



Escola Profissional do Alto Lima C.I.P.R.L.

ECVET Methodological Guide for Professionals

Methodology developed within the EURspace Project



EURSPACE

European Initial Vocational Training Recognition Gateway



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EURspace: European IVT Recognition Gateway

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PREFACE

The ***ECVET Methodological Guide for Professionals*** has been elaborated through the ***EURspace Project***, reference number 2015-1-PT01-KA202-013119, co-funded by the Erasmus+ Programme of the European Union.

The ***ECVET Methodological Guide for Professionals*** is a fundamental part of the ***EURspace Pedagogical Kit***, intellectual output no. 2 of the *EURspace* Project, which is composed by the Guide and a Battery of Tools.

The purpose of the ***ECVET Methodological Guide for Professionals*** is to provide guidance and understanding for the implementation of ECVET (European Credit System for Vocational Education and Training), through a methodology developed specifically for ECVET, and designed for VET organizations and professionals who work with European mobility projects for VET learners.

The ***ECVET Methodological Guide for Professionals*** is aimed at VET professionals, teachers, VET trainers, professionals working with European mobility projects, organizations that promote internships or on-the-job-training programmes for VET, educational entities, educational authorities, etc.

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LIST OF ABBREVIATIONS

C-VET: Continuing Vocational Education and Training

DGVT: Directors General for Vocational Training

ECTS: European Credit Transfer and Accumulation System

ECVET: European Credit System for Vocational Education and Training

EQAVET: European Quality Assurance in Vocational Education and Training

EQF: European Qualifications Framework

EU: European Union

I-VET: Initial Vocational Education and Training

LA: Learning Agreement

LO: Learning Outcomes

MoU: Memorandum of Understanding

NQF: National Qualifications Framework

NQS: National Qualifications System

VET: Vocational Education and Training

CHAPTER 1: THE EURSPACE PROJECT

EURspace: European IVET Recognition Gateway, reference no. 2015-1-PT01-KA202-013119, is a European Project financed by the Erasmus+ Programme, Key-Action 2 (KA2), which aims to facilitate the mobility of I-VET students across Europe and contribute towards the development of vocational education and training without borders, as well as, transparency in the recognition and certification of learning outcomes acquired abroad.

The outputs of the *EURspace* Project contribute towards the development of a European skills and qualifications area, by providing support to ensure the recognition, validation and attribution of ECVET credit points, in addition to the certification of units of learning outcome that are applied within other European countries. Therefore, allowing the combination of theoretical and practical approaches by extending the national scale to the European scale.

Over the 3 years of the project's implementation, the following outputs/activities have been developed:

1. **ECVET European Platform** – a digital platform that offers pedagogical and logistic support to organizations involved in European mobility projects – starting with the processes involved in the preparation of the mobility to the processes applied after the mobility – specifically focusing on the recognition, validation and certification of the learning outcomes acquired abroad, in accordance with the ECVET principles and technical specifications.

The *ECVET European Platform* provides free access to the open educational resources elaborated throughout the project's lifecycle, which provides useful information on ECVET and other European tools such as EQF (European Qualifications Framework) and EQAVET (European Quality Assurance in Vocational Education and Training), as well as information on the partner countries' educational system and best practices on ECVET.

The main contents and functionalities of the Platform can be summarized as follows:

- **upgradeable database of the organizations** working with European mobility projects, which can be searched per country, economic activity and role in the mobility project.
- **open educational resources**: consultation and free download of output no. 2 (Guide on ECVET and *EURspace* methodology for professionals; pedagogical tools) and output no. 3 (Guide on ECVET for Learners);
- **matching matrices**: available for consultation and download. Both *matching matrices* elaborated within the *EURspace* pilot project and those elaborated by registered organizations working on European mobility projects are available for consultation and download, implying that this digital web is also upgradeable and sustainable;
- **pedagogical circuit**: a virtual pathway of the stages involved in European mobility with formal learning purposes, from the planning stage to the certification of the learning outcomes, focusing on recognition, assessment, validation and certification processes that are based on ECVET principles and technical specifications. For each stage, pedagogical tools are available.

- **project discussions and forums:** registered users working on European mobility projects can manage their project in a private space, share documentation and communicate with each other.
2. **Matching Methodology** – the methodology used during the joint recognition, validation and certification of Units of Learning Outcome of a given qualification, between European countries.
- The *matching methodology* was elaborated at the same time as the implementation of the **pilot project**, for the field of Hotel and Restaurant Management, with the purpose of designing a *matching matrix* that highlighted the common Units of Learning Outcome of the Cookery Qualification (qualification agreed upon by the partnership during the kick-off meeting).
- The developed methodology follows EQF principles and ECVET principles and technical specifications. The *matching methodology* is sustainable since it is applicable to different qualifications, training fields and countries.
3. **EURspace Pedagogical Kit** – an *open educational resource* for VET professionals and people working with European mobility projects, composed of a Methodological Guide for Professionals (descriptive guide of the *matching methodology* developed) and a Battery of Tools, elaborated during the Pilot Project which lead to the establishment of the methodology.
- Both Methodological Guide for Professionals and Tools are available on the *ECVET European Platform*, for consultation and download. The Guide and the 21 Tools are available in English and in the idiom of each partner country. Tools can be used as pre-defined models or can be adapted according to specific needs of the user.
4. **Guide to Support ECVET Understanding for Learners** – a Guide aimed at learners attending Initial Vocational Education and Training Courses in Europe.
- The Guide to Support ECVET Understanding for Learners* aims to:
- inform learners about ECVET using a creative strategy;
 - provide guidelines on the quality assurance of a European mobility programme;
 - provide guidelines on how to choose a mobility programme that formally ensures the recognition, validation and certification of learning outcomes acquired abroad within the context of the VET course that the learner is attending.
- The Guide for learners is available in the *ECVET European Platform*, for consultation and download, both in English and in the idiom of each partner country.

CHAPTER 2: EUROPEAN QUALIFICATIONS FRAMEWORK (EQF)

1. What is the European Qualifications Framework (EQF)?

The *European Qualifications Framework*, hereinafter referred to as EQF, is a common European reference framework which aims to contribute towards the mutual understanding and transparency of qualifications across different European countries and systems.

The guidelines provided by EQF make it possible to have a comprehensive overview of qualifications among the 39 European countries that are currently involved in its implementation.

EQF constitutes itself as a bridge between the national qualifications systems and takes into account the diversity of national systems and facilitates the translation and comparison of qualifications between countries.

This common framework contributes towards the development of a Europe knowledgeable at all levels of education and training, as well as, the internationalization and educational and training excellence in Europe, supporting cross-border mobility of learners and workers and lifelong learning across Europe.

EQF is a necessary basis for the achievement of educational objectives related to the smart, sustainable and inclusive growth of the Europe 2020 Strategy.

The *European Qualifications Framework* covers qualifications at all levels and in all sub-systems of education and training.

2. What are the legal bases of the European Qualifications Framework (EQF)?

The development of the *European Qualifications Framework* started in 2004 to respond to the requests of the Member States, social partners and other stakeholders regarding a common reference to increase the transparency of qualifications. In 2005, the Commission published a proposition of an 8-level framework based on learning outcomes, which aimed to facilitate the transparency and recognition of qualifications and to support lifelong learning.

The initial proposal was amended by the Commission on September 6, 2006 and integrated the contributions of experts from the 32 countries involved and the European social partners. The European Parliament and the Council negotiated the proposal successfully during 2007, and EQF was formally adopted on February 2008.

The practical implementation of EQF is based on *the Recommendation on the European Qualifications Framework for Lifelong Learning* adopted by the European Parliament and the Council on April 23, 2008. The aim of this Recommendation was not to replace or define national qualification systems and/or qualifications, nor to describe specific qualifications or an individual's competences, but rather to reference

national qualifications in accordance to the European Qualifications Framework level, in addition to promoting citizens' mobility and fostering lifelong learning.

On May 22, 2017, the revised and strengthened EQF Council Recommendation encourages the trend towards comprehensive frameworks which include qualifications of all types and levels, awarded by different bodies and subsystems. This Recommendation addresses the impact, stresses the need to contribute towards lifelong learning, employability, mobility and social integration making these more visible to end-users. The Council has recommended that EU Member States should take steps to make sure that the qualification makes reference to the relevant EQF level. The Council also recommends that the European Commission should support the creation of “*voluntary procedures on the levelling of international qualifications through national qualifications frameworks*”, in a way that is consistent from country to country.

3. European Qualifications Framework: Principals and Definitions

The implementation of the European Qualifications Framework implies the following principles:

- development of National Qualifications Frameworks in accordance with the European Qualifications Framework and national legislation and practice;
- follow the European framework of qualification levels to describe qualifications;
- use an approach based on learning outcomes when defining and describing qualifications, and promote the validation of non-formal and informal learning in accordance to the common European principles;
- use a common set of descriptors to indicate the relevant learning outcomes of qualifications at each level in any system of qualifications;
- apply common principles of quality assurance in education and training.

Therefore, the following definitions are given for common understanding by the *Recommendation of the European Parliament and of the Council*, April 23, 2008:

- National Qualifications 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 qualification subsystems and improve the transparency, access, progression and quality of qualifications in relation to the labour market and civil society*”;
- 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*”;
- Qualification – “*a formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards*”;

- Learning Outcomes – “*statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and competence*”.

(Recommendation of the European Parliament and of the Council - April 23, 2008 on the establishment of the European Qualifications Framework for Lifelong Learning)

4. Eight Reference Levels in the European Qualifications Framework

The European Qualifications Framework proposes eight reference levels which span the full scale of qualifications, from basic (Level 1 - example school leaving certificates) to advanced (Level 8 - example Doctorates) levels.

Being a tool for Lifelong Learning, EQF encompasses all levels of qualifications acquired in general, vocational education and training and academic education. The framework addresses both qualifications acquired in initial and in continuing education and training.

Each level is defined by a set of descriptors that indicate the relevant learning outcomes for qualifications in any given qualifications' system. Each level is defined in terms of knowledge, skills and competence.

The description of the EQF level increases in terms of complexity as the EQF level increases.

In the context of EQF: knowledge is described as theoretical and/or factual; skills are described as cognitive and practical; competence is described in terms of responsibility and autonomy.

For example:

- EQF Level 1 implies: basic general knowledge; basic skills required to carry out simple tasks; work or study under direct supervision in a structured context.
- EQF Level 3 implies: knowledge of facts, principles, processes and general concepts, in a field of work or study; a range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information; take responsibility for completion of tasks in work or study; adapt own behaviour to circumstances in solving problems.
- EQF Level 4 implies: factual and theoretical knowledge in broad contexts within a field of work or study; a range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study; exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, take some responsibility for the evaluation and improvement of work or study activities.

Table 1 describes the relevant learning outcomes for each EQF level, in terms of knowledge, skills and competence, in accordance to Annex II of the Recommendation on the European Qualifications Framework for Lifelong Learning, adopted by the European Parliament and the Council on 23 April 2008.

