessment indicator and a minimum of 60 percent is needed for the learner to pass the assessment.

39 The OPIR project is a pilot project funded by the funded by the centralised actions of the Lifelong Learning Programme 2008 call for proposals. For more information see: http://www.ecvet-projects.eu/Projects/ProjectDetail.aspx?id=8

Competences	Criteria	Assessment indicators
Advise a new or established client in a re- sponsible and autonomous manner in order to	1. Adapted choice of the haircut to be made	1.1. The processes necessary to identify the characteristics of the hair are followed
agree an adapted hairstyle taking into account her wishes or characteristics.		<ol> <li>The questions asked enable to understand the wishes and the preferences of the client</li> </ol>
		1.3. The suggestions made take into account the needs and the characteristics of the client
Appropriately prepare the client for the reali- sation of the hair style, taking into account hy-	<ol> <li>Adapted choice of techniques in line with the chosen hairstyle</li> </ol>	1.1. The choice of techniques to be used corresponds to the identified characteristics of client's hair
giene, health and safety rules and procedures.		1.2. The choice of techniques has to enable to achieve the expected result
Taking into account the agreed hairstyle, se- lect the techniques necessary for its realisa- tion.		(hairstyle)
Undertake the preparation necessary for the chosen hair style, the devices, materials,	<ol> <li>Correct positioning and seating of the client in order to realise the chosen hair</li> </ol>	1.1. The client is seated in a way which enables the hairdresser to work in an ergonomic manner
products, respecting the hygiene, health and safety rules.	style	1.2. The protection equipment corresponding to the security and hygiene norms was correctly chosen for the client
Appropriately prepare the client for the reali- sation of the hairstyle, taking into account the security, hygiene and protection measures, with full autonomy.		<ol> <li>The client is equipped with the adequate protection equipment (apron, cape, etc.)</li> </ol>
Apply the necessary techniques corresponding to the hair form, the client expectations, hair	4. Correct preparation of tools, materials and products	<ol> <li>The selection corresponds to the tools necessary to carry out the chosen hairstyle</li> </ol>
type and the state of the hair, morphological		1.2. The selection corresponds to all materials necessary for the workstation
characteristics and the chosen haircut. Autonomously carry out the preparation for		1.3. The selection corresponds to all the products needed for the selected hairstvle
the agreed hairstyle, the tools, materials and		1.4. The verification of the correct functioning of tools and materials is done
products respecting the security, hygiene and		1.5. The verification of the good state of hygiene of material is done
protection measures, with full autonomy.		<ol> <li>The workstation is organised in a way that facilitates the use of tools, materials and products</li> </ol>
		1.7. All activities are realised respecting security and hygiene norms

Table 13 | Description of assessment criteria and indicators – qualification Hairdresser (pilot project OPIR)

Use the most adequate devices and products applying the appropriate ergonomic positions.	<ol><li>Correct carrying out of techniques in line with the chosen hairstyle</li></ol>	5.1. The dimension, the tension and the fixing of locks are adapted to the technique
		5.2. The progression is logical
adapted techniques, material and products		5.3. The gestures are synchronised
adapted to the agreed hairstyle.		5.4. The hair drying is adapted to the technique
		5.5. The hair is dry
		5.6. The use of materials and tools is done adopting adapted ergonomic
		positions
		5.7. The time dedicated to the hairstyle is correct (does not go beyond the time established)
		5.8. The security and hygiene rules are respected during the whole protocol
	6. Correct carrying out of brushing tech-	1.1. The result of brushing is meticulous and aesthetic
	niques in line with the chosen hairstyle	1.2. The final quality of the work is assessed by the learner who possibly makes
		additional final corrections
		1.3. The result is in line with what has been agreed
		1.4. The distribution of volumes is appropriate for the chosen hairstyle
	7. Correct use of products	1.1. The choice of cosmetic products is correct in line with the expected result
		1.2. The quantity and distribution of cosmetic products applied is adequate (in
		line with the length and the gensity of hair, the technique)
		1.3. The rules for storing, conservation and manipulation of cosmetic products were respected throughout the whole process.
		1.4. Flimination and recycling of cosmetic packaging were carried out respecting
		the environment.
Advise the products and treatments to be used in order to favour or maintain the results	8. Relevance of advice when it comes to products (treatments and brushing	1.1. The advice provided concerning products/treatments and their use in order to maintain the hairstyle are appropriate
	producto/ in calinetico and practicos	
Autonomously advise the practices and the	highrines	<ol> <li>Ihe advice provided concerning the practices to maintain the hairstyle is appropriate</li> </ol>
products in order to manitam the obtained hairstyle.		

