BE-TWIN TOOL KIT
BRIDGING ECVET AND ECTS
A GUIDE FOR PEDAGOGICAL STAFF
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(English version)
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THE BE-TWIN PROJECT

Main objectives
Be-TWIN is one of the 10 pilot projects selected by the European Commission in 2008 in order to test and implement ECVET, the European Credit for Vocational Education and Training. The project brings together 13 partners from 8 EU countries, representing the great diversity of the European vocational education and training and higher education communities. Their goal is to explore the links and relations between ECVET and ECTS.

The ECTS (European Credit and Accumulation System) has become one of the main pillars of the Bologna process towards a common European Higher Education Area. More recently, ECVET (European Credit for Vocational Education and Training) has been designed as a response to the peculiarities of vocational education and training (VET). A central issue is to define the connections between these tools. Indeed, higher education and VET are often interconnected and, in the context of lifelong learning and in order to favour vertical mobility, especially for those shifting from VET to higher education, this connection has to be explored.

The Be-TWIN project aims at tackling this issue by testing a common implementation of both credit systems to achieve the following objectives:

- improve learners’ and workers’ horizontal and vertical mobility
- foster a common approach to education and training in Europe and the creation of a European area for lifelong learning.
learning, thus linking the benefits of both systems and enhancing mutual understanding
- develop transferability, integration and recognition of qualifications in Europe.

In order to address the need for a dialogue between higher education and VET, the project will put into practice innovative translation tools between both systems, which will help in reaching common goals of transparency, mobility and recognition. A common matrix linking ECVET and ECTS has been shaped through the publication of the Methodological Guide: “ECVET-ECTS: Building bridges and overcoming differences”. In parallel, the developed model is being applied on existing training programmes in VET, higher education and continuing training. This trial implementation phase aims at experimenting the ECVET-ECTS matrix in three case studies throughout Europe in the fields of the Plastics Industry, Hospitality Management and Training of trainers. The proposed implementation wishes to go beyond sheer dichotomies and to contribute to favouring the geographical and horizontal mobility of learners across Europe.

The Methodology developed: A model based on the transparency and readability of learning outcomes and learning activities
The Methodological Guide, “ECVET-ECTS: Building bridges and overcoming differences”, strives to suggest a possible approach to coordinate ECVET and ECTS. The main innovation of the guide is a double entry table, the “matrix”, whose common denominator is the learning outcomes. The matrix is meant to serve as a transparency tool and a translation device. It enables to link learning outcomes and learning activities and, in this way, facilitates translation from an output-based system to an outcome-based
system (and vice-versa). As a common interface, it emphasises learning outcomes and the secondary layers of information of the systems, namely the workload for ECTS and the relative importance of the units of learning outcomes within the qualification for ECVET (as expressed in credit points). The Be-TWIN matrix allows training providers using either the ECTS or the ECVET systems to present their training offer more transparently. Both the learning outcomes (grouped into units) and the corresponding learning activities must be recorded in on the matrix. This should enable training providers using ECVET to better link the learning outcomes with the training offer they propose, and higher education institutions using ECTS to reshape their training offer according to an output-based system. Overall, the idea is to build bridges between the two segments of education and training and give them a common language to communicate with in order to be of use to learners across Europe. The objective is, indeed, to favour the vertical mobility of learners from one system to another, since the model is expected to benefit those wishing to have their previous learning recognised when shifting from one learning context to another (from VET to higher education or vice versa). A condition for that is that the training providers present their training offer and qualifications more transparently, thus favouring recognition of prior learning. In order to use the matrix, training providers have to follow four steps:

1. depict the qualification by filling in the grid with the single learning outcomes corresponding to the job profile and then grouping them into units
2. depict the qualification by filling in the grid with the associated learning activities
3. cross which learning activities contribute to which learning outcomes in order to identify the overlapping of the training pathway and of the outputs of the qualifications expressed in learning outcomes

4. allocate the ECVET points to the units of learning outcomes respecting the ECVET specifications, or allocate ECTS credit points to the learning activities, taking into account the workload, or, in some cases, allocate both types of credits:
HOW TO FILL IN THE TABLE: 4 STEPS

Move your mouse over the icons to reveal the corresponding information

**Depict the qualification by filling in the grid with the learning outcomes**

In order to fill in the matrix, one has to be able to depict the qualification in terms of learning outcomes, if possible related to a professional standard or at least having consulted employers about the expected skills, knowledge and competences for the specified position(s). In the framework of higher education degrees, learning outcomes are not traditionally designed in line with one particular job profile. In this context, the degree's qualification profile might embrace a wider range and scope of potential perspectives upon completion. After having identified the learning outcomes, these should be grouped into coherent units in order to respect the ECVET specifications.

**Depict the qualification by filling in the grid with the associated learning activities**

Learning activities (courses, internships, theses, practical experimentations, on the job training etc.) are crucial in the framework of the Be-TWIN project since the project’s aim is to enable a dialogue between vocational education and training and higher education. Therefore, learning pathways as the result of a sequence of learning activities, have to be addressed. Flexible learning pathways can furthermore be seen as one building block of contemporary higher education. Learning activities, just like learning outcomes, are contextual components of any qualification. However, both (LOs and LAs) are relevant only in a specific temporal context, since they are not set in stone. For example, the evolution of the job market's needs in terms of knowledge, skills and competences, or didactical innovations might spark changes in both of these categories.

**Cross which learning activities contribute to each learning outcome in order to identify the overlapping of the learning pathway and the outputs of the qualification described in learning outcomes**

This step is the very core of the work and necessitates the involvement of the pedagogical team as a whole (teachers, professors, training programme managers, learners etc.) in order for the process to be done accurately and to be fine-tuned.