Table 1: *Descriptors defining levels in the European Qualifications Framework.*

EQF Level	Knowledge	Skills	Competence
	In the context of EQF, knowledge is described as theoretical and/or factual.	In the context of EQF, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools and instruments).	In the context of the EQF, competence is described in terms of responsibility and autonomy. Responsibility and Autonomy are described as the ability of the learner to apply knowledge and skills autonomously and with responsibility.
Level 1 Relevant LO	Basic general knowledge.	Basic skills required to carry out simple tasks.	Work or study under direct supervision in a structured context
Level 2 Relevant LO	Basic factual knowledge of a field of work or study.	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools.	Work or study under supervision with some autonomy.
Level 3 Relevant LO	Knowledge of facts, principles, processes and general concepts, in a field of work or study.	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information.	Take responsibility for completion of tasks in work or study; adapt own behaviour to circumstances in solving problems.
Level 4 Relevant LO	Factual and theoretical knowledge in broad contexts within a field of work or study.	A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study.	Exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities.
Level 5 Relevant LO	Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge.	A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems.	Exercise management and supervision in contexts of work or study activities where there is unpredictable change; review and develop performance of self and others.
Level 6 Relevant LO	Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles.	Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study.	Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups.
Level 7 Relevant LO	Highly specialized knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research. Critical awareness of knowledge issues in a field and at the interface between different fields.	Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields.	Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches; take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams.
Level 8 Relevant LO	Knowledge at the most advanced frontier of a field of work or study and at the interface between fields.	The most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice.	Demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research.

Source: adapted from the *European Parliament and of the Council (2008). Recommendation of the European Parliament and of the Council of April 23, 2008, on the establishment of the European Qualifications Framework for Lifelong Learning* (pp. C111/5-C111/6). Official Journal of the European Union. 2008/C 111/01.

5. Development State of the National Qualifications Framework (NQF) – Partner Countries

Currently, all the countries that integrate the partnership of the Project *EURspace* already have a National Qualifications Framework aligned with the European Qualifications Framework, despite the fact that countries have different stages of development and there are small variations in level descriptors.

Table 2 compares the state of development of the National Qualifications Framework in the countries that integrate the partnership of the *EURspace* Project.

Table 2: *National Qualifications Framework developments in Europe.*

Country	Scope of the Work	Number of levels	Level descriptors	Stage of development	NQF linked to EQF
Portugal	Comprehensive NQF including all levels and types of qualification from formal education and training and from the national system for the recognition, validation and certification of competences.	Eight	<ul style="list-style-type: none"> • knowledge • skills • attitudes 	Operational	2011
Spain	Designed as comprehensive NQF for lifelong learning; will include all levels and types of qualification from formal education and training. NQF for higher education in place.	Eight proposed	<ul style="list-style-type: none"> • knowledge • skills and abilities • competence 	Advanced development stage	
Italy	Comprehensive framework will include all levels and types of qualification from formal education and training and regional qualifications.	Eight	<ul style="list-style-type: none"> • knowledge • skills • autonomy and responsibility 	Formally adopted	2013 major national qualifications from formal education and training linked directly to EQF
France	NQF covers all levels and types of vocationally or professionally oriented qualification; general education qualifications are not included.	Five	<ul style="list-style-type: none"> • Integrated learning outcomes including knowledge, skills, attitudes, autonomy and responsibility 	Operational	2010
Romania	Comprehensive NQF including all levels and types of qualification from formal education and training.	Eight	<ul style="list-style-type: none"> • knowledge • skills • competences 	(Early) operational stage	
Lithuania	Comprehensive NQF including all levels and types of qualification from formal education and training.	Eight	<ul style="list-style-type: none"> • characteristics of activities (complexity, autonomy, changeability) • types of competences (functional, cognitive and general) 	Operational	2011
Turkey	Comprehensive NQF, including all levels and types of qualification from formal education and training and from national vocational qualification system.	Eight	<ul style="list-style-type: none"> • knowledge • skills • competence 	(Early) operational	2017

Source: adapted from the CEDEFOP (2017). *Overview of National Qualifications Framework Developments in Europe 2017*. Thessaloniki: Publications Office.

Despite the variations in EQF level descriptors found between countries, within the context of the *EURspace* project, learning outcomes are described in terms of “knowledge”, “skills” and “competence”. More detailed information on how to describe learning outcomes can be found in Chapter 5.

6. The *EURspace* Project and the European Qualifications Framework (EQF)

Considering EQF, the *EURspace* Project is more specifically aimed at Initial Vocational Education and Training (I-VET).

For the purposes of the *EURspace* Pilot Project, **particular attention was given to EQF descriptors levels 3 and 4**. Depending on the national qualifications framework, learning outcomes are described in accordance to EQF descriptors levels 3 and 4.

Table 3: EQF descriptors for level 3 and level 4 *in the European Qualifications Framework*.

EQF Level	Knowledge	Skills	Competence
	In the context of EQF, knowledge is described as theoretical and/or factual.	In the context of EQF, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools and instruments).	In the context of the EQF, competence is described in terms of responsibility and autonomy. Responsibility and Autonomy are described as the ability of the learner to apply knowledge and skills autonomously and with responsibility.
Level 3 Relevant LO	Knowledge of facts, principles, processes and general concepts, in a field of work or study.	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information.	Take responsibility for completion of tasks in work or study; adapt own behaviour to circumstances in solving problems.
Level 4 Relevant LO	Factual and theoretical knowledge in broad contexts within a field of work or study.	A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study.	Exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities.

Source: adapted from the *European Parliament and of the Council (2008). Recommendation of the European Parliament and of the Council of April 23, 2008 on the establishment of the European Qualifications Framework for Lifelong Learning* (pp. C111/5-C111/6). Official Journal of the European Union. 2008/C 111/01.

CHAPTER 3: EUROPEAN QUALITY ASSURANCE IN VOCATIONAL EDUCATION AND TRAINING

1. What is the European Quality Assurance in Vocational Education and Training (EQAVET)?

The European Quality Assurance in Vocational Education and Training (EQAVET) is a practice that brings Member States, Social Partners and the European Commission together to promote European collaboration by developing and improving quality assurance in Vocational Educational and Training.

The *Recommendation of the European Parliament and of the Council of June 18, 2009 on the establishment of a European Quality Assurance in Vocational Education and Training* established a European quality assurance reference framework, comprising a quality assurance and improvement cycle, composed by four phases – planning, implementation, evaluation/assessment and review/revision – based on a selection of quality criteria, descriptors and indicators applicable to quality management of both VET-system and VET-provider levels.

The aim of the *framework* is to contribute towards quality improvement in VET systems and VET policy developments between Member States, in order to increase the transparency, consistency and mutual trust in VET systems, facilitating the mobility of workers and learners, and lifelong learning.

2. What are the legal bases of EQAVET?

The *Lisbon Strategy* (2000) identified a set of challenges on VET, namely the need to:

- strengthen the European dimension of VET;
- improve transparency, information and guidance in VET systems;
- recognize competencies and qualifications;
- promote cooperation in quality assurance.

The *Copenhagen Declaration* of November 30, 2002, calls for enhancing European cooperation in VET for the common development of principles and tools. In order to achieve the targets set out in the *Copenhagen Declaration* for VET, the Education Council reached political agreement for:

- development of principles on the identification and validation of non-formal and informal learning;
- cooperation on the development of a shared framework for quality assurance in VET;
- development of a single framework for the transparency of qualifications and competencies (EUROPASS);
- resolution on guidance/counselling within a lifelong learning dimension.

The *Maastricht Communiqué* (2004) – first revision of the *Copenhagen Declaration* – focused on the consolidation and further development of VET tools. At European level, priorities included the European

Qualifications Framework (EQF), the European Credit System for VET (ECVET), the specific learning needs of VET teachers and trainers, improvement of the scope, precision and reliability of VET statistics.

The *Helsinki Communiqué* (2006) – second follow-up of the Copenhagen Process – set the priorities and strategies for European cooperation in VET focused on the following priority areas:

- attractiveness and quality of VET;
- further development and utilization of common European instruments for VET (EQF, ECVET, Europass);
- EU collaboration in the improvement of VET quality;
- enhancement of the scope, comparability and reliability of VET statistics by 2008;
- involvement of all stakeholders in the activities for the implementation of the *Copenhagen Process*.

The *Bordeaux Communiqué* (2008) – third follow-up of the Copenhagen Process – set the priorities and strategies for European cooperation in VET, namely, the focus on the implementation of the European Quality Assurance in Vocational Education and Training (EQAVET) and the European Credit System for Vocational Education and Training (ECVET).

The *Recommendation of the European Parliament and of the Council on June 18, 2009 on the establishment of a European Quality Assurance in Vocational Education and Training* recommended concrete measures for VET quality assurance through the establishment of a European quality assurance reference framework, which includes a quality assurance VET-system level and a quality assurance VET-provider level.

The application of the quality assurance framework both for VET systems and VET providers demands a systemic approach to quality, with a strong focus on monitoring and evaluation processes, and intervention readjustment based on monitoring and evaluation results.

In 2017, a proposal for a Council Recommendation on a European Framework for Quality and Effective Apprenticeships were made with the specific objective of providing a coherent framework for apprenticeships based on a common understanding of what defines quality and effectiveness, taking into account that apprenticeships are a particularly effective form of work-based learning in VET that facilitates the transition from education and training to work. Taking into consideration the diversity of VET systems in Member States, this framework set out 14 criteria to define quality and effective apprenticeships, ensuring both the development of job-related skills and the personal development of apprentices.

3. How does EQAVET Works?

EQAVET is applicable at the system level and at the level of VET providers, depending on the **quality criteria and indicators** adopted, within the framework of national legislation and practice.

EQAVET quality cycle includes four interrelated phases:

1. Planning (setting appropriate and measurable goals and objectives);
2. Implementation (establish procedures to ensure compliance with defined goals and objectives);

3. Evaluation (develop data collection and processing mechanisms that support an informed evaluation of the expected results);
4. Review (develop procedures to achieve results not yet achieved and/or establish new objectives based on the generated evidences, to ensure the introduction of necessary improvements).

4. EQAVET Quality Assurance Model

The *Recommendation of the European Parliament and of the Council June 18, 2009 on the establishment of the European Quality Assurance in Vocational Education and Training* comprises a quality model which aims to develop a systematic approach to monitoring the performance of VET systems and VET provision at national and European levels.

Image 1: The four phases of the Quality Assurance Model.



The quality assurance model is based on common European references. It comprises a quality assurance and improvement cycle composed by four phases:

Stage 1: Planning – Set up clear, appropriate and measurable goals and objectives in terms of policies, procedures, tasks and human resources.

Stage 2: Implementation – Establish procedures to ensure the achievement of goals and objectives (e.g. development of partnerships, involvement of stakeholders, allocation of resources and organizational or operational procedures).

Stage 3: Evaluation – Design mechanisms for the evaluation of achievements and outcomes by collecting and processing data in order to make informed assessments/evaluation.