**Note:** For another example of a description of assessment criteria for a unit see the presentation of the ECVET ASSET project<sup>40</sup> *Source:* OPIR

40 http://www.ecvet-projects.eu/Seminars/presentations.aspx?id=30
Table 14 below presents a concise presentation of a unit as designed in the ECVET pilot project SME Master.

Title of the Qualification:	Master Baker Craftsperson		
EQF Level:	Not yet defined		
Generic Title of the Unit:	Production of bread, small breads and rolls		
ECVET points	The number of ECVET points will differ from country to country depending on the relative weight of the given unit in a country. The ECVET points for this unit have not yet been defined by the project partners at this stage of development.		
Procedures and criteria for assessment	Note: these are not defined in the matrix that describes the qualifications in a common manner. They are described in the specific learning agreement.		
Learning outcomes:	<ul> <li>S/he is able to choose ingredients production methods and techniques for various types of:</li> <li>white, brown and mixed bread,</li> <li>traditional, specific and organic bread,</li> <li>small breads and rolls.</li> </ul>		S/he is able to de- sign, decorate and present these vari- ous types of bread, small breads and rolls according to customers' orders.
	S/he is able to apply the recipes.	S/he is able to dem- onstrate mastery in the production of these various types of bread, small breads and rolls.	S/he is able to modify existing reci- pes and production methods of bread, small breads and rolls.
			S/he is able to de- velop innovative reci- pes and production methods of bread, small breads and rolls.

 Table 14 | Presentation of a unit 'Production of bread, small breads and rolls' (SME Master)

Source: SME Master Plus

<sup>41</sup> SME Master and SME Master Plus were pilot projects funded by the centralised actions of the Lifelong Learning Programme in the period 2006-2007 and 2008-2011. More information can be found here: http://sme-master.schnittsteller.de/ and here: http://www.ecvetprojects.eu/Projects/ProjectDetail.aspx?id=10

### C12. Allocation of ECVET points to qualifications

To allocate ECVET points to a qualification, a reference learning pathway is chosen. This can be, for example, the most typical pathway (in terms of number of learners). Using the convention concerning ECVET points, the number of ECVET points for the qualification is defined (one year = 60 ECVET points). For example 180 points for a qualification that has a reference pathway which lasts two years. In consequence the qualification is allocated 180 ECVET points even though it can be prepared through a shorter or a longer pathway (see Figure 5 below).



Figure 5 | Allocation of ECVET points

For example in France, the upper-secondary qualification *Baccalauréat professionnel* (vocational baccalaureate) can be achieved through:

- Initial school-based VET normal duration of the programme is three years;
- Through apprenticeship training the normal duration is also three years;
- Continuing VET the duration varies depending on the prior experience of the learner or his/her previous qualification<sup>42</sup>.
- The full qualification can also be achieved through validation of non-formal and informal learning or by combining continuing training and validation.

Source: Ministry of National Education<sup>43</sup>

If the initial VET programme is taken as the reference pathway (this is actually the most commonly pursued route) the vocational baccalaureate qualification would have 180 ECVET points. This number of ECVET points would apply independent of the route followed to achieve the qualification.

43 http://www.education.gouv.fr/cid2552/le-baccalaureat-professionnel.html

<sup>42</sup> Information taken from the training offer catalogue of Greta Tertiaire Sud 77: http://www.greta-tersud77.org/CA-2008-2009.pdf

# C13. Allocation of ECVET points to units

#### *Relative importance of learning outcomes in units* (*Recomfor/Cominter*<sup>44</sup>)

The Cominter common methodology for credit points allocation was developed taking into account the fact that none of the countries involved in the project were using a credit point system. All main actors with roles in the certification process in the countries involved (employers in the trade sector, institutions responsible for certification process, training centres) actively participated in each phase of the project. This working method was also used for the development of the methodology for credit points allocation.

**Phase 1:** Employers and professional organisations involved in the project were consulted in order to establish the importance of each unit with regard to the job requirements (relevance and importance of the learning outcomes for the professional activities). This importance, expressed as percentage, reveals the relative weight of each unit leading to a hierarchy of units in the qualification.