**Allocate the credit points to either the units of learning outcomes (ECVET points) or the learning activities (ECTS points) or to both (ECVET and ECTS).**
Partnership
A large consortium of 13 partners from 8 EU countries has been put together to achieve these objectives. It includes representatives from all sectors of education and training: universities, VET providers, certifying authorities, chambers of commerce and business representatives.

Chambre de commerce et d’industrie de Paris – Applicant Organisation

Stratford-upon-Avon College

Angel Kanchev University of Ruse
Rectorat de Paris

Fédération de la Plasturgie

Fondazione “G. Rumor” – Centro Produttività Veneto

Ufficio Scolastico Regionale per il Veneto – UST di Venezia
UNICA – Network of Universities from the Capitals of Europe

Staffordshire University – Staffordshire, Stoke-on-Trent, Shropshire, Telford & Wrekin Lifelong Learning Network

ZDZ - Zakład Doskonalenia Zawodowego w Kielcach
The partnership is a very important dimension of the project, since it constitutes a unique occasion to foster dialogue and mutual understanding between sectors of education and training that are not necessarily used to working together. This dimension constitutes an added value to the project, since, in the long term, all institutions dealing with ECVET and/or ECTS will have to cope with the issue of their linkage. Be-TWIN thus opens up the way for a broader dialogue Europe-wide.
ECVET - THE EUROPEAN CREDIT SYSTEM FOR VOCATIONAL EDUCATION AND TRAINING

Overview

What is ECVET?
ECVET, the European Credit for Vocational Education and Training, is a European system of accumulation and transfer of credits. It has been designed to enable the recognition of the learning outcomes achieved by an individual engaged in a learning pathway leading to a qualification.

It favours the documentation (attesting and recording), validation and recognition of achieved learning outcomes acquired, in particular in the framework of a transnational mobility, in both formal VET and in non-formal contexts. It is centred on the individual and based on the learning outcomes approach, defined in terms of the knowledge, skills and competences necessary for achieving a qualification.

ECVET is a European tool which will foster:

- the transfer, recognition and accumulation of assessed learning outcomes of individuals
- the transparency of learning outcomes achieved
- transnational mobility and portability both at national and European levels
- the development of flexible and individualized pathways and the recognition of learning outcomes acquired through non-formal and informal learning.
Who are the beneficiaries?
ECVET is expected to serve

- Individuals (learners, apprentices, adults, job seekers, etc.), making it possible for them to fully benefit from periods of transnational mobility
- Competent authorities, awarding bodies and VET providers responsible for the design and implementation of qualifications, contributing to the improvement of the legibility, the transparency and the quality of processes concerning the validation of vocational education and training
- VET providers, enabling:
  - the definition of clear and precise learning objectives and the design of a more attractive VET supply and provision
  - the cooperation at international level
  - the organisation of learners’ mobility
- Employers, enabling
  - A more accurate design of training courses which answers to the training needs of employees
  - A fine tuned matching between the companies’ needs and the content of the qualifications
  - A clearer and more transparent training offer among the EU Member States, especially towards employers.

How is it implemented?
The adoption and implementation of ECVET in the participating countries is voluntary. The adoption of the Recommendation by the European Parliament and the Council in 2009 has created the
preliminary conditions for the implementation of ECVET. Until 2012, ECVET will be tested and experimented in different European, national and sectoral contexts and systems. By 2012, Member States are expected to have created the necessary conditions and measures for the gradual implementation of ECVET. In 2014, the European Parliament and the Council will review and evaluate the first stage of the ECVET implementation and, if required, readjust the text of the Recommendation.

Where is it implemented?
The ECVET implementation concerns all 27 member states of the European Union. It is being put in place to enable learning outcomes achieved in vocational education and training systems as well as in non formal and informal learning contexts (work, voluntary activities or leisure).
ECVET KEY TOPICS

Technical specifications
ECVET is based:

- on the division of qualifications into units
- on the description of the contents of units in terms of knowledge, skills and competences (expected learning outcomes).

A unit of learning outcomes is a component of a qualification, consisting of a coherent set of knowledge, skills and competence that can be assessed and validated. A unit of learning outcomes should include: the generic title of the unit; the EQF level of reference (usually, but not necessarily always the same as that of the qualification); the detailed knowledge, skills and competences that will be assessed; the criteria of evaluation; the relative weight of a unit in comparison to the whole qualification.

Transfer and accumulation of learning outcomes:
1. Accumulation and capitalisation function: ECVET will make it possible for any person to accumulate, capitalise and put forward his/her achieved learning outcomes and to claim for their recognition and validation. At European level, ECVET will furthermore enable an individual to accumulate his/her learning outcomes achieved abroad in the framework of a transnational mobility.

2. Transfer function: ECVET will make it possible to transfer learning outcomes achieved in one context into another context. In order to be transferred, learning outcomes have to be assessed. The outcome of the assessment is recorded and
constitutes a credit. On the basis of the assessed outcomes, the
credit can be validated and recognised by another competent
institution. The transfer process follows three stages:

- The hosting institution assesses the learning outcomes
  achieved and awards credit to the learner. The learning
  outcomes achieved and the corresponding ECVET points
  are recorded in a learner's ‘personal transcript’
- the ‘sending’ institution validates the credit as a suitable
  record of the learner's achievement
- the ‘sending’ institution then recognises the learning
  outcomes that have been acquired; this recognition
  gives rise to the award of the units and their
  corresponding ECVET points, according to the rules of
  the ‘home’ system.