Stage 4: Review – Develop procedures in order to achieve the targeted outcomes and/or new objectives; after processing feedback, key stakeholders conduct discussion and analysis in order to devise procedures for change.

The four stages of the quality assurance cycle are interrelated and need to be addressed together.



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The quality assurance cycle – planning, implementation, evaluation and review of VET – is supported by common quality criteria, indicative descriptors and a set of indicators.

Indicators should be used as a *toolbox* from which VET providers can select the more relevant indicators for their quality assurance system.

In the context of European mobility projects, VET providers should take into consideration the required quality criteria, including those quality aspects in the Learning Agreement, if applicable.

The four stages of the quality assurance cycle should be sequentially applied during the implementation of European mobility projects.

CHAPTER 4: EUROPEAN CREDIT SYSTEM FOR VOCATIONAL EDUCATION AND TRAINING

1. What is the European Credit System for Vocational Education and Training (ECVET)?

The European Credit System for Vocational Education and Training, hereinafter referred to as ECVET, is a common European technical framework for the transfer, recognition and (where appropriate) accumulation of individuals' learning outcomes in light of achieving a qualification.

In conjunction with the European Qualifications Framework (EQF), the European Credit System for Vocational Education and Training (ECVET) aims to achieve greater compatibility between the different Vocational Education and Training systems (VET) across Europe and their qualifications.

European Credit System for Vocational Education and Training (ECVET) is applicable to all learning outcomes achieved by an individual on different learning paths, which are then transferred, recognized and accumulated in order to obtain a qualification.

ECVET has been set up to work with other European tools and aims to make it easier for European citizens to recognize their knowledge, skills and competencies in another European country.

ECVET is foreseen to be a European tool supporting mutual trust in the field of qualifications and increasing transparency in relation to individual learning experiences, making mobility more attractive between different countries and different learning environments.

It also contributes towards lifelong learning, recognizing learning outcomes achieved in formal, non-formal and/or informal settings in order to ensure that such achievements can contribute to the acquisition of a qualification.

2. What are the legal bases of the European Credit System for Vocational Education and Training (ECVET)?

Several European Communiqués on Vocational Education and Training (VET) refer to the purpose of a credit system for Vocational Education and Training (VET).

In 2002 at the *Copenhagen Declaration*, reference was made to a credit transfer system for Vocational Education and Training (VET). The recognition of skills and qualifications was considered a priority by the Directors General for Vocational Training (DGVET) and the European Commission for Vocational Education and Training (VET), as one of the common necessary measures to promote "transparency, comparability, transferability and recognition of skills and/or qualifications between different countries and at different levels".

The *Maastricht Communiqué*, in 2004 – first revision of the *Copenhagen Declaration* – confirmed a continuing commitment to a credit transfer system for Vocational Education and Training (VET).

The *Helsinki Communiqué*, in 2006 – second follow-up of the Copenhagen Process – focused on further development of common European tools for Vocational Education and Training (EQF, ECVET, Europass), enhancement of scope, comparability and reliability of vocational education and training.

The *Bordeaux Communiqué*, in 2008 – third follow-up of the Copenhagen Process – focused on the implementation of the European Credit System for Vocational Education and Training (ECVET) and the European Quality Assurance Reference Framework for Vocational Education and Training (EQAVET).

The Recommendation of the European Parliament and of the Council, June 18, 2009 on the establishment of a European Credit System for Vocational Education and Training (ECVET) is a key European tool with guidelines to boost the creation and implementation of a European credit system for Vocational Education and Training (VET). This Recommendation establishes common ECVET principles and technical specifications for ECVET and recommends wider ECVET promotion and implementation by all Member States.

In recent years, efforts have been made by the European Commission and Member States creating conditions for the ECVET implementation. In 2010, eight pilot projects were funded by the European Commission to test the ECVET implementation. ECVET has been considered a priority within the Lifelong Learning Programme (2007-2013) and the Erasmus+ Programme (2014-2020). In 2011, a network of 14 national agencies, known as NetECVET, came together to produce the *ECVET Mobility Toolkit* (<http://www.ecvet-toolkit.eu/>).

The Report on the implementation of the *Recommendation of the European Parliament and of the Council on ECVET*, published in 2014, found that ECVET projects strongly contributed towards the quality of mobility and awareness and understanding of learning outcome approaches. The Report recommends the need to: increase the political commitment at the national level, or bring stronger permeability between VET and higher education; focus on the benefits and elements seen as most relevant, particularly learning outcomes; better align ECVET with other recognition and transparency tools, particularly Europass, European Qualifications Framework (EQF) and European Credit Transfer and Accumulation System (ECTS).

To develop high quality and relevant labour market vocational skills and qualifications, based on learning outcomes, the *Riga Conclusions* (June 2015) *on a new set of medium-term deliverables in the field of VET for the period 2015-2020*, recommends: promoting work-based learning, with special attention to apprenticeships; further developing quality assurance mechanisms in VET in line with the EQAVET recommendation and, as part of the quality assurance systems, establish continuous information and feedback loops in Initial Vocational Education and Training (I-VET) and Continuing Vocational Education and Training (C-VET) systems based on learning outcomes.

The *Draft 2015 Joint Report of the Council and the Commission on the implementation of the Strategic framework for European cooperation in education and training (ET2020)* – 2015 – confirmed the

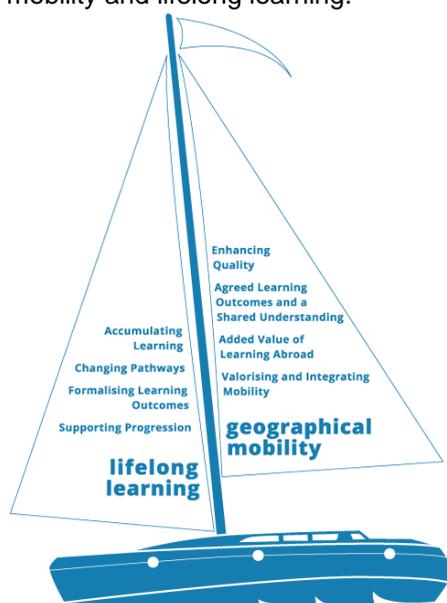
transparency and recognition of skills and qualifications to facilitate learning and labour mobility as one of six new priority areas for European cooperation in Vocational Education and Training.

The *Communication: New Skills Agenda for Future*, presented in 2016 by the European Commission, launched 10 actions in order to equip people in Europe with better skills and make reference to the possible future revision of ECVET. The 10 actions are centred in three key work strands: improving the quality and relevance of skills formation; making skills and qualifications more visible and comparable; improving skills intelligence and information for better career choices.

3. Benefits of European Credit System for Vocational Education and Training (ECVET)

ECVET brings a set of benefits for geographic mobility and lifelong learning.

Image 2: ECVET – benefits for geographic mobility and lifelong learning.



Source:
<http://www.ecvet-toolkit.eu/introduction/why-use-ecvet>

From the geographical mobility point of view, ECVET contributes towards visibility and recognition of learning outcomes achieved abroad, which is crucial for enhancing VET mobility:

- targets the recognition of learning outcomes through a transparent process;
- provides a framework for the assessment, validation and recognition of learning outcomes;
- promotes the integration of mobility into existing learning pathways;
- supports the value of key competences alongside those that are more technically – or vocationally – oriented;
- contributes towards the development of a common language among VET stakeholders and promotes mutual trust within the wider VET community.

From the lifelong learning point of view, ECVET supports the flexibility of programmes and pathways. ECVET enhances the opportunities for lifelong learning making it easier to recognize the learning achievements that youths or adults gained in other contexts, such as in other countries, organizations or systems, as well as in different settings (formal, non-formal, or informal learning).

4. Recognition of Learning Outcomes in Partners' Countries

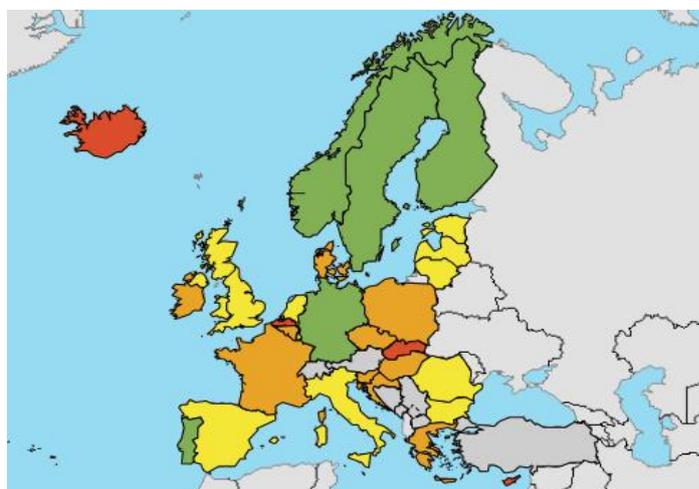
In accordance with the European Commission's Mobility Scoreboard¹, in October 2017, the indicator "Recognition of learning outcomes" obtained the following results for I-VET:

- Portugal – "very good performance";
- Spain, Italy, Romania and Lithuania – "good performance";
- France – "some progress has been made".

Image 3 shows the results commented above.

The indicator for monitoring developments in the area of recognition is defined based on country performance with respect to seven criteria. Indicator colours represent average country scores, which are calculated on the basis of criteria-specific scores.

Image 3: *Recognition of learning outcomes in Europe for I-VET (2017).*



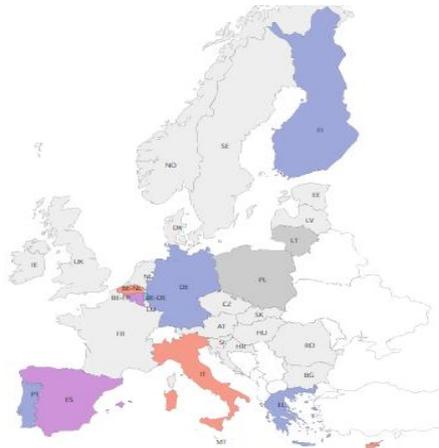
Legend:

	4.5 < Country's score in the indicator	Excellent performance
	3.5 < Country's score in the indicator ≤ 4.5	Very good performance
	2.5 < Country's score in the indicator ≤ 3.5	Good performance
	1.5 < Country's score in the indicator ≤ 2.5	Some progress has been made
	Country's score in the indicator ≤ 1.5	Little progress has been made yet

Source: <https://eacea.ec.europa.eu/national-policies/en/mobility-scoreboard/ivet-indicators/scoreboard-indicator-3-recognition-learning-outcomes-0>

¹ The European Commission's Mobility Scoreboard has been developed by Eurydice (higher education) and Cedefop (Initial Vocational Education and Training - IVET). It follows up on the 2011 'Youth on the Move' Recommendation of the Council of the European Union, providing a framework for monitoring progress made by European countries in creating a positive environment supporting learner mobility. Indicators aim to help countries identify actions to remove obstacles to learner mobility.

Image 4: Scope of recognition of learning acquired abroad by I-VET learners (2017).