**Phase 2:** Analysis of learning outcomes in each unit in terms of complexity from the point of view of the learning process. This analysis was carried out by the training providers on the basis of the hierarchy resulting from phase 1 (without modifying it). The goal was to fine-tune the percentage allocated to units.

Transcription of the reference allocation into national context:

- Credit points have been allocated to the common reference units: knowing that these units can be adapted in each national context and therefore may not be identified under exactly the same form in the national qualifications;
- To maintain the coherence of the common work, the transcription of points allocated to units at national level must not lead to a variation higher than 10% in comparison with the common definition.
- This relative value of the unit is expressed in the form of a percentage (as compared to all the reference units in the common profile). The reason for using a percentage is explained in the example from Cominter concerning the way reference units adapted at national level varies.

The convention, as expressed in a percentage, will only be effective once each national system has defined its own rules. Therefore, the allocation of ECVET points, as expressed in Table 15 below, is indicative and allows adjustments according to each system.

#### Table 15 | Guidelines for the relative allocation of ECVET points

Certification units Sub units	Credit points/%
UC1 International Marketing	20%
UC11 Market research and market planning on foreign markets	10
UC12 Business information system	10
UC2 Export Selling	20%
UC 21 Prospecting and customer/partner follow up	10
UC 22 Negotiating	10
UC3 Import Buying	20%
UC31 Identifying potential suppliers and sourcing	10
UC32 Organising the negotiation	10
UC4 Managing International Trade Operations	20%
UC41 Choosing and working with service providers	10
UC42 Managing the international business administration	10
UC5 Working in a Multicultural Context	20%
UC51 Business English language A	8
UC52 Business foreign language B	8
UC53 Intercultural management and communication	4
TOTAL	100

#### Table 16 | Example of applying the common methodology to the national context: Romania

Certification units Sub units	Credit points/%	ECVET credit points	Romanian credit points
UC1 International Marketing	20%	24	6
UC11 Market research and market planning on foreign mar- kets	10	12	3
UC12 Business information system	10	12	3
UC2 Export Selling	20%	24	6
UC 21 Prospecting and customer/partner follow up	10	12	3
UC 22 Negotiating	10	12	3
UC3 Import Buying	20%	24	6
UC31 Identifying potential suppliers and sourcing	10	12	3
UC32 Organising the negotiation	10	12	3
UC4 Managing International Trade Operations	20%	24	6
UC41 Choosing and working with service providers	10	12	3
UC42 Managing the international business administration	10	12	3
UC5 Working in a Multicultural Context	20%	24	6
UC51 Business English language A	8	10	2.5
UC52 Business foreign language B	8	10	2.5
UC53 Intercultural management and communication	4	4	1
TOTAL	100	120	30

Source: Recomfor<sup>45</sup>

45 http://www.ecvet-projects.eu/Projects/ProjectDetail.aspx?id=17

In the UK, England, Wales and Northern Ireland Qualifications and Credit Framework (QCF), all units must identify a credit value (described in terms of credit points). This must be based on an estimation of the learning time. The learning time is defined as the time taken by learners at the level of the unit, on average, to complete the learning outcomes of the unit to the standard determined by the assessment criteria.

The function of learning time is to provide an indication of the volume of learning related to the achievement of specified outcomes. Learning time is not an exact, scientific measure but a judgement made and agreed by those who are informed and experienced in the relevant area of achievement and who understand the contexts in which the learning can take place. The involvement of a panel or group of relevant experts will help the process and make sure that the credit value is recognised and accepted by the relevant stakeholders.

#### The concept of learning time is applicable to learning in diverse contexts.

This measure of learning time does not determine the time actually taken by any individual learner; the real time varies and is influenced by factors such as the individual's learning style and prior learning. It is important to emphasise that learning time is not the amount of time served for example, the number of hours a learner rehearses for a performance or the number of hours a learner spends training in the workplace. Nor is learning time the number of hours that a learner attends a course or the sum of hours of actual participation in learning activities.

The process of determining credit value focuses on the learning outcomes and assessment criteria in a unit. It does not focus the mode of delivery used to support the learners in achieving those learning outcomes nor the context of delivery.

For more information see the UK QCF *Guidelines for writing credit-based units of assessment for the Qualifications and Credit Framework*<sup>46</sup>

#### Relative importance of learning outcomes in units (OPIR<sup>47</sup>)

In the OPIR project each key activity for which the qualification prepares is given a certain weight, at the level of the partnership, which is expressed as the percentage of the overall qualification (similar to the example Cominter/Recomfor above). For example, for the qualification related to the occupation of automation, the group of key activities that correspond to maintenance is given the relative weight of 25% with regard to the full qualification. This is then translated into the qualifications systems of the partners in the project.