Figure 1: The process of assessment, validation and recognition of learning outcomes
**ECVET points:**
They provide complementary information about qualifications and units in numerical form. To be in line with the ECTS system, a convention is used according to which 60 points are allocated to the learning outcomes expected to be achieved in a year of formal full time VET.

**Allocation of ECVET points:**
It usually has two phases: ECVET points are allocated first to a qualification as a whole and then to its units. For a given qualification, one formal learning context is taken as a reference and, on the basis of the convention, the total number of points is assigned for that qualification. From this total, ECVET points are then allocated to each unit according to its relative importance within the qualification.

**Criteria to allocate credit points**
- the relative importance of the unit of learning outcomes for the labour market, for progression to other qualification levels or for social integration
- the complexity, scope and volume of learning outcomes in the unit in relation to the learning outcomes of the overall qualification
- the effort necessary for a learner to achieve the unit’s required learning outcomes (estimation of the learner’s effort, workload or learning time needed to achieve expected results)
**Accumulation of credit points**

Credit accumulation is a process through which learners can acquire qualifications progressively by successive assessments and validation of learning outcomes. It is based on qualification systems’ rules and requirements on accumulation. These rules define which learning outcomes are accumulated towards which qualification and how they are assessed and validated. 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.

**ECVET Tools**

- **Memorandum of Understanding (MoU):** It is an agreement between competent institutions which sets the framework for credit transfer. It formalises the ECVET partnership by stating the mutual acceptance of the status and procedures of competent institutions involved. It also establishes partnership’s procedures for cooperation.

- **Learning Agreement:** It is concluded by the authorised institutions and a specific mobile learner in the framework of a MoU. It should specify the particular conditions for a period of mobility, such as information about the learner, the duration of the mobility period and the learning outcomes expected to be achieved or competences to be developed and the associated ECVET points. It should also clarify that, if the expected learning outcomes have been achieved and positively assessed according to agreed criteria by the hosting country, the home institution will
validate and recognise them as part of the requirements for obtaining the qualification.

- Personal transcript: It contains information on learner’s assessed learning outcomes, units and ECVET points awarded. It also specifies the identity of the learner and the competent institutions that awarded, validated and recognised the learner’s credit.

Useful texts about ECVET

- RECOMMENDATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 June 2009 on the establishment of a European Credit System for Vocational Education and Training (ECVET)
- “Get to know ECVET better - Questions and Answers”
- Leaflet on ECVET
- “The development of ECVET in Europe” – CEDEFOP Working paper
ECTS – THE EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM

Overview

What is ECTS?
ECTS is a credit transfer system based on the calculation of the time students are expected to spend to acquire given learning outcomes. It was originally introduced in 1989 as a pilot scheme in the framework of the Erasmus programme with the aim of facilitating the international mobility of students and the recognition of the learning periods spent abroad. During the two last decades, it has undergone significant modifications: first of all, it moved from a credit transfer system to a credit transfer and accumulation system. Today, the ECTS system finds itself in a transition period between the traditional approach according to which the credit are allocated to the components of the curriculum based on the workload, and an output based system taking into account learning outcomes in the allocation of credits.

Who is in charge of ECTS and who are the beneficiaries?
ECTS is steered by the member states (ministries of higher education) and coordinated by the European Commission, which has for instance established a network of experts (ECTS/DS) and developed the ECTS and DS labels to recognise excellent application of either system.
Although ECTS can help recognition of a student’s studies between different institutions and national education systems, it has to be underlined that higher education providers remain autonomous
institutions. The final decisions are the responsibility of the relevant authorities: professors involved in student exchanges, university admission officers, recognition advisory centres (ENIC-NARIC), ministry officials or employers, etc. The beneficiaries of the ECTS system are mainly the students who can have their training periods abroad recognised. Also, the higher education institutions across Europe benefit from the enhanced transparency and facilitated recognition among the higher educational systems.

**Why was ECTS implemented?**
The main objective of ECTS was to increase the mobility of students in Europe by enabling their learning experiences abroad to be recognised and incorporated into their original training programme. The idea is to make teaching and learning in higher education more transparent across Europe and to facilitate the recognition of the study periods. The system allows for the transfer of learning experiences between different institutions, enhanced student mobility and more flexible routes to gain degrees. It also aids curriculum design and quality assurance.

**How was it implemented?**
The ECTS has become a central tool in the Bologna Process, which aims at making national higher educational systems converge. It was implemented by the majority of higher education institutions of the countries taking part in the Bologna Process and in most of these countries, it is embedded in the legislation. In the remaining countries, ECTS is widely supported, in some cases financially. However, so far ECTS implementation practices vary in the different European countries. In some of them the ECTS credit calculation is based on student workload and learning outcomes, in others it is based on student workload only. Some countries define ECTS on the
sole basis of contact hours, others on both contact hours and student workload.

**Where was it implemented?**  
Currently, the Bologna Process for higher education involves 47 countries\(^1\) and ECTS is implemented in the majority of higher education institutions of these countries.

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\(^1\) 47 Countries participate in the Bologna Process: Albania, Andorra, Armenia, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Vatican City, Croatia, Cyprus, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Norway, Holland, Poland, Portugal, United Kingdom, Czech Republic, Former Yugoslav of Macedonia, Slovak Republic, Romania, Russia, Serbia and Montenegro, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, Hungary, Kazakhstan.
**ECTS KEY TOPICS**

**More about ECTS**
ECTS is a learner-centred system designed to help higher education institutions shifting the emphasis in programme design and delivery from traditional teacher-centred approaches to approaches that accommodate for learners’ needs and expectations. In traditional teacher-centred approaches, subject requirements, knowledge and the teaching process itself were considered the main elements of educational programmes. The learner-centred approach on the contrary puts the individual at the heart of curriculum design and delivery, and gives him/her more choice in content, mode, pace and place of learning.