Legend:

Grey	No data
Orange	Three types of components covered
Purple	Four types of components covered
Blue	All six types of learning components covered
Light blue	The recognition mechanism is very limited or lacking

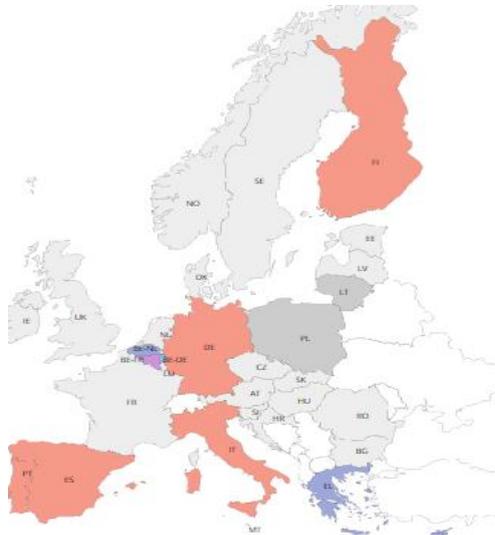
Source: https://eacea.ec.europa.eu/national-policies/en/content/ivet-indicators-2017_en

Image 4 shows a map about the range of learning components that can be taken into account for the recognition of learning outcomes acquired abroad by I-VET learners (2017).

Countries are distinguished depending on the variety of learning components that their approach to recognition covers. The components considered are courses, credit points, units, modules, programmes, qualifications/diplomas/degrees.

In Portugal, all six types of components are covered. Spain recognizes four types of components. Italy recognizes three types of components.

Image 5: Countrywide coordination of the approach to recognition (2017).



Legend:

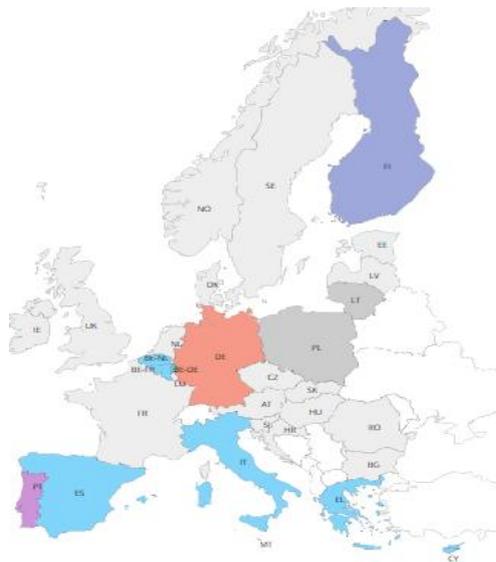
Grey	No data
Orange	Complete countrywide coordination (through regulation or agreement) with local / decentralised implementation
Purple	No countrywide coordination but plans for setting up one
Blue	No countrywide coordination and no plans for setting any
Light blue	The recognition mechanism is very limited or lacking

Source: https://eacea.ec.europa.eu/national-policies/en/content/ivet-indicators-2017_en

Coordination implies a common countrywide framework set by regulations or agreements between the involved entities, but it does not require centralized policies.

Italy, Portugal and Spain have complete countrywide coordination with decentralised implementation.

Image 6: Time limit for processing applications and/or granting recognition (2017).



Legend:

Grey	No data
Orange	Automatic recognition
Purple	Regulatory time limit is six weeks or less
Blue	Regulatory time limit is more than 12 weeks
Light blue	No regulatory time frame and in practice either more than 12 weeks or no particular time limit
Green	No possibility of recognition in the country

Source: https://eacea.ec.europa.eu/national-policies/en/content/ivet-indicators-2017_en

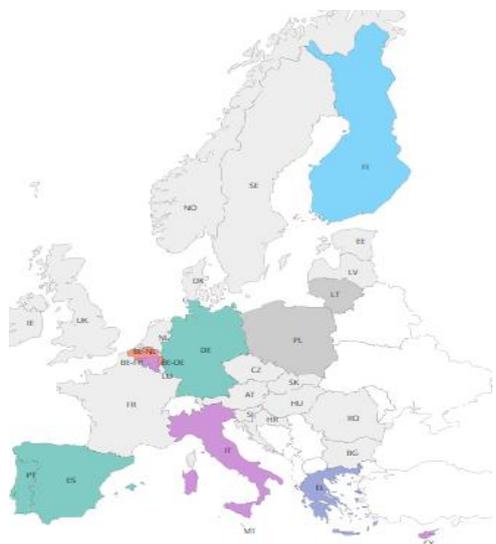
Image 6 shows the situation of countries in terms of time limit for processing applications and/or granting recognition (2017). It is focused on the time to ensure the recognition of learning outcomes, including upon learners' request.

It is considered that the sooner recognition is processed and notified, the quicker the learner will go ahead with further study/work plans.

In Portugal, the regulatory time limit for processing recognition is less than six weeks.

In Spain and Italy, there is either no time frame at all or a practice-based limit of more than 12 weeks.

Image 7: Use of EU tools for visibility, transfer and recognition of LO acquired abroad in I-VET (2017).



Legend:

Grey	No data
Orange	One tool is used
Purple	Two tools are used
Blue	Three tools are used
Light blue	Four tools are used
Green	All five tools are used

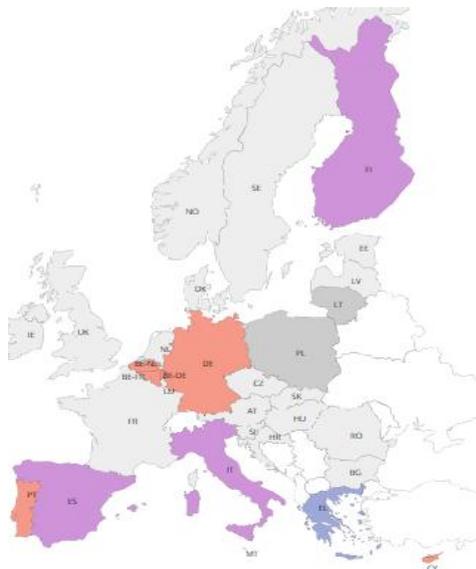
Source: https://eacea.ec.europa.eu/national-policies/en/content/ivet-indicators-2017_en

Image 7 shows the situation of countries regarding the use of EU tools to enhance the visibility, transfer and recognition of learning outcomes acquired abroad in I-VET (2017).

Five EU tools were considered: Europass Mobility Document; Europass Certificate Supplement; ECVET; EQF/NQF; learning outcomes approach. Countries are distinguished depending on the number of tools that are using.

Portugal and Spain are using all five European tools. In Italy two European tools are in use.

Image 8: *Evaluation of the recognition policy (2017).*



Legend:

Grey	No data
Orange	No monitoring, no plans for it
Purple	Monitoring and no plans for shifting to full evaluation
Blue	Monitoring, but plans for shifting to full evaluation

Source: https://eacea.ec.europa.eu/national-policies/en/content/ivet-indicators-2017_en

Image 8 shows the situation of countries on the evaluation of the recognition policy (2017). Countries are distinguished depending on whether their recognition policy is evaluated or not. The policy is considered evaluated if it undergoes monitoring which results in recommendations to implement and change next policies. Evaluation can be complete and systematic ("full evaluation"), or incomplete/not-systematic (labelled "monitoring"), or lacking.

Any country of the partnership has a complete and systematic evaluation of their recognition policy. Italy and Spain have incomplete/non-systematic evaluation but no plans for shifting to full evaluation. Portugal lack both an evaluation process and tangible plans for developing one.

5. How does the European Credit System for Vocational Education and Training (ECVET) Work?

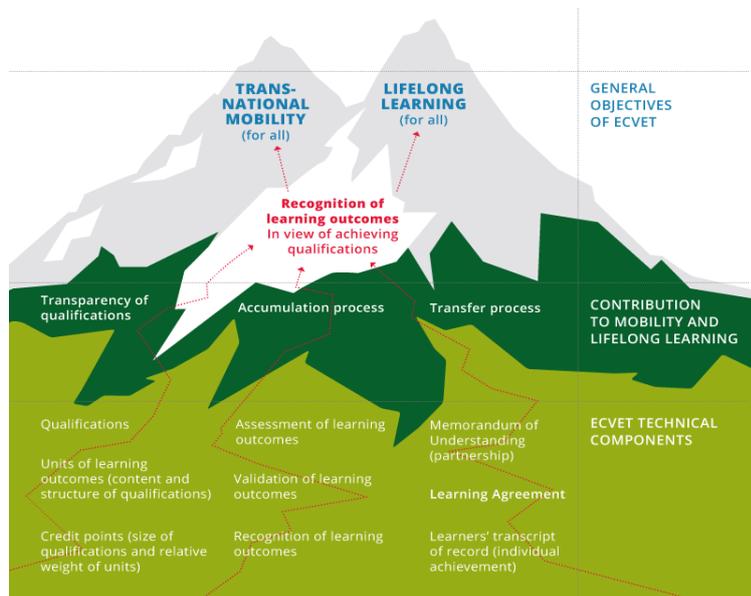
ECVET implementation requires that qualifications be described in terms of learning outcomes, which should be grouped into units of learning outcome. Learning outcomes can be achieved by individual learners through various different learning pathways and different learning contexts.

A qualification should be composed of a set of units of learning outcome, and the units can be accumulated and transferred to obtain a certain qualification.

To do so, a credit point system has to be put into practice. A certain number of credit points must be assigned to the qualification. A qualification and each unit of learning outcome must be represented by a specific number of credit points.

Credits can be accumulated and transferred. Credit transfer consists of a process through which learning outcomes achieved in one context can be validated and recognized and taken into account in another context. Credit transfer implies a previous evaluation, validation and recognition of learning outcomes. Credit accumulation consists of a process through which learners can progressively achieve qualifications by successive assessment processes and validation of learning outcomes.

Image 9: Diagram on ECVET implementation.



Source: <http://www.ecvet-toolkit.eu/introduction/ecvet-principles-and-technical-components>

Within the ECVET framework, ECVET points allocated to qualifications and units of learning outcome are recommended. ECVET points are “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 European Parliament and of the Council June 18, 2009 on the establishment of a European Credit Systems for Vocational Education and Training*). The number of ECVET points allocated to a qualification, alongside units, learning outcomes and EQF level, can support the understanding of a qualification. “The number of ECVET points allocated to a unit provides the learner with information concerning the relative weight of what he/she has accumulated already. It also provides the learner with information concerning what remains to be achieved.” (Cedefop, 2012).

CHAPTER 5: THE EURSPACE PILOT PROJECT – METHODOLOGICAL APPROACH

This Chapter describes the methodological approach developed during the implementation of the pilot project in the Hotel and Restaurant Management field. The purpose was to find a practical methodology applicable to the countries that compose the partnership, in order to apply ECVET to the technical component of the Cookery qualification.

The developed methodology – *matching methodology* – follows EQF principles and ECVET principles and technical specifications.

The training field and chosen VET course for the implementation of the pilot project was based on its usefulness to partners involved.