For example, in the French speaking community of Belgium this percentage is validated by representatives of the sector. When the units of the Belgian qualification are designed, each unit is allocated a number of ECVET points based on the relative weight it represents with regard to the full qualification and the total number of ECVET points which were allocated to the full qualification. In consequence, the unit of maintenance is allocated 30 ECVET points as the full qualification has 120 points in the French speaking community of Belgium.

46 http://www.ecvet-projects.eu/Projects/ProjectDetail.aspx?id=17

47 The OPIR project is a pilot project funded by the centralised actions of the Lifelong Learning Programme 2008 call for proposals. For more information see: http://www.ecvet-projects.eu/Projects/ProjectDetail.aspx?id=8

# C14. Example of a description of assessment criteria

The Finish example below shows the description of assessment criteria for the unit called 'Serving food and beverages' of a qualification in Restaurant and Catering Services.

In Finland, so called 'targets of assessment' describe the learning outcomes specific to a given unit. The assessment criteria are described in terms of learning outcomes at three levels of performance: satisfactory, good and excellent. These targets of assessment are the learning outcomes descriptions of units that are defined at national level. The more detailed learning outcomes for the education and training process are defined by the VET providers.

The skill requirements for the unit are:

#### The student or candidate

- maintains customer and work facilities
- receives customers and serves them for the duration of the service process
- knows the products being sold and their quality requirements
- presents, sells and offers food and beverages to customers and customer groups
- utilises sector-specific language skills in customer service
- functions in the sale of alcoholic beverages
- registers sales and bills customers
- tidies and organises customer and work facilities
- uses basic gastronomic terms
- ensures customer satisfaction
- assesses their own work and performance

All units of all qualifications are described according to four aspects: mastering the work process, mastering working methods, tools and materials, mastering knowledge upon which the work is based, and key skills for lifelong learning.

#### Demonstration of professional skills (Description)

The student or candidate earning their vocational qualification demonstrates their professional skills by working on customer service assignments at restaurants, employee cafeterias or for institutional kitchen customers in co-operation with other employees at the workplace. They maintain customer and work facilities, present, sell and offer á la carte and catered foods and beverages, serve alcoholic beverages, register and keep account of sales, and bill customers. The student or candidate earning their vocational qualification demonstrates their language skills in customer service situations in accordance with one of the assessment targets listed in the table above. Work is performed in such a manner that it is possible to determine whether the professional skills in question meet set requirements. In the skills demonstration the following at minimum must be shown:

- complete command of the work process
- complete mastery of work methods, equipment and materials
- complete mastery of knowledge upon which the work is based, presentation of food and beverages, acting in
  accordance with the principles of sustainable development, cost-effective and profitable performance, serving alcoholic beverages and a command of sector-specific language skills (sector-specific language skills are
  demonstrated in accordance with the language background of the individual)
- complete command of key skills for lifelong learning

Those portions of the professional skills required in any given module, that cannot be shown in the skills demonstration or qualification exam, will be supplemented with additional skills assessments, such as interviews, assignments and other methods.

Target of assessment	Assessment criteria		
1.Mastering the	Satisfactory T1	Good H2	Excellent K3
work process	The student or candidate		
Serving customers	maintains, tidies and organises customer and work facilities	maintains customer and work facilities and keeps them tidy for the duration of their shift	independently maintains customer and work facilities according to reservations made and given needs as well as keeps facilities tidy for the duration of their shift
	receives customers in a friendly manner in accordance with the establishment's service model	receives customers in a friendly manner in accordance with the establishment's service model	receives customers in a friendly manner in accordance with the establishment's service model and based on any given situation
	observes working order and schedules in accordance with set guidelines	observes working order and scheduling independently	observes working order and scheduling smoothly in accordance with customer orders and needs
••••••			
Performance self-assessment	assesses the strengths and weaknesses of their own performance	assesses the strengths of their own performance and opportunities to work professionally	independently assesses the strengths of their own performance and opportunities to work professionally
Target of assessment	Assessment criteria		
2.Mastering	Satisfactory T1	Good H2	Excellent K3
working methods, tools and materials			
Use of food and beverage service methods and techniques	is familiar with the products for sale, recommendation lists, orders and knows how to use the appropriate serving techniques	is familiar with the products for sale, recommendation lists, orders and serving techniques	has independently familiarised themselves with the products for sale, recommendation lists, orders and serving techniques