**ECTS Features**
Today, the ECTS finds itself in a transition period from credits connected with curricula to credits associated with learning outcomes. Learning outcomes are verifiable statements of what learners who have obtained a particular qualification or completed a programme or its components, are expected to know, understand and be able to do. As such they emphasise the link between teaching, learning and assessment. Learning outcomes statements are typically characterised by the use of active verbs expressing knowledge, comprehension, application, analysis, synthesis and evaluation, etc. The learning outcomes should be defined prior to estimating the workload associated with a programme or an educational component. These learning outcomes are the basis for choosing suitable learning activities and for a consistent estimation of the workload necessary to complete them.
**ECTS credits**

Up to now, ECTS credits are based on the workload learners need in order to achieve expected learning outcomes. 60 ECTS credits are attached to the workload of a full-time year of formal learning (academic year) and the associated learning outcomes. In most cases, learners’ workload ranges from 1,500 to 1,800 hours for an academic year, whereby one credit corresponds to 25 to 30 hours of work. This means that “the ECTS credit is a quantified means of expressing the volume of learning based on the workload learners need in order to achieve the expected outcomes of a learning process at a specified level” (The ECTS Users’ Guide 2009). The ECTS credit enables measurement of the students’ workload.

**Allocation of ECTS credits**

Credits should be allocated to learning outcomes for the entire qualification or to study programs as well as to learning outcomes associated with their educational components, i.e. learning activities. The allocation of credits to learning activities is integrated into curriculum design. There are different methods as to how to do it. The ECTS User’s Guide 2009 describes two approaches:

- The learning activities are described by learning outcomes and the workload typically needed for a student to complete these outcomes estimated. The proposals are collected from the staff, evaluated, systemized and the workload of learning activities is expressed in ECTS credits. Thus the learning activities can be allocated with different numbers of credits – 3, 5, 8 etc.

- The alternative approach described recommends that a decision be made in advance about the size of learning activities giving each the same value or multiplies of it.
Whatever method is chosen, the size of learning activities should be reasonable – too small activities could lead to fragmentation, and too big ones could impede mobility.

Credit accumulation and ranges for a degree
At European level, the credit ranges that a learner is required to accumulate in order to receive a qualification corresponding to the first and second cycle degrees (in many countries known as Bachelor’s and Master’s degrees) are defined in the Overarching Qualification Framework for European Higher Education Area (Bologna Qualification Framework). The Bologna Qualification Framework is complemented by compatible National Qualifications Frameworks, which include credit ranges as well:

<table>
<thead>
<tr>
<th>Degrees</th>
<th>ECTS credit ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctorate</td>
<td>Non applicable</td>
</tr>
<tr>
<td>Master</td>
<td>120</td>
</tr>
<tr>
<td>Bachelor</td>
<td>180</td>
</tr>
</tbody>
</table>

*Figure 2: The three cycles of the European Higher Education Area and associated credit ranges*
Grading Scales

The grading system is an important part in the academic recognition process, especially for students participating in international mobility programs. Grading systems vary according to countries and even institutions, which increases the difficulty and complexity of transfer of study results. Therefore, having in mind the different grading systems in Europe, a grading scale has been developed, in addition to their national scale, in the framework of ECTS (European Credit Transfer System) and published in the ECTS Users’ Guide 2009 to make the comparison between different national scales easier and the assessment process more transparent:

<table>
<thead>
<tr>
<th>ECTS</th>
<th>GRADING SCALE</th>
<th>EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10%</td>
<td>EXCELLENT – outstanding performance with only minor errors</td>
</tr>
<tr>
<td>B</td>
<td>25%</td>
<td>VERY GOOD – above the average standard but with some errors</td>
</tr>
<tr>
<td>C</td>
<td>30%</td>
<td>GOOD – generally sound work with a number of notable errors</td>
</tr>
<tr>
<td>D</td>
<td>25%</td>
<td>SATISFACTORY – fair but with significant shortcomings</td>
</tr>
<tr>
<td>E</td>
<td>10%</td>
<td>SUFFICIENT – performance meets the minimum criteria</td>
</tr>
<tr>
<td>F</td>
<td>-</td>
<td>FAIL – some more work required before the credit can be awarded</td>
</tr>
<tr>
<td>FX</td>
<td>-</td>
<td>FAIL – considerable further work is required</td>
</tr>
</tbody>
</table>

*Figure 3: The ECTS Grading Scale.*

**EU documents**

- ECTS Users’ Guide
  

- ECTS Key Feature

- ECTS in EU

- Bologna Process official website: http://www.ehea.info


- Recognition issues in Bologna Process:
  http://www.ehea.info/article-details.aspx?ArticleId=64

- ENIC/NARIC Network website: http://www.enic-naric.net/
BE-TWIN TOOL KIT: BRIDGING ECVET AND ECTS.
A GUIDE FOR PEDAGOGICAL STAFF

Using the outputs of the methodology developed and of the ongoing trial implementation, a tool kit for trainers has been designed within the framework of the project, in order to disseminate the developed method to potential users across Europe and to communicate a workable and transferable model for those encountering the same challenges which have been met within the Be-TWIN partnership.