The *EURspace* methodological approach is sustainable and applicable to other training fields and VET courses existent in other European countries.

STEP 1:

IDENTIFYING THE EXPECTED LEARNING OUTCOMES OF THE QUALIFICATION

The first step of the methodology is to identify the expected Learning Outcomes of the qualification. The whole training referential of the qualification has to be described in terms of learning outcomes. This is one basic principal for the ECVET implementation.

Learning outcomes should be clearly identified and described in accordance with a common conceptual framework in order to allow a reciprocal understanding of the qualification.

What are Learning Outcomes?

Learning Outcomes are described as “statements of what a learner knows, understands and is able to do upon completion of a learning process and which are defined in terms of knowledge, skills and competence”. (Recommendation of the European Parliament and of the Council June 18, 2009 on the establishment of a European Credit System for Vocational Education and Training)

Within the context of the *EURspace* Project, *learning outcomes* are understood as a set of knowledge, skills and competences needed to put into practice key technical outcomes or key tasks. Therefore, *learning outcomes* are described in terms of knowledge, skills and competence. The description of the knowledge, skills and competence are interconnected for each key technical outcome.

Learning outcomes are described from the perspective of the learner and focus on the results that are expected to be achieved upon the completion of a learning process. *Learning outcomes* are focused as outputs, instead of being focused as inputs (learning targets or learning path). For this reason, both, learning context, learning process and learning methods are considered relevant for learning outcome description.

Knowledge

Knowledge is the result of the assimilated information after a learning process, acquired through study or experience. In the Recommendation of the European Parliament and of the Council, April 23, 2008, knowledge is described as “the body of facts, principles, theories and practices that is related to a field of work or study. In the context of the European Qualifications Framework, knowledge is described as theoretical and/or factual.”

The European Qualifications Framework provides some **knowledge descriptors**. *Table 4* shows the descriptors for EQF levels 1 to 5.

Table 4: *Descriptors per EQF level – knowledge.*

Knowledge In the context of EQF, knowledge is described as theoretical and/or factual.	
Level 1 The learning outcomes relevant to Level 1 are:	Basic general knowledge
Level 2 The learning outcomes relevant to Level 2 are:	Basic factual knowledge of a field of work or study
Level 3 The learning outcomes relevant to Level 3 are:	Knowledge of facts, principles, processes and general concepts, in a field of work or study
Level 4 The learning outcomes relevant to Level 4 are:	Factual and theoretical knowledge in broad contexts within a field of work or study
Level 5 The learning outcomes relevant to Level 5 are:	Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge

Source: adapted from the *European Parliament and of the Council (2008). Recommendation of the European Parliament and of the Council April 23, 2008 on the establishment of the European Qualifications Framework for lifelong learning* (pp. C111/5-C111/6). Official Journal of the European Union. 2008/C 111/01.

Within the context of the *EURspace* Project, **Knowledge** is described in terms of **what the learner knows and understands**.

In the description of what the learner knows, the body of facts, principles, theories and practices which are related to a field of work or study are implied.

The **depth and breadth dimensions** of knowledge are important because knowledge has to be described as increasing levels of depth and breadth, as European Qualifications Framework Levels increase. Meaning that as EQF levels increase, so does the levels of depth and breadth (knowledge) that the individual should have at that particular level.

Depth and breadth of understanding depend upon, and contribute to, independence of thought, which also implies autonomy.

Image 10: *Depth dimension.*



Depth of knowledge is related to the level of complexity and detail of knowledge, at a vertical level, which implies facts of knowledge, meaning that the depth of knowledge is linked to fine points of a particular subject.

Depth of understanding depends upon the capacity to master a body of knowledge.

Image 11: *Breadth dimension.*



Breadth of knowledge is related to the vastness or the range of knowledge in a given field, at a horizontal level.

Image 12: *Tree of knowledge.*



Using a tree of knowledge as a metaphor, the number of branches would represent the breadth of knowledge and the length of the branches and the number of secondary ramifications would represent the depth of knowledge.

Below is an example on how to describe knowledge, for the Unit of Learning Outcome “Preparation of Soups”, EQF level 4, in Cookery qualification.

Course: Cookery

EQF Level: IV

Unit of Learning Outcome: Preparation of Soups

Key Technical Outcome: Elaborate daily work plans for the production of soups

Knowledge:

The Learner knows and understands:

- *The technology related to kitchen appliances and utensils;*
- *Production and organization procedures: kitchen service;*
- *Articulation with restaurant service (reservations, orders, etc.);*
- *Kitchen planning techniques: production.*

Skills

Skills can be described as a set of abilities available to perform a specific task. “Skills’ means the ability to apply knowledge and use know-how to complete tasks and solve problems.” (Recommendation of the European Parliament and of the Council April 23, 2008 on the establishment of the European Qualifications Framework for lifelong learning)

The European Qualifications Framework provides some **skills' descriptors**. Table 5 shows the descriptors for EQF levels 1 to 5.

Table 5: *Descriptors per EQF level – skills.*

Skills	
In the context of EQF, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools and instruments).	
Level 1 The learning outcomes relevant to Level 1 are:	Basic skills required to carry out simple tasks
Level 2 The learning outcomes relevant to Level 2 are:	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools
Level 3 The learning outcomes relevant to Level 3 are:	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information
Level 4 The learning outcomes relevant to Level 4 are:	A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study
Level 5 The learning outcomes relevant to Level 5 are:	A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems

Source: adapted from the *European Parliament and of the Council (2008). Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning* (pp. C111/5-C111/6). Official Journal of the European Union. 2008/C 111/01.

In line with the European Qualifications Framework suggestions, 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, tools and instruments).

As in the domain of knowledge, in the skills description various levels of **depth and breadth** are also considered, according to the EQF level to which the qualification relates.

There is a progressive widening (breadth) and specialization (depth) of the range of cognitive and practical skills as EQF levels increase, from the ability to perform basic tasks and solve simple problems that imply a strict breadth and a degree of specialization, to the ability to perform tasks of a high degree of complexity and the ability to solve critical and unexpected problems in an autonomous manner, interconnecting a vast range of skills and applying skills with a higher degree of specialization.

Within the context of the *EURspace* Project, **skills** are described in terms of **what the learner is able to do**.

The *EURspace* methodological approach establishes that the description of the skills must obey, in terms of writing, to the structure of the statement initiated by the verb that indicates the type of skill, conjugated in the infinity, followed by the description of the action.

Below is an example on how to describe skills, for the Unit of Learning Outcome “Preparation of Soups”, EQF level 4, in Cookery qualification.

Course: Cookery

EQF Level: IV

Unit of Learning Outcome: Preparation of Soups

Key Technical Outcome: Elaborate daily work plans for the production of soups

Skills:

The Learner is able to:

- **Interpret and analyze** documents related to kitchen organization and functioning;
- **Analyze the production plan** and other production guidelines (reservations, orders, special services, etc.);
- **Read and interpret** technical datasheets in Portuguese and English;
- **Select and apply** production and organization procedures: kitchen service;
- **Apply** kitchen planning techniques.

Competence

In accordance with the Recommendation of the European Parliament and of the Council April 23, 2008, competences are “the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development”.

The European Qualifications Framework defines competence in terms of responsibility and autonomy.

Table 6: Descriptors per EQF level – competences.

Responsibility and Autonomy	
In the context of the EQF responsibility and autonomy are described as the ability of the learner to apply knowledge and skills autonomously and with responsibility	
Level 1	The learning outcomes relevant to Level 1 are: Work or study under direct supervision in a structured context
Level 2	The learning outcomes relevant to Level 2 are: Work or study under supervision with some autonomy
Level 3	The learning outcomes relevant to Level 3 are: Take responsibility for completion of tasks in work or study; adapt own behaviour to circumstances in solving problems
Level 4	The learning outcomes relevant to Level 4 are: Exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities
Level 5	The learning outcomes relevant to Level 5 are: Exercise management and supervision in contexts of work or study activities where there is unpredictable change; review and develop performance of self and others

Source: adapted from the *European Parliament and of the Council (2008). Recommendation of the European Parliament and of the Council April 23, 2008 on the establishment of the European Qualifications Framework for lifelong learning* (pp. C111/5-C111/6). Official Journal of the European Union. 2008/C 111/01.

Within the context of the *EURspace* Project, **competences** are described in terms of **what the learner does, applying knowledge, skills and putting in evidence attitudes, personal, social and methodological abilities**.

Competences should be described with increasing levels of dexterity, as EQF levels also increase.

For qualifications reporting to EQF level 1, it is expected that the learner puts into practice basic factual knowledge, basic cognitive and practical skills, basic personal, social and/or methodological abilities, with a degree of depth, breadth and dexterity, under direct supervision and in a structured context.

For qualifications reporting to EQF level 5, it is expected that the learner puts into practice specialized factual and theoretical knowledge, comprehensive range of cognitive and practical skills, higher personal, social and/or methodological abilities, with a higher degree of depth, breadth and dexterity, carrying out management and supervision of work where there is unpredictable change, reviewing and developing performance of self and others.

The *EURspace* methodological approach establishes that the description of competences must obey, in terms of writing, to the structure of the statement initiated by the action verb that indicates the type of competence, conjugated in the present simple and continuous forms, followed by the description of the observable action.

Below is an example on how to describe competences, for the Unit of Learning Outcome “Preparation of Soups”, EQF level 4, in Cookery qualification.

Course: Cookery

EQF Level: IV

Unit of Learning Outcome: Preparation of Soups

Key Technical Outcome: Elaborate daily work plans for the production of soups

Competences:

The Learner:

- **Elaborates** *daily work plans for the production of soups, by:*
 - **working** *in a team;*
 - **respecting** *safety and health standards at work;*
 - **defining** *goals;*
 - **acting** *in accordance to the defined goals;*
 - **being** *proactive in solving problems and unforeseen events.*

STEP 2:

DEFINING UNITS OF LEARNING OUTCOME

The second step of the methodology is to **group Learning Outcomes into Nuclear Units** and **define the Units of Learning Outcome that compose the qualification**.

Units of Learning Outcome can be considered as one technical specification to put ECVET into practice. ECVET implementation requires not only that qualifications be described in terms of learning outcomes, but also that learning outcomes be brought together in units.

What are Units of Learning Outcome?

A *unit of learning outcome* is a concept different from a course or a module of a training framework.

A *unit of learning outcome* is a component of a qualification, consisting of a coherent set of knowledge, skills and competence that can be assessed and validated with a number of associated ECVET points. A qualification comprises several units and is made up of the whole set of units. Thus, a learner can achieve a qualification by accumulating the required units, achieved in different countries and different contexts (formal and, where appropriate, non-formal and informal), while respecting national legislation relating to the accumulation of units and the recognition of learning outcomes.

A unit may be specific to a single qualification or common to several qualifications. The expected learning outcomes defining a unit may be achieved irrespective of where or how these have been achieved. (Recommendation of the European Parliament and of the Council June 18, 2009 on the establishment of a European Credit System for Vocational Education and Training)

Units of learning outcome should be described as occupational activities and key technical tasks.