#### Table 17 | Extract from the description of assessment criteria for the unit 'Serving food and beverages' (Finland)

	sets customer tables in accordance with establishment guidelines and handles dishes and silverware hygienically	sets customer tables in accordance with establishment guidelines and given needs as well as handles dishes and silverware hygienically	independently sets customer tables in accordance with establishment guidelines and given needs as well as handles dishes and silverware hygienically and carefully
	serves dish portions or from a serving dish under supervision	serves dish portions or from a serving dish	serves dish portions or from a serving dish in co-operation with kitchen staff according to need
	uses a serving tray	uses a serving tray independently according to need	adeptly and smoothly uses a serving tray according to need
Registering sales and keeping accounts	registers sales and bills customers	adeptly registers sales and bills customers	independently registers sales and bills customers quickly in varying work situations
	keeps sales accounts, under supervision	keeps sales accounts, in accordance with set guidelines	keeps sales accounts independently
Target of assessment	Assessment criteria		
3. Mastering	Satisfactory T1	Good H2	Excellent K3
knowledge upon			
which the work is based	The student or candidate		
which the work	The student or candidate is familiar with the food and beverage products being sold and recommendations to the extent that they can present them to the customers for each dining situation and recommend suitable beverages for any given food as well as explain the origin of the products	is familiar with the food and beverage products being sold and recommendations to the extent that they can adeptly present them to the customers for each dining situation and recommend suitable beverages for any given food as well as explain the origin of the products	is familiar with the food and beverage products being sold and recommendations to the extent that they can actively present them to the customers for each dining situation and recommend suitable beverages for any given food as well as comprehensively explain the origin of the products
which the work is based Presenting food	is familiar with the food and beverage products being sold and recommendations to the extent that they can present them to the customers for each dining situation and recommend suitable beverages for any given food as well as explain the origin of the	food and beverage products being sold and recommendations to the extent that they can adeptly present them to the customers for each dining situation and recommend suitable beverages for any given food as well as explain	products being sold and recommendations to the extent that they can actively present them to the customers for each dining situation and recommend suitable beverages for any given food as well as comprehensively explain the origin of the

Cost-effective and profitable performance	under supervision, takes time usage and other resources into consideration in the performance of their duties	in accordance with set guidelines, takes time usage and other resources into consideration in the performance of their duties	independently takes time usage and other resources into consideration in the performance of their duties toward promoting the profitability of their organisation
	is familiar with the sector cost structure and works in a cost-effective manner under supervision	is familiar with the sector cost structure and works in a cost-effective manner	is familiar with the sector cost structure and works in a cost-effective and productive manner
Acting in accordance with the principles of sustainable development	observes workplace operating methods that are compliant with the principles of sustainable development	observes workplace operating methods that are compliant with the principles of sustainable development	in a responsible manner. observes workplace operating methods that are compliant with the principles of sustainable development
Target of assessment	Assessment criteria		
4. Key skills for	Satisfactory T1	Good H2	Excellent K3
lifelong learning The student or candidate			
	The student or candidate		
Learning and problem-solving	The student or candidate plans their work and receives feedback	plans their own work, receives feedback and acts upon it	plans their own work, receives feedback and acts upon it
Learning and	plans their work and	receives feedback and	
Learning and	plans their work and receives feedback requires supervision in new situations or when changes occur in the	receives feedback and acts upon it adapts to new situations or when changes occur in the operating environment, in accordance with set	and acts upon it when changes occur in work, knows how to act independently according to the given situation and, if necessary, can adapt their

Source: Finish National Board of Education

# C15. Example of validation and recognition of learning outcomes that do not correspond to a full unit in the home qualifications system

As noted in Part A of this document, the length of the geographical mobility period does not always enable learners to achieve the full unit abroad. Often a longer period would be required to fully master the expected learning outcomes.

The ECVET pilot projects face this issue and some have proposed solutions which are presented here.

#### Validation of mobility units as elements of continuing assessment (ECVET ASSET<sup>48</sup>)

As presented in Section C.10 the project ECVET ASSET is designing units that are 'open to mobility' which means, among other things, that the number and complexity of learning outcomes are compatible with the length of the mobility period as well as the moment in which learners undertake part of their learning abroad (in terms of pre-requisites). This leads to the creation of units which combine a relatively small number of learning outcomes provided the pre-requisites are met.