This Tool Kit takes into account the methodology developed in the framework of the Be-TWIN project as well as the outcomes of the three ongoing case studies. It is conceived as a practical device, a user friendly guide which should promote the results of Be-TWIN with appropriate decision-makers in regulated local, regional, national and European systems and convince individual end-users to adopt and apply the results of Be-TWIN to their own training systems and training programmes. It is targeted to:

→ **Decision makers in the field of higher education and VET:** ministries of education, universities, any other relevant certifying and/or competent body in the field of education and training.

→ **Education providers:** VET providers, universities, higher education institutions and their pedagogical staff: teachers, trainers, professors, training programme managers, staff in charge of European affairs, mobility projects, international relations.
In order to take into account the great diversity of the possible situations where the Be-TWIN methodology could possibly be applied, this guide addresses three types of target groups and can be applied in the following three contexts, which have been experimented in real life in the framework of Be-TWIN:

- **Initial Vocational Education and Training** – Recognition of geographical mobility in the framework of initial VET
- **Continuing Training** – Recognition of vertical mobility: adults wishing to re-qualify
- **Higher education (initial training)** – Recognition of learning outcomes in higher education.
The general aim of IVET is to prepare learners with skills and/or competences to enter a specific occupation/sector. At least this is the definition provided in most instances, but IVET is an evolving concept in all countries and, in many respects, this limited definition is becoming outdated. IVET is no longer considered only as a vocational pathway, but as an alternative pathway to the academic route that contains many elements of academic education which can, ultimately, lead to a tertiary level.

IVET is also a dynamic concept which has undergone multiple reforms as it adapts to current and anticipated needs of the labour market. In all countries the structure and content of IVET has been subject to major reform in recent years. Reform has been substantial in the former Eastern bloc countries where the IVET system has had to adapt to the development of market economies, but making IVET more responsive to current and future labour-market demand is a common trend across Europe. The reform debate is about making IVET more flexible so it is better able to meet the demand for skills.

On July 8th 2009 the European Commission issued a Green Paper “Promoting the learning mobility of young people”, an open and public consultation in order to foster the mobility of young people in Europe.
The importance of mobility of young people is stressed in this green paper:
“Learning mobility, i.e. transnational mobility for the purpose of acquiring new skills, is one of the fundamental ways in which individuals, particularly young people, can strengthen their future employability as well as their personal development.”

In the EU, there are some longstanding traditions in supporting learning mobility by means of different programmes and initiatives, especially via the Lifelong Learning programme for the period 2007-2013. The main goals of the programme are to contribute to the development of the European Community as a knowledge-based society, with sustainable economic development, more and better work opportunities and greater social cohesion while at the same time providing enhanced protection of the environment for future generations.

1. CREDIT ALLOCATION
In the framework of initial vocational education and training, the geographical mobility of learners can be enhanced and facilitated through the implementation of ECTS or ECVET.
It is important to point out that, when allocating the credits, VET training providers will use the ECTS while others will implement ECVET. Indeed, in some European countries such as France or the UK for instance, VET is also being delivered at higher educational level (this is for example the case of the French BTS or of the Foundation Degree in the UK).
Thus, the training providers must possess all information linked to both credit systems in order to decide which system will better match their training model and qualifications, and enable their
learners to have the best chances to have their learning outcomes recognised when experiencing mobility abroad.

According to the technical specifications of both credit systems, the allocation of credits is calculated as below:

**Allocation of ECTS points**
The estimated workload of an average student amounts to 60 credit points for one year of formal learning. ECTS points are calculated on the workload (i.e. contact hours, personal work and in some cases time spent working in a company in the framework of an internship or in apprenticeship for example) necessary to achieve specified learning outcomes.

**Allocation of ECVET points**
60 ECVET points are allocated for one year of formal full time VET. ECVET points are allocated to units of learning outcomes and calculated on the basis of the relative importance of these units within the qualification.

Depending on the way their qualifications are built and what type of prior learning they want their learners to have recognised when, for instance, experiencing a vertical mobility, VET providers will decide to either use ECVET or ECTS, or in some cases work with both credit systems.

**2. CREDIT USE IN MOBILITY**
When using credits in the framework of mobility, an important step is to identify the units of learning outcomes which can be open to mobility. These units must be identified together by the institutions
involved in a mobility partnership: the units must be reasonably equivalent across the partner countries since they will serve as a basis for assessment and validation on both sides.

In order to be easily validated, the units must neither be too big nor too fragmented. In the framework of case study 1 of the Be-TWIN project for example\(^1\), the partner institutions have decided to implement the assessment on a sub-unit, i.e. a restricted number of coherent learning outcomes that can be easily assessed and validated in the framework of a three-week mobility period, and that are shared by both partner institutions involved.

Another constraint can be related to the conditions for validation and assessment linked to education and training systems. In the framework of the French national education system, which includes the diploma BTS we have worked on in this case study, the allocation of units of LOs abroad is only possible within continuing evaluation; the final evaluation, which is carried out at national level, must obligatorily take place in France. Thus, the only possible way to have part of the training evaluated abroad was to work on continuing evaluation.

\(^1\) See the website of the project for more details on the case studies: www.betwin-project.eu
3. CREDITS RECOGNITION

The process of implementing credit transfer and accumulation also supposes that mutual trust among the partner institutions has been achieved. The tools developed in the framework of ECVET, i.e. the Memorandum of understanding, the Learning agreement and the Personal transcript can be used to formalise mutual trust.