Units of learning outcome should include not only the technical and methodological knowledge, skills and competence, but also, attitudes and other social, personal and transversal competences related to the professional profile of the qualification.

Units of learning outcome have to be assessable. The description of the Unit also has to include the performance criteria related to the learning outcomes of each key technical outcome.

Due to the fact that learning outcomes focus on the results achieved upon completion of a learning process, both contextual conditions, learning processes, learning methodologies and resources are considered with no additional relevance for the description of the *unit of learning outcome*.

How to group Learning Outcomes into Nuclear Units?

Within the context of the *EURspace* Project, *units of learning outcome* are understood as a coherent set of knowledge, skills and competences needed to prove a given key technical outcome or to perform key tasks. *Learning outcomes* are interconnected in a coherent, comprehensible and logical set of *key technical outcomes*, which should result in observable and verifiable *outputs*.

The main rule for grouping *learning outcomes* into *units* is the coherence, interconnectivity, reciprocity and interdependence of knowledge, skills and competence associated with each *key technical outcome* among each other. The following criteria are taken into account to group *learning outcomes*: relation of *learning outcomes* to the same set of key technical tasks; relation of *learning outcomes* to the same product/outcome; relation of *learning outcomes* to the same production technique.

Each *unit of learning outcome* is composed of one or more *key technical outcomes* which are interconnected and led to observable and evaluable *outputs*.

Whenever possible, *units of learning outcome* should be designed in such a way that can be achieved as independently as possible of other *units*, so that *learning outcomes* in a qualification should be assessed only once.

Image 13: *Unit of Learning Outcome in EURspace Project.*



What are the components of a Unit of Learning Outcome?

Units of learning outcome should be described in accordance with a common conceptual framework in order to allow a reciprocal understanding of the qualification and allow to an objective comparison between countries.

For the purposes of the *EURspace* Project, it is considered that a *unit of learning outcome* should be composed by the following components:

- ◆ **Title of the Qualification** to which the Unit relates
- ◆ **EQF Level**
- ◆ **Title of the Unit**

The title of the Unit should be as short as possible and should reflect the importance of the Learning Outcome(s) for the labour market. The title should reflect the global learning outcomes that are contained in the unit, and not focusing only on some of them.

◆ **Key Technical Outcome**

Key technical outcome are statements that express the main technical tasks that the learner has to perform to prove a specific output.

Key technical outcome are expressed in a simple, short and objective statement, beginning by the action verb that indicates the main technical task that the learner has to perform, conjugated in the infinitive.

◆ Knowledge

Knowledge is the theoretical and/or factual body of facts, principles, theories and practices that are related to a field of work or study.

Knowledge is described in terms of what the learner knows and understands.

◆ Skills

Skills are cognitive or practical abilities to apply knowledge and use know-how to complete tasks and solve problems.

Skills are described in terms of what the learner is able to do.

◆ Competence

A competence is considered the proven ability to use knowledge, skills and personal, social and/or methodological abilities at work or in academic situations and in professional and personal development.

Competences are described in terms of what the learner does, applying knowledge, skills, and proving the following abilities: attitudes, personal, social and methodological.

◆ Performance Criteria

Performance criteria are the quality requirements associated with performance and the quality standards that ensure that the individual acts competently (required quality for achievements).

The performance criteria are specifically associated with each key technical outcome and respective set of knowledge, skills and competence.

Performance criteria are measurable, observable and provide qualitative important information on the expected performance.

◆ Outputs

Outputs are the results, the obtained products or the proof.

The outputs are directly associated with key technical outcome and performance criteria, being the observable result of the performance.

Outputs are described in a clear, objective and short manner, expressing the main nuclear professional proof for a given qualification.

◆ Code (if applicable)

The title of the Unit should contain the national code used in the national qualifications framework (when applicable).

In cases where the work of reformulating the qualification for learning outcomes implied reformulating the description of the existing unit for a focus on the results of the learning process, rather than the existing description focused on the inputs and learning process, without any alteration in terms of the expected results of the learning process that would be achieved by a learner with a successful evaluation, the code existing in the national system is maintained. In cases where the reformulation of the qualification also entailed, for example, the dismantling of modules into several units of learning outcome, the code is assigned as follows: assignment of the national code in which these learning outcomes were contained,

followed by an asterisk and an integer (1, 2, 3, ...), assigned in ascending order of the number of units of learning outcome in which the original module was disassembled.

◆ Number of Hours

Although the number of hours of the Unit of Learning Outcome is considered to be of no relevance to the *matching process*, the number of hours is an indicator that helps to balance the size of the Unit between countries, and it is a fundamental indicator for the assignment of ECVET Points.

◆ ECVET Credit Points

In order to have a comprehensive view of the overall weight of learning outcomes in a qualification and the relative weight of Units in relation to the qualification, each Unit should contain the indication of the number of ECVET Points allocated to the Unit of Learning Outcome. The allocation of ECVET Points to Units of Learning Outcome is crucial for the validation and recognition processes of Units when the Learning Outcomes are acquired abroad.

In the same way, the attribution of Credit Points is important for the reason that Credits represent the volume of learning outcomes achieved by the learner. Credits express the volume of learning outcomes involved in each unit of learning outcome. In addition, transfer and accumulation of credits make it possible to gradually achieve a qualification.

STEP 3:

ATTRIBUTING ECVET CREDIT POINTS TO UNITS OF LEARNING OUTCOME

The third step of the methodology is to attribute ECVET points to qualifications and units, **representing the qualification and each unit by a specific number of ECVET credit points.**

In the *EURspace* Project, the implementation of a **credit system** was decided, in addition to the attribution of **ECVET points**, so it can be possible to attribute credits to assessed learning outcomes. In the countries in which a credit system already exists, the existent credit system was followed, and in the other countries it was decided that the rule for the attribution of ECVET Points should be linked with the rule for the attribution of credits when the respective learning outcome is achieved by the learner.

These procedures are of extreme importance in order to ensure the **validation and recognition processes of learning outcomes**, as well as **credit transfer and accumulation.**

What are Credit Points?

“Credit for learning outcomes (credit) means a set of learning outcomes of an individual which have been assessed and which can be accumulated for a qualification or transferred to other learning programmes or qualifications.” (Recommendation of the European Parliament and of the Council June 18, 2009 on the establishment of a European Credit System for Vocational Education and Training)

A credit system associated with qualifications implies that the qualification and each unit be represented by a specific number of Credit points. Credit points supplement the units (or sub-units). They express the volume of learning outcomes involved in each unit and also give information on the relative weight of the units which make up a qualification.

Credit refers to the fact that the learner has achieved the expected learning outcomes which have been assessed positively and the outcome of the assessment is documented in a personal transcript. Based on this documentation, other institutions can recognise the learners' credits.

Credit points represent the volume of learning outcomes achieved by the learner. Credit points are acquired by the individual at the same time as the units, sub-units and, if necessary, part of a unit are achieved, accumulated within the learning pathway and used to indicate the learners' progress and the completion of an individual learning pathway leading to a qualification.

Credit points may be used to allow a learner: to move from one qualification to another within the same EQF level; to move from one qualification level to another; to move from one learning system to another.

Credit points are not automatically recognized. Recognition is a decision taken at the national level by the competent bodies responsible for the qualification or of its implementation (training institutions, employers, ministries, social partners, professional organisations, chambers of commerce...). But, credit points linked to the EQF-levels might increase the predictability of recognition decisions. They might facilitate the conclusion of individual learning agreements and collective recognition conventions at sectoral, regional, national or European levels. These recognition conventions are part of the *Memorandum of Understanding* and/or of the individual *ECVET Learning Agreement*.

What does Credit Transfer mean?

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 assessment, validation and recognition processes.** 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 credits. On the basis of the assessed learning outcomes, the credit can be validated and recognized by another competent institution. Two cases of credit transfer exist:

- Credit transfer in the framework of partnerships for mobility – in which credit points are converted to ECVET points. When the credit transfer takes place in the framework of an organized mobility, underpinned by a *Learning Agreement*, credit should be validated and automatically recognized if the assessment is positive;
- Credit transfer outside partnerships – it depends on the rules established by the National

Qualifications Frameworks.

What does Credit Accumulation mean?

Credit accumulation is a process through which learners can acquire a given qualification in a progressive way by successive assessments and validation of learning outcomes. When the learner has accumulated the required credit for the qualification and when all 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 outcome which can be progressively assessed, validated and recognized. 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.

What are ECVET Points?

ECVET points are "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". "ECVET points provide complementary information about qualifications and units in a numerical form. They have no value independent of the acquired learning outcomes of a particular qualification to which they refer and they reflect the achievement and accumulation of units." (Recommendation of the European Parliament and of the Council June 18, 2009 on the establishment of a European Credit System for Vocational Education and Training)

The number of ECVET points allocated to a unit of learning outcome provides the learner with information concerning the relative weight of what has been already achieved and accumulated, as well as, what remains to be achieved in order to acquire a given qualification.

How to allocate ECVET Points to Units of Learning Outcome?

In the context of the *EURspace* Project, the role for the attribution of ECVET points to units of learning outcome followed the convention to which 60 points are allocated to the learning outcomes expected to be achieved in a year of formal, full-time, Vocational Education and Training, in accordance with the Recommendation of the European Parliament and of the Council June 18, 2009.

ECVET Recommendation also mentions that the relative weight of a unit of learning outcome, with regard to the qualification, should be established according to the following criteria or to a combination thereof:

- 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,
- the complexity, scope and volume of learning outcomes in the unit,
- the effort necessary for a learner to acquire the knowledge, skills and competence required for the unit.

Following the convention, for the Cookery qualification, a VET formal learning context is understood as a reference in each country 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 countries in which a credit system based in the European Recommendation already exists, the credit system is followed and converted in ECVET points.

It is possible that the same qualification in different countries has a total number of ECVET points substantially different from another country. The intention in the pilot project is to compare units of learning outcome, considering that learning outcomes are the main focus. The number of hours of the unit is considered of less relevance for this comparison, provided that the same learning outcomes are achieved.

ECVET points are assigned to units that make up a qualification and a system of credits is assigned, in each country. It makes the transfer and accumulation of credits that correspond to learning outcomes acquired in other contexts possible. For example, the learner participates in an Erasmus+ mobility and acquires learning outcomes abroad that we know match Unit X and Unit Y of the country of origin; when returning, the learner expects that the recognition and validation of learning outcomes are already assessed, so that the learner can accumulate the number of credit points corresponding to the units that contain the acquired learning outcomes.