The project brings together partners from different countries and each partner has to clarify how will these units be validated and recognised in their own systems. In France, for example, the mobility unit on vehicle stability management systems is part of a larger unit. The learning outcomes achieved and assessed during the mobility period will hence be validated as an element of the continuing assessment (contrôle en cours de formation<sup>49</sup>). In the qualifications system concerned it is possible to achieve some units through continuing assessments. The continuing assessment is composed of a limited number (defined in the qualification regulation) of assessments which each time evaluate fully achieved learning outcomes (as compared to learning outcomes that are pre-requisites for further learning outcomes defined in the qualification). A mobility unit, like the one designed in the project ECVET ASSET, can be validated as one of the assessments that constitute the continuing assessment.

#### Assessing the full unit abroad (OPIR<sup>50</sup>)

Another approach is envisaged by the project OPIR. In this project the mobility period will be situated at a point in time where learners will be close to having achieved the learning outcomes expected in the unit concerned. During the mobility period they will complete the learning process for these learning outcomes. The assessment abroad will concern the whole unit and not only the learning outcomes achieved during mobility.

Consequently, even though the mobility period will concern only a part of the unit, the full unit will be assessed and this assessment will be validated and recognised when the learner returns to his/her home institution

<sup>48</sup> ECVET ASSET was a pilot project funded by the centralised actions of the Lifelong Learning Programme in the period 2008-2011. More information can be found here: http://www.ecvet-projects.eu/Projects/ProjectDetail.aspx?id=9

<sup>49</sup> For more information on this modality of summative assessment see eduscol – in French only (http://eduscol.education.fr/cid47722/ controle-en-cours-de-formation.html)

<sup>50</sup> The OPIR project is a pilot project funded by the funded by the centralised actions of the Lifelong Learning Programme 2008 call for proposals. For more information see: http://www.ecvet-projects.eu/Projects/ProjectDetail.aspx?id=8

## C16. Items in a Memorandum of Understanding

There is not yet an agreed template or definite list of items to be included in the MoU and the ongoing pilot projects are experimenting different approaches (from a 'minimalist' to a much more detailed version). Table 18 below illustrates the main items that can be found in a selection of the ongoing ECVET pilot projects.

As the ECVET pilot projects progress in their work examples of MoU are being added to the Toolbox of the project web-site<sup>51</sup>.

Items present in MoU of most projects	Comment
Introduction – What is the MoU about and what is its status	
Identification of competent authorities that are signing the MoU (name of institution, address, etc.)	Some projects also identify the role of the person signing
Description of the competent authority signing the MoU (what is their competence within the qualifications system)	Some projects use a textual description; some refer to the functions of competent authorities as described in the ECVET Questions and Answers
The qualifications concerned by the MoU	The level of detail in which the qualifications are actually described in the MoU varies: some only mention the titles in the partner countries others also include the description of units that will be the subject of mobility in an Annex
Units of learning outcomes	Some projects mention only the titles of units identified as common, others include the description of learning outcomes in an Annex. A few MoU do not refer to units (this figures only in the LAs)
Duration of the validity of the MoU	
Signatures and formulae through which the institutions accept the conditions in the MoU	
Additional items present in some MoU	Bustants subtably souther that a subset
Additional terms present in some moo	Projects which mention this aspect
Identification of VET providers who are entitled to run mo- bility using ECVET within the framework of the MoU	ASSET VaLOGReg (the type of providers not necessarily the exact names of institutions)
Identification of VET providers who are entitled to run mo-	ASSET VaLOGReg (the type of providers not necessarily the exact
Identification of VET providers who are entitled to run mo- bility using ECVET within the framework of the MoU Information about the nature and/or duration of mobility	ASSET VaLOGReg (the type of providers not necessarily the exact names of institutions) Aerovet
Identification of VET providers who are entitled to run mo- bility using ECVET within the framework of the MoU Information about the nature and/or duration of mobility exchanges The division of responsibilities with regard to mobility be-	ASSET VaLOGReg (the type of providers not necessarily the exact names of institutions) Aerovet M.O.T.O Aerovet
Identification of VET providers who are entitled to run mo- bility using ECVET within the framework of the MoU Information about the nature and/or duration of mobility exchanges The division of responsibilities with regard to mobility be- tween the home and the host organisation (who does what) Commitment to certain quality principles for different as-	ASSET VaLOGReg (the type of providers not necessarily the exact names of institutions) Aerovet M.O.T.O Aerovet M.O.T.O Aerovet M.O.T.O
Identification of VET providers who are entitled to run mo- bility using ECVET within the framework of the MoU Information about the nature and/or duration of mobility exchanges The division of responsibilities with regard to mobility be- tween the home and the host organisation (who does what) Commitment to certain quality principles for different as- pects of mobility	ASSET VaLOGReg (the type of providers not necessarily the exact names of institutions) Aerovet M.O.T.O Aerovet M.O.T.O Aerovet M.O.T.O Recomfor Aerovet – also the information about different levels of performance to be used by assessors