Since in the specific context of geographical mobility, the LOs achieved abroad correspond to all or part of a unit of LOs of the qualification, these are recognised as one of several assessment steps (as required by the qualification regulations), which implies that the learner achieves part of the qualification abroad and that the result of the assessment abroad is fully integrated into the qualification. In order for the process of recognition to be fully implemented by the partner institutions, transparency and trust have to be achieved beforehand.
SECTION: CONTINUING TRAINING
Adults wishing requalify

Continuing training is divided into

- training addressed to employees and usually funded with resources provided by the Ministry of Labour or interprofessional funds
- adult education addressed to people who are over 16 years old and wish to obtain a degree in junior high school or a high school diploma or to get language certifications (also linked to residence permits)
- lifelong learning covering activities that a person can perform to improve his/her personal background and can be carried out in formal, non formal and informal contexts.

In this section we will focus on the third situation.

1. CREDIT ALLOCATION
In continuing training, the job profile can be defined through:

- the description, the areas of activity and the tasks to be performed in the labour market and the associated learning outcomes
- the training pathway: in particular, the access to the courses, the accreditation procedures, the standards including also any criteria for quality control, the assessment methods, the certification in relation to "who" certifies and "the procedures” to certify.
In order to be in line with the ECVET technical specifications, the training providers should start with grouping the learning outcomes into units according to a specific criterion: each unit has to be composed of relevant learning outcomes matching the area of activity. Afterwards, the credit points will have to be allocated to each unit of learning outcomes according to the relative weight of this unit in relation to the qualification.

In continuing training, the qualification consists of one or more learning activities that can be associated with each unit of learning outcomes. The learning activities to achieve given the learning outcomes might very well differ according to the type of training pathway and provider concerned. Different learning pathways can thus lead to achieving the same units of learning outcomes and/or the same qualification. Most of the time, the training programme’s content is defined taking into account the number of available teachers, the amount of financial and logistical resources and the type of target group. Moreover, in continuing training, the training provider very often recognizes the learning outcomes achieved in non formal and informal learning contexts, not only in formal learning.

The learner’s workload should also be taken into account when assigning a relative importance to different learning activities. Indeed different credits can be attached to the same unit present in several qualifications; for example the unit on marketing has a high value in a qualification on “International trade” while it has less value in a job profile within tourism. The Be-TWIN matrix can be useful to compare the relative weight assigned to one unit of learning outcomes (according to its importance in relation to the qualification) in respect to the weight
obtained by adding up the scores (based on the workload) of the single learning units. The Be-TWIN matrix is a useful tool to eventually revise the curriculum.

In continuing training, the formal learning context is taken as a reference and convention 60 ECVET points are allocated to the learning outcomes expected to be achieved in a year of formal full time.

ECTS credits are allocated taking into account the workload which refers to the time students typically need to complete all learning activities (such as lectures, seminars, projects, practical work, self-study and examinations) required to achieve the expected learning outcomes. 60 ECTS credits are attached to the workload of a full-time year of formal learning (academic year) and the associated learning outcomes.

2. CREDIT USE IN MOBILITY

In continuing training, mobility most of the time concerns internships. The exchange of learners through periods of study in another training institution is less frequently carried out.

Usually, adults don’t take part in mobility schemes in order to achieve single fragments of a training pathway, but are more interested in the recognition abroad of the qualification obtained in their own country (for example, a person who has to work abroad) or in the partial recognition of the qualification if they wish to attend a further training course in another country. In both situations, it is important that the qualification held by a person is described in terms of learning outcomes, and related to a specific EQF level and, ideally, that ECVET credit points are attached to the units of learning outcomes previously achieved. This accumulation
of learning outcomes through the ECVET system can be documented using the Europass documents. In ECTS the mechanism is the same: the universities sign the agreements for the recognition of the training modules carried out in a foreign University; the hosting training institution allocates the credits and the sending one recognizes them when the learner comes back. A person may have to carry out further learning activities when coming back.

3. CREDIT RECOGNITION
In continuing training, credit recognition supposes that the mobility process can rest upon the mutual trust among training providers and the use of the ECVET key documents, i.e. the Memorandum of Understanding, the Learning Agreement and the Personal Transcript.

Credit recognition in ECTS is based on the agreement signed between the two universities. The BE-TWIN methodology can be used to enhance the recognition of non formal and informal learning activities.

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1 For further information on ECVET key documents see the section “ECVET – Key topics”
SECTION: HIGHER EDUCATION (INITIAL TRAINING)
Towards a learning outcomes based higher education

Higher, post-secondary, tertiary, or third level education refers to the stage of learning that occurs at higher education institutions, i.e. universities, colleges, institutes of technology, etc.

Higher education plays an essential role in society, creating new knowledge, transferring it to students and fostering innovation.

The recognition of periods of study abroad has been introduced since the late 1980’s in the higher education sector. However, recent studies have shown that the process of transfer and recognition introduced by the ECTS still remain insufficient, several students finding themselves with no credit allocation when coming back to their home institution.

The Be-TWIN matrix, by introducing more transparency through a matrix based on the correspondence of learning activities and learning outcomes, can help to improve the process of transfer and recognition and insufflate a new dynamic into the ECTS system.

1. CREDIT ALLOCATION
In higher education, where the identification of one particular job profile per degree isn’t realistic, the training provider should rather focus on the definition of an “occupational profile”, i.e. a panel of jobs the students could possibly perform after graduation.
To do so, the pedagogical team in charge of the identification of the competences necessary to perform the expected tasks as a professional should consult the enterprises in the relevant business sectors as well as the alumni.