Example 1: **Portugal**

In Portugal, on February 1, 2017, Ordinance no. 47/2017 was issued, giving account of the creation of a credit system that, in line with the modular structure of the existing training offer, enables the coherent capitalization of training units and greater mobility and flexibility in the training paths. This ordinance regulates the National System of Credits of Vocational Education and Training, with the objective of promoting the flexibility of the qualification pathways, capitalizing individual paths of training and lifelong learning and favouring the readability and recognition of the education system and training of the various actors, in particular by employers. Credit points are allocated to qualifications that integrate the National Qualification Catalogue, according to the qualification level defined in the National Qualifications Framework. A full-time formal training year corresponds to 60 credit points, as provided for in the ECVET Recommendation. Qualifications with the same level of qualification, according to the National Qualifications Framework, have the same minimum limit of number of credit points. Credit points are distributed among the units that comprise the qualification, taking into account the following criteria: (a) the relative importance of the learning outcomes for the labour market; b) complexity of the learning outcomes to be achieved; c) the amount of work required to acquire the learning outcomes, in particular the hours of training required for this purpose. The minimum number of credit points allocated to EQF level 4 qualifications is 180 credit points: 70 credit points for all units relating to the basic training component; 110 credit points allocated to all units relating to the technological training component or professional skills, of which 20 correspond to the internship, when applicable. The qualification *Cookery and Pastry Technician*, EQF level 4, contained in the National Qualification Catalogue has a total of 3 years of full time training. Therefore, for example, the unit of learning outcome "Preparation of Soups", which has 25 hours, has a total of 2.25 credit points.

Example 2: Turkey

Turkey does not have a framework and/or guidelines for the attribution of ECVET points and credits for VET programmes. Therefore, the ECVET credit attribution has been implemented via the general ECVET Recommendation, attribution of 60 ECVET credits for each academic year. The Cookery Technician Course in Turkish VET schools is 3 years and graduates receive EQF level 4 – with a total of 180 ECVET credits. The allocation of ECVET credits has consequently been calculated with this data. In the 3 years of VET education, the learners receive a total course of 4280 hours, of which 2235 belongs to the technical components and the remaining 2045 to the other courses. A ratio of 60% to 40% between the technical courses and other courses has been followed respectively and the following results have been obtained:

ECVET POINTS FOR TECHNICAL COURSES	60 of 180	108
ECVET POINTS FOR OTHER COURSES	40 of 180	72

Therefore,

ECVET point corresponding to 1 Technical Course Hour is (1x108/2235)	0,048322
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In order to avoid numerical abundance, the obtained ECVET point value for 1 technical course hour has been rounded up to 2 decimal places (0,048322 rounded up to 0,05).

ECVET point corresponding to 1 Technical Course Hour is	0,05
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Sample on ECVET points attribution for ZMD MTAL:

UNITS OF LEARNING OUTCOME	HOURS	ECVET CREDIT
Hygiene and Sanitation	16	0,8 (16 x 0,05)
Occupational Health and Safety	8	0,4 (8 x 0,05)
International Soups	24	1,2 (24 x 0,05)

Example 3: Spain

In the case of Spain, the country does not yet have a framework and/or guidelines for the attribution of ECVET points and credits in VET programmes, although this is now in the debate of the Spanish ECVET discussion group. Without a national reference, for this pilot experience, the general ECVET Recommendation was followed, attribution of 60 ECVET credits to each academic year. In this case, the VET qualification, EQF level 3, for Cookery and Gastronomy Technician lasts 2 years, and to the overall programme is attributed 120 ECVET credits. To allocate credits to each unit of learning, the total number of programme credits (120) is divided by the total number of hours of the programme (1967), meaning that each hour is multiplied by the coefficient 0.06. In the case of Spain all the components in the curriculum are technical; there is no difference between technical and non-technical components as in the case of other countries like Turkey for example.

The ECVET credits for each unit of learning will be achieved by multiplying:

Hours of the Unit x 0,06 = number of ECVET points attributed to the Unit

The total number of hours of the Cookery Course is 1976 hours.

Therefore,

TOTAL ECVET POINTS for 2 year	120
Total ECVET points for 1st year	60
Total ECVET points for 2nd year	60

Sample ECVET Points attribution for Spain:

UNIT OF LEARNING OUTCOME	HOURS	CREDIT for 1 HOUR	ECVET CREDITS
Business and entrepreneurial initiative	63	0,06	3,84

Example 4: Italy

The attribution of ECVET points has been calculated by taking into consideration the three-year courses equivalent to 3000 hours and since Italy does not have a credit system for vocational education, the 180 credits of the European system was taken into account. From here, the total hours was divided into three main components: 1500 hours for professional/technical competencies; 720 hours for internship; 780 hours for basic competencies over the three years.

Therefore, the weight attributed to each component was distributed by assigning 60% to technical competencies and internship and 40% to basic competencies. Then, the value obtained was multiplied by the number of hours of each unit of learning outcome. Below is a concrete example, of the Unit of Learning Outcome UC03: *Plan the food and the wine and the need for supply*.

This unit has 50 hours and it is a part of the overall 1500 hours of professional/technical competencies. Assigning a 60% weight to the hours of this component translates in a 0,06 value per hour. This value is then multiplied by the amount of hours (50*0,06) and as a result 3 ECVET points are allocated to this Unit of Learning Outcome.

Example 5: Romania

The attribution of ECVET points to Romanian Cookery qualification has been calculated as follows:

- the weight attributed to each component was distributed by assigning 60% to the technical component and 40% to basic components;
- 1 ECVET point is granted for the units of competence that are reasonably expected to be obtained by the learner with 20 hours of training;
- a unit of learning outcome may have between 0.5 and 2 ECVET points.

The calculations to get this conclusion are outlined below.

YEAR	TOTAL HOURS PER YEAR	GENERAL COMPONENT	TECHNICAL COMPONENT
I	1238 hours	748 hours	490 hours
II	1326 hours	352 hours	974 hours
III	1290 hours	330 hours	960 hours
Total	3854 hours	1430 hours	2424 hours

A total of 180 ECVET points are allocated to the qualification.

Total of ECVET points to allocate to the general component: $180 * 0,4 = 72$ ECVET points

Total of ECVET points to allocate to the technical component: $180 * 0,6 = 108$ ECVET points

Number of ECVET points, per hour, for the technical component: $108 / 2424 = 0,05$ ECVET point/hour

Example:

UNIT OF LEARNING OUTCOME	NO. OF HOURS	CALCULATION	ECVET POINTS
Appetizers and snacks	30	$30 * 0.05 = 1.5$	1.5
Liquid dishes	31	$31 * 0.05 = 1.55$	1.6

Example 6: Lithuania

In Lithuania, in 2012, based on the European Union Social Fund and the budget of the Republic of Lithuania, under the implementation of project number VP1-2.2-ŠMM-04-V-03-001, "*Formation of qualifications and development of modular vocational training system*", a Centre for the Development of Qualifications and Vocational Training developed a methodology for the development of modular Vocational Training Programmes which has been used as the main framework until now.

The methodology for the development of modular training programmes offered to use credits (not ECVET points). Firstly, credits are allocated to all qualifications, i.e. for the entire curriculum, after which a certain number of credits from the total number of credits are allocated to individual competences, i.e. units, as the number of credits reflects the weight ratio of each competency to the entire qualification.

A credit is the unit of learning volume for measuring both learning outcomes and learner work time.

One academic year of full vocational training, composed by 1600 hours, corresponds to 60 credit points.

One academic year consists of 60 credit points.

LT ECVET credit points: $1600 \text{ hours} / 60 = 27$ hours

Therefore, 1 ECVET point is allocated to 27 hours of vocational training.

Example:

UNIT OF LEARNING OUTCOME	NO. OF HOURS	CALCULATION	ECVET POINTS
Preparation of workplace	108	$1 * 108 / 27 = 4$	4
Preparation, presentation and quality estimation of salad	81	$1 * 81 / 27 = 3$	3

Example 7: France

The allocation of ECVET points to units of learning outcome in the case of the French Cookery qualification has been calculated as follows:

- level IV Cookery qualification in France is a three-year course with a total of 4700 hours of vocational training, therefore, 180 ECVET points are allocated to the qualification;
- the professional/technical component has a total of 1236 hours;
- the weight attributed to each training component was distributed by assigning 60% to professional/technical component and 40% to the basic component;
- a total of 108 ECVET points are allocated to the technical component: $180 * 0,6 = 108$ ECVET points;
- a total of 72 ECVET points are allocated to the general component: $180 * 0,4 = 72$ ECVET points;
- 0,09 ECVET points are allocated to 1 training hour in the technical component:
 $108 / 1236 = 0,09$ ECVET point/hour;
- 1 ECVET point is granted for the units of competence that are reasonably expected to be obtained by the learner with 11 hours of professional/technical training.

Example:

UNIT OF LEARNING OUTCOME	NO. OF HOURS	CALCULATION	ECVET POINTS
Priming Raw Materials	20	$1 * 20 / 11 = 1.8$	1.8
Making Soups	30	$1 * 30 / 11 = 2.7$	2.7

STEP 4:

DEVELOPING MATCHING MATRICES

Since qualifications are described on the basis of a common conceptual framework, the conditions for finding the common units of learning outcome among countries are met.

Only common units of learning outcome will be considered for the *matching process*. If there are common learning outcomes, but these have not been grouped into common units of learning outcome, they will not be considered for the *matching process*. Similarly, parts of units of learning outcome will not be considered and a unit will only be considered for the *matching matrix* if the entire unit of learning outcome matches.

It was decided that only common units, among at least 3 countries, will be considered for the *matching matrix* of the *EURspace* pilot project.

What is a Matching Matrix?

A *matching matrix* is an instrument that shows the common units of learning outcome between different countries for a given qualification. It is the result of the study and comparison of all components that composes the units of learning outcome, between countries.

The concept of the *matching matrix* was developed within the context of the implementation of the *EURspace* pilot project. It takes part of the *matching methodology* carried out.

The *matching process* is a methodological approach consisting of the comparison of the components contained in the units of learning outcome, resulting in an instrument that represents the match of common key technical outcomes, learning outcomes and outputs.

It is assumed that a common set of knowledge, skills and competence are needed to perform a set of key technical outcomes and to carry out a set of outputs, which are characterized by being observable and evaluable, based on a set of performance criteria.

Match means that the qualification of the country has a unit of learning outcome composed by a set of key technical outcomes, learning outcomes (knowledge, skills and competence) and outputs, which are equivalent to the components of a unit of learning outcome in another country.

Comparatively to what exists in another country, **No Match means** that the qualification of the country doesn't have a unit of learning outcome composed of equivalent key technical outcomes, learning outcomes (knowledge, skills and competence) and outputs.

Image 14: Example of a Matching Matrix for the Cookery Qualification.