#### Table 18 | What do ECVET pilot projects include in their MoU?

Note: LA refers to learning agreement

# C17. Items in a Learning Agreement

Like for the MoU, there is not yet an agreed template or definite list of items to be included in the learning agreement and the ongoing pilot projects are experimenting different approaches. The differences and commonalities based on a sample of projects are presented in Table 19 below.

As the ECVET pilot projects progress in their work examples of learning areements are being added to the Toolbox of the project web-site<sup>52</sup>.

Items present in the LAs of most projects	Comment
Introduction – what is the LA and how to use it	
Identification of the learner concerned by the LA	
(name and other details)	
Identification of the home and host institutions (name of	A few LAs also include a description of their roles
institution, etc.)	
Qualification being prepared by the learner	
Titles and descriptions of unit(s) of learning outcomes that	This information is sometimes in an Annex
are concerned by the specific mobility exchange (what the	
learner will learn during mobility) and the related ECVET	
points*	
Information about the assessment procedure for the specific	Several projects include an assessment grid to be used by
learner (who will assess, when and how)	the assessor in the LA
Basic information about the mobility period: when will it	The nature of information on this point varies
takes place, who is the contact person	
Signatures of the three parties (host and home institution	
and the learner)	
Additional items present in some LAs	Projects which mention this aspect
The learning activities the learner will take part in during the	M.O.T.O
mobility	Recomfor
Practical aspects concerning the mobility such as: language	ASSET
requirements, costs, housing, insurance, etc.	VaLOGReg
	Recomfor
Overview of who does what (home and host institution)	Credchem
	Recomfor
Obligations of the different parties	ASSET
	Recomfor

#### Table 19 What do ECVET pilot projects include in their learning agreements?

\* Depending on the way ECVET points are used in the projects

# C18. The possible use of Europass mobility as personal transcripts

The Europass Mobility is a record of any organised period of time (called Europass Mobility experience) that a person spends in another European country for the purpose of learning or training. This includes for example:

- a work placement in a company;
- an academic term as part of an exchange programme;
- a voluntary placement in a non-governmental organisation (NGO).

The mobility experience is monitored by two partner organisations, the first in the country of origin and the second in the host country. Both partners agree on the purpose, content and duration of the experience; a mentor is identified in the host country. The partners may be universities, schools, training centres, companies, NGOs, etc. *Source:* Europass web-site<sup>53</sup>

The Europass Mobility already contains basic information that identifies the learner, the host and the home institutions. It also already contains a description about the skills and competences acquired during mobility (see Table 20) including key competences (such as language or ICT). The use of ECVET will enable the referencing of this record to the learning outcomes and units of qualifications in the home system. The Europass Mobility template also currently contains the possibility of recording information about courses passed during the mobility period. However, information about courses may be replaced with information about units of learning outcomes and also record the ECVET points for the given unit.

#### Table 20 Extract from the Europass Mobility template

	Ę	5.A DESCRIPTION OF SKILLS AND COMPETENCES ACQUI EUROPASS MOBILITY EXPERIENCE (NO)					
	Activities/tasks carried out						
(29a) <sup>(*)</sup>							
	Job-related skills and con	npetences acquired					
(30a)	Possible to use the ECV	/ET description					
	Language skills and com	petences acquired (if not included under 'Job-related skil	lls and competences')				
(31a)	Possible to use the ECV	/ET description					
	Computer skills and com	petences acquired (if not included under 'Job-related skil	lls and competences')				
(32a)	Possible to use the ECV	/ET description					
	Organisational skills and	competences acquired (if not included under 'Job-related	d skills and competences')				
(33a)	Possible to use the ECV	/ET description					
	Social skills and compete	ences acquired (if not included under 'Job-related skills a	nd competences')				
(34a)	Possible to use the ECV	/ET description					
	Other skills and competences acquired						
(35a)	) Possible to use the ECVET description						
	Date	Signature of the reference person/mentor	Signature of the holder				
(36a) (*)		(37a) <sup>(*)</sup>	(38a) <sup>(*)</sup>				
	dd mm yyyy						
	NB : This table is not valid without the signatures of the mentor and of the holder of the Europass Mobility. Headings marked with an asterisk are mandatory.						