In higher education, academic degrees are traditionally input based. However, through the prism of the Be-TWIN matrix, the traditional elaboration of the curricula might evolve. If the training programme content is defined in close association with the learning outcomes first identified, some changes in the curriculum might occur: for instance, if some learning activities do not contribute to any of the learning outcomes identified anymore, the training provider should consider revising the curriculum, i.e. adding some courses and removing others.

Thus, the ECTS are no longer attributed to learning activities taking into account the workload, but to courses and modules which have been redesigned according to the shift to learning outcomes. This is a way of bringing ECTS closer to ECVET and to acknowledge the shift to learning outcomes in higher education.

2. CREDIT USE IN MOBILITY
The practical implementation of ECTS in the context of mobility as it is shouldn’t be modified: the ECTS key documents used in the framework of mobility periods, i.e. the Course Catalogue, the Student Application Form, the Learning Agreement and the Transcript of Records, should further be used. However, the added value of the Be-TWIN matrix should be integrated in to these documents and the learning outcomes to be acquired during the mobility phase explicitly mentioned. This should furthermore contribute to an enhanced and facilitated recognition of the periods
spent abroad, since the transparent formulation of the LOs acquired will facilitate legibility.

3. CREDIT RECOGNITION
The process of having credits awarded in one context and recognised in another context for the purposes of obtaining a qualification should further remain one of the pillars of the ECTS system. Simply the credits will no longer be used only to ensure the recognition of studies at a host institution, indicating the workload the students have to invest for the successful completion of a study programme, but also to indicate which knowledge, skills and competences the learner has gained while studying abroad. This should be ensured by the clear link made between the learning activities and the corresponding learning outcomes, as well as through transparent assessment and validation procedures at the host institution. This will ensure that the credit awarded through the ECTS system also signifies the recognition of the learning outcomes acquired. The Transcript of Records should thus be adapted in order to be compatible with this new dimension of the ECTS output based system.
<table>
<thead>
<tr>
<th>TERM</th>
<th>Source: ECVET Recommendation/Get to Know ECVET better/CEDEFOP/Other</th>
<th>ECTS User’s Guide</th>
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</table>
| Credit system | An instrument designed to enable accumulation of learning outcomes in formal, non-formal and/or informal settings, and facilitate their transfer from one setting to another for validation and recognition. A credit system can be designed:  
- By describing an education or training programme and attaching points (credits) to its components (modules, courses, placements, dissertation work, etc.); or  
- By describing a qualification using learning outcomes units and attaching credit points to every unit. (CEDEFOP, 2004, European Commission, 2006c.) Credit systems are the feature of a training system in which qualifications are designed in components (units or modules), and in which there are explicit rules on how these units/modules can be accumulated and/or transferred by the learners. | ECTS: The expressing of the volume of learning based on what the workload students need in order to achieve the expected outcomes of a learning process at a specified level. (ECTS User’s Guide, 2009) |
<table>
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<tr>
<th>TERM</th>
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<tr>
<td>This means that all qualifications have to be built so as to enable credit accumulation and transfer. This does not necessarily imply the use of a credit point convention. (CEDEFOP, January 2010)</td>
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<tr>
<td>Credit accumulation</td>
<td>Process through which learners can acquire qualifications progressively by successive assessments of learning outcomes. (ECVET Q&amp;A)</td>
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<td>Credit transfer</td>
<td>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. (ECVET Q&amp;A)</td>
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<tr>
<td>Credit for learning outcomes</td>
<td>A set of learning outcomes of an individual which have been assessed and which can be accumulated towards a qualification or transferred to other learning programmes or qualifications. (Recommendation of the EP and of the Council on the establishment of ECVET dated 17 April 2009)</td>
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<td>Credit value</td>
<td>Credit value describes the number of credits that may be awarded to a learner for the successful achievement of the identified learning outcome of a unit, module or</td>
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<td>TERM</td>
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<td>qualification. (Lifelong Learning Network, UK)</td>
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<td>ECVET points</td>
<td>Means a numerical representation of the overall weight of learning outcomes in a qualification and of the relative weight of units in relation to the qualification. (Recommendation of the EP and of the Council on the establishment of ECVET dated 17 April 2009)</td>
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<tr>
<td>Education or training path</td>
<td>The sum of learning sequences followed by an individual to acquire knowledge, skills or competences. A learning path may combine formal and non-formal learning sequences which validation leads to certification. (CEDEFOP 2004)</td>
<td></td>
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<tr>
<td>Formal learning</td>
<td>Learning that occurs in an organised and structured environment (e.g. in an education or training institution or on the job) and is explicitly designed 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. (CEDEFOP 2004)</td>
<td>Learning typically provided by an education or training institution, structured (in terms of learning objectives, learning time or learning support) and leading to certification. Formal learning is intentional from the learner’s perspective. (ECTS User’s Guide, 2009)</td>
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<td>Non-formal Learning</td>
<td>Learning which is embedded in planned activities not explicitly designated as learning (in terms of learning objectives, learning time or learning support). Non formal learning is</td>
<td>Learning that is not provided by an education or training institution and typically does not lead to certification. It is, however, structured</td>
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<td>Intentional learning</td>
<td>(in terms of learning objectives, learning time or learning support). Non-formal learning is intentional from the learner’s perspective. (CEDEFOP 2004)</td>
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<td>Informal learning</td>
<td>Learning resulting from daily activities related to work, family or leisure. It is not organised or structured in terms of objectives, time or learning support. Informal learning is in most cases unintentional from the learner’s perspective. (CEDEFOP 2004)</td>
<td>Learning resulting from daily life activities related to work, family or leisure. It is not structured (in terms of learning objectives, learning time or learning support) and typically does not lead to certification. Informal learning may be intentional but in most cases it is nonintentional (or “incidental”/random). (ECTS User’s Guide, 2009)</td>
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<td>Learning Outcomes</td>
<td>The set of knowledge, skills and competences an individual has acquired and/or is able to demonstrate after completion of a learning process, either formal, non-formal or informal (CEDEFOP 2004)</td>
<td>Are statements of what a learner is expected to know, understand and be able to do after successful completion of a process of learning. (ECTS User’s Guide, 2009)</td>
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<td>Module</td>
<td>A course unit in a system in which each course unit carries the same number of credits or a multiple thereof. (ECTS User’s Guide, 2009).</td>
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<tr>
<td>Qualifications frameworks (QFs)</td>
<td>An instrument for the development and classification of qualifications (e.g. at national or sectoral level) according to a set of criteria (e.g. using descriptors)</td>
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<td>applicable to specified levels of learning outcomes.</td>
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<td>Comment:</td>
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<td>A qualification framework can be used to:</td>
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<td></td>
<td>— establish national standards of knowledge, skills and</td>
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<td>competences;</td>
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<td>— promote the quality of education;</td>
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<td>— provide a system of coordination and/or integration of</td>
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<td>qualifications and enable comparison of qualifications by</td>
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<td>relating qualifications to each other;</td>
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<td>— promote access to learning, transfer of learning outcomes and</td>
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<td>progression in learning.</td>
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<td>Related terms: European qualification framework (EQF),</td>
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<td>qualification system</td>
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<td>The European qualifications framework (EQF) is a common</td>
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<td>European reference framework which links countries’</td>
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<td>qualifications systems together, acting as a</td>
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<td>translation grid to make qualifications more readable and</td>
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<td>understandable across different countries and systems.</td>
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<td>(CEDEFOP)</td>
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<td>Qualifications frameworks operating at national, regional or</td>
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<td>sectoral level can take many forms</td>
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<td>and this term also requires common understanding. Current OECD</td>
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<td>work provides the following definition:</td>
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<td>A qualifications framework is an instrument for the development</td>
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<td>and classification of qualifications according to a set of</td>
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<td>criteria for levels of learning achieved. This set of</td>
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<td>criteria may be implicit in the qualifications descriptors</td>
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<td>themselves or made explicit in the form of a set of level</td>
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<td>descriptors.</td>
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<td>The scope of the frameworks may be comprehensive of all</td>
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<td>learning achievement and pathways or may</td>
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<td>TERM</td>
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<td><em>be confined to a particular sector, for example, initial education, adult education and training, or an occupational area. Some frameworks may have more design elements and a tighter structure than others; some may have a legal basis, whereas others may represent a consensus of views of social partners. All qualifications frameworks, however, establish a basis for improving the quality, accessibility, linkages and public or labour market recognition of qualifications within a country and internationally. (Recommendation of the European Parliament and of The Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning)</em></td>
<td>The process through which an institution certifies that learning outcomes achieved and assessed in another institution satisfy (some or all) requirements of a particular programme, its component or qualification. (ECTS User’s Guide, 2009)</td>
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<td>Recognition of credit</td>
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<tr>
<td>Recognition of Learning Outcomes</td>
<td>The process of attesting officially achieved learning outcomes through the awarding of units or qualifications. (ECVET Q&amp;A).</td>
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<tr>
<td>Skills</td>
<td>The ability to perform tasks and solve problems. (CEDEFOP 2006a) The ability to apply knowledge and to use knowhow to complete tasks and solve problems. In</td>
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<td>the context of the European Qualifications Framework, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tolls and instruments. (Recommendation of the EP and of the Council on the establishment of ECVET dated 17.4.2009).</td>
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<tr>
<td>Unit/Unit of learning outcomes</td>
<td>(ECVET) A set of knowledge, skills, and/or competence which constitute a coherent part of a qualification. A unit can be the smallest part of a qualification that can be assessed, transferred, validated and, possibly certified. A unit can be specific to a single qualification or common to several qualifications. The characteristics of units (content, size, total number of units composing a qualification, etc.) are defined by the competent body responsible for the qualification at the appropriate level. The definition and description of units can vary according to the qualification</td>
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<td>System and the procedures of the competent body. However, ECVET system proposes to provide for every unit: — the generic title of the unit; — the knowledge, skills and competence which are contained in the unit; — the criteria for assessment of the corresponding learning outcomes. (European Commission, 2006c.) Unit means a component of a qualification, consisting of a coherent set of knowledge, skills and competence, that can be assessed and validated. (Recommendation of the EP and of the Council on the establishment of ECVET dated 17.4.2009).</td>
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</table>
PARTNERSHIP

- Chambre de commerce et d’industrie de Paris – Applicant Organisation
- Stratford-upon-Avon College
- Angel Kanchev University of Ruse
- Rectorat de Paris
- Fédération de la Plasturgie
- Fondazione “G. Rumor” Centro Produttività Veneto
- Ufficio Scolastico Regionale per il Veneto – UST di Venezia
- UNICA – Network of Universities from the Capitals of Europe
- Staffordshire University – Staffordshire, Stoke-on-Trent, Shropshire, Telford & Wrekin Lifelong Learning Network
- ZDZ - Zakład Doskonalenia Zawodowego w Kielcach
- ENAIP – Ente Nazionale ACLI Istruzione Professional
- DEKRA Akademie GmbH
- Econometrica Ltd

Be-TWIN
Testing a Joint ECVET-ECTS Implementation
147825-LLP-2008-FR-LEONARDO-ECVET