# C19. Example of the application of ECVET and the use of credit transfer and accumulation

This final section of this document presents a small sample of examples written as 'real life stories' that illustrate how ECVET can be applied in practice to support the learning pathways of individuals.

#### Individual learning pathway of Simo the Snowboarder - Cook (Finland)

Example prepared by Hanna Autere (Finnish National Board of Education)

As presented in Section C.7 the Finish qualifications system facilitates the development of individualised learning pathways by combining compulsory, optional as free choice units. The story of Simo the snowboarder below shows how these technical concepts can fit into the learning pathway of a young person.

#### Figure 6 | The learning pathway of Simo (the Snowboarder – Cook) and credit transfer and accumulation



Simo has been an active snowboarder since he was seven years old. Now he would like to combine his favourite hobby with studies and work by finding a school which is located close to the ski slopes. He will begin his studies at Levi Institute, Lapland Vocational College, therefore he now has the possibility not only to snowboard, but to work, study and get a vocational qualification at the same time at Levi ski resort, where the school is located.

In the autumn, Simo starts his studies aiming at the Vocational Qualification in Hotel, Restaurant and Catering Services. In other words he wants to become a cook. The first unit that he prepares is a compulsory one and it is called **'Entering labour market in catering and hospitality'**. Simo demonstrates his competence in a skills test, which is held at a small bistro. After Christmas he continues his studies at the Levi institute. The next unit he prepares is called **'Lunch production'**. It is part of the study programme for cooks and therefore compulsory for Simo. The studies at the school have been planned in accordance with the ski seasons. Therefore it is possible for Simo to work during the ski season at the lunch restaurant of the ski resort and to take the skills demonstration test in April before the ski season is over. Simo is in good shape. He has had the possibility to snowboard every day during the whole spring when he has not been studying or working. He gets a job for the summer season in the Turku/Åbo archipelago, where he is working at a small cafe. The menu of the café also includes lunch. Now Simo can also extend his competence to customer service. Therefore he agrees with the school to give a skills demonstration in August for the unit called **'Cafe services'**, which is an optional unit for him. In the autumn he continues his studies at school, where they are organising the second compulsory unit of the study programme for cooks: **'Meal production'**.

Simo gets another job at the ski resort for the Christmas season. At the restaurant he demonstrates his competence in **'Meal production'**. Now that Simo has passed skills tests in all the compulsory units of the vocational qualifications he gets interested in the higher peaks of the mountains. He manages to get a job at the Austrian Alps for the ski season. He works in the evenings in the kitchen of a restaurant, but the days he spends snowboarding. Before going on a mobility period to Austria, Simo signs a learning agreement at his home training centre. After signing the agreement he knows exactly how this on-the-job-period aboard will be recognized as part of his qualifications. Simo's teacher has agreed with the Austrian employer on the targeted learning outcomes and how they will be assessed. In the negations it becomes obvious that Simo's tasks at the workplace are rather demanding and the learning outcomes would correspond to the optional unit of the qualification, which is called **'A la carte meal production'**.

Simo decides to stay at the Alps until summer. The Austrian restaurant owner has decided that Simo can continue working in his restaurant. One reason for staying in the Alps a little longer might be that Simo has met an Italian girl Giulietta, who is also a student in the same field and is also working there. Giulietta is an adventurous girl who is also an excellent snowboarder and is not afraid of new challenges.

After the summer Simo decides to return back home to continue his studies. Together with Giulietta they wonder, if Giulietta could come to Finland either to study or to work. Now Simo has the competence to work as a cook and he would also be able to work in a small restaurant or in sales and customer service of a bar. He wants to extend his competence and decided to give skills demonstration in **'Beverage sales and service'**. 

Dossier 2011.3115				
Titre de travail: ECVET Questions and answers				
Langue	Numéro de catalogue	ISBN-13	DOI	
EN NC-30-11-070-EN-N 978-92-79-19916-5 10.2766/15437				