Matching Matrix

Qualification: Cookery

EQF Levels: 3 and 4

Countries: PT, ES, IT, FR, LT, RO, TR

Themes of the Units of Learning Outcome

Hygiene / Quality

Occupational Safety and Hygiene

PT	ES	IT	FR	LT	RO	TR
PT	ES	IT	FR	LT	RO	TR

Food Safety and Hygiene

Kitchen Organization

Kitchen Organization

PT	ES	IT	FR	LT	RO	TR
PT	ES	IT	FR	LT	RO	TR
PT	ES	IT	FR	LT	RO	TR

Raw Material

Supplies / Stocks

Pre-prepared Products

Sauces

PT	ES	IT	FR	LT	RO	TR
PT	ES	IT	FR	LT	RO	TR

Dough

Entrées / Starters

Entrées / Starters

PT	ES	IT	FR	LT	RO	TR
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Soups

Soups

PT	ES	IT	FR	LT	RO	TR
----	----	----	----	----	----	----

Dishes

Meat, Poultry, Game

PT	ES	IT	FR	LT	RO	TR
----	----	----	----	----	----	----

Fish, Seafood

PT	ES	IT	FR	LT	RO	TR
----	----	----	----	----	----	----

Pasta

PT	ES	IT	FR	LT	RO	TR
----	----	----	----	----	----	----

Salads

PT	ES	IT	FR	LT	RO	TR
----	----	----	----	----	----	----

Eggs

PT	ES	IT	FR	LT	RO	TR
----	----	----	----	----	----	----

Garnishes

PT	ES	IT	FR	LT	RO	TR
----	----	----	----	----	----	----

Desserts

Desserts

PT	ES	IT	FR	LT	RO	TR
----	----	----	----	----	----	----

Legend

	Match
	No Match

CHAPTER 6: THE EURSPACE PILOT PROJECT – PEDAGOGICAL CIRCUIT AND TOOLS

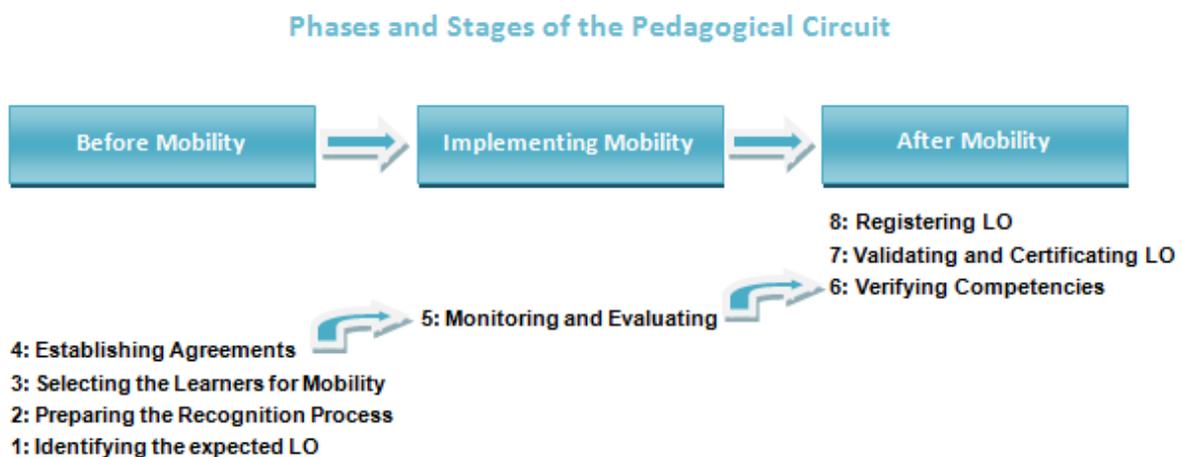
Chapter 6 presents the pedagogical circuit on the processes of identification, recognition, validation and certification of learning outcomes acquired by VET learners in the context of a European mobility with learning purposes.

Pedagogical circuit was elaborated on the basis of the methodological approach described in previous chapter and represents the phases and stages to be covered during the processes of identification, recognition, validation and certification of learning outcomes.

1. Pedagogical Circuit

Pedagogical circuit takes part of the *ECVET European Platform*. It is a virtual pathway on the phases and stages involved in a European mobility with formal learning purposes, since the planning of the mobility to the certification of learning outcomes, especially focused on the identification, recognition, assessment, validation and certification of learning outcomes. These processes are based in ECVET principles and technical specifications.

Image 15: *Sequential phases and stages of the Pedagogical Circuit.*



The circuit has three main phases – **Before Mobility**, **Implementing Mobility**, **After Mobility** – and eight sequential stages, distributed along the pedagogical pathway:

Stage 1 – Identifying the expected Learning Outcomes

Stage 2 – Preparing the Recognition Process

Stage 3 – Selecting the Learners for Mobility

Stage 4 – Establishing Agreements

Stage 5 – Monitoring and Evaluating

Stage 6 – Verifying Competencies

Stage 7 – Validating and Certificating Learning Outcomes

Stage 8 – Registering Learning Outcomes

For each stage of the circuit, pedagogical tools are associated.

Image 16 represents the Pedagogical Circuit, which includes three main phases, eight sequential stages and twenty one tools.

Image 16: *Pedagogical Circuit.*



Phase 1: Before Mobility

Stage 1 – Identifying the expected Learning Outcomes

- **Tool_1** – Framework for the description of the Professional Profile of a Qualification
- **Tool_2** – Framework for defining Learning Outcomes
- **Tool_3** – Framework for identifying common Learning Outcomes
- **Tool_4** – Framework for grouping common Learning Outcomes in Nuclear Units
- **Tool_5** – Framework for the conception of Units of Learning Outcome

Stage 2 – Preparing the Recognition Process

- **Tool_6** – Framework for the attribution of Credit Points to Learning Outcomes
- **Tool_7** – Framework for the transfer and accumulation of Credit Points
- **Tool_8** – Framework for the attribution of ECVET Points
- **Tool_9** – Framework for conceiving *Matching Matrices*

Stage 3 – Selecting the Learners for Mobility

- **Tool_10** – Competencies Assessment Tool (BM - Before Mobility)

Stage 4 – Establishing Agreements

- **Tool_11** – Memorandum of Understanding
- **Tool_12** – Learning Agreement

Phase 2: Implementing Mobility

Stage 5 – Monitoring and Evaluating

- **Tool_13** – Logbook
- **Tool_14** – Personal Monitoring
- **Tool_15** – Assessment Tool for Units of Learning Outcome
- **Tool_16** – On-the-Job-Training Assessment Tool
- **Tool_17** – Reflective Learning Portfolio

Phase 3: After Mobility

Stage 6 – Verifying Competencies

- **Tool_10** – Competencies Assessment Tool (AM - After Mobility)

Stage 7 – Validating and Certificating Learning Outcomes

- **Tool_18** – Personal Registration Form
- **Tool_19** – Certificate

Stage 8 – Registering Learning Outcomes

- **Tool_20** – Europass Mobility
- **Tool_21** – Europass Language Passport

The **first stage** is the **identification of the expected learning outcomes**. Five frameworks were developed within this stage with the aim to guide schools and VET organizations in the identification of the expected learning outcomes on the completion of a learning process for a given VET qualification.

Since the fact that in many countries qualifications are still described in terms of *inputs*, it is necessary to describe the qualification in terms of learning outcomes and group these learning outcomes into nuclear units so that ECVET can be applied. Tools 1 to 5 were elaborated with the intention to guide professionals on this work:

- Tool_1 – Framework for the description of the Professional Profile of a Qualification
- Tool_2 – Framework for defining Learning Outcomes
- Tool_3 – Framework for identifying common Learning Outcomes
- Tool_4 – Framework for grouping common Learning Outcomes in Nuclear Units
- Tool_5 – Framework for the conception of Units of Learning Outcome

The **second stage – preparing the recognition process** – focuses the rules for the attribution of ECVET credit points to units of learning outcome and the *matching* process. This stage includes 4 tools:

- Tool_6 – Framework for the attribution of Credit Points to Learning Outcomes
- Tool_7 – Framework for the transfer and accumulation of Credit Points
- Tool_8 – Framework for the attribution of ECVET Points
- Tool_9 – Framework for conceiving *Matching Matrices*

The **third stage – selecting the learners for mobility** – includes one practical tool which has a competence catalogue that can be used in the selection process:

- Tool_10 – Competencies Assessment Tool (BM - Before Mobility)

The **fourth stage – establishing agreements** – is still included in the preparation of the mobility and consists in a set of agreements related with the mobility between the involved parties (the learner, the sending organization, the receiving organization). During this stage, the following tools should be applied:

- Tool_11 – Memorandum of Understanding
- Tool_12 – Learning Agreement

During the mobility implementation (phase 2), the monitoring of the learner's progress is a continuous process that crosses all mobility period. The assessment of learning outcomes also takes place during the mobility implementation. The receiving organization is responsible for the evaluation of the learning outcomes acquired by the learner after the learning period. Both processes – monitoring and assessment of learning outcomes are included in the **fifth stage – monitoring and evaluating**. Tools 13 to 17 were elaborated with the aim to provide some support during the monitoring and evaluation processes:

- Tool_13 – Logbook
- Tool_14 – Personal Monitoring
- Tool_15 – Assessment Tool for Units of Learning Outcome
- Tool_16 – On-the-Job-Training Assessment Tool
- Tool_17 – Reflective Learning Portfolio

Immediately after the return of the learner, the development of competencies is verified by the sending organization: **sixth stage – verifying competencies**. For this purpose, tool number 10 (competencies assessment tool) can be used. This tool has a competence catalogue and some guidelines to set up a matrix for the selection of learners (*Competence Assessment Tool before Departure*) and their assessment upon arrival (*Competence Assessment Tool upon Arrival*), with operational comments on how to integrate the information collected during the selection phase in the ECVET Learning Agreement. The tool is meant to be used by the sending organization that can in this way evaluate the learner's performances and progresses.

The **seventh stage – validating and certificating learning outcomes** – focuses the validation and the certification of the learning outcomes acquired abroad and already assessed. The following tools are **included in this stage**:

- Tool_18 – Personal Registration Form
- Tool_19 – Certificate

The **eighth stage – registering learning outcomes** – consists in the registration of the acquired learning outcomes in formal documents. During this stage, the following tools should be applied:

- Tool_20 – Europass Mobility
- Tool_21 – Europass Language Passport

2. Clues for the sustainable use of the Methodology and Tools

The *Pedagogical Circuit* and the 21 pedagogical tools were developed with the aim to facilitate the practical implementation of the methodological approach proposed in the *EURspace* project, which follows the EQF principles and the ECVET principles and technical specifications.

This *Methodological Guide for Professionals* and the *Battery of Tools* takes part of the *EURspace Pedagogical Kit* and are available in the *ECVET European Platform* for consultation and *download*.

Following the *Pedagogical Circuit*, VET schools and other VET providers can easily manage their European mobility project, applying the proposed methodology and using the available tools.

Pedagogical tools can be used as pre-defined models or can be adapted according to the specific needs of the users. The proposed tools are very useful to manage and monitor individual mobility of learners, providing support for the assessment of learning outcomes, as well as ensuring the recognition, validation and certification of the acquired learning outcomes.

The organizations registered in the *ECVET European Platform* can manage their mobility project in the platform and make *upload* of their own *matching matrices*, sharing their results with others and contributing in this way for the sustainability and disseminations of the own work, making it useful for others.

GLOSSARY

COMPETENCE: competence means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development (*Recommendation of the European Parliament and of the Council April 23, 2008 on the establishment of the European Qualifications Framework for lifelong learning*). In the context of the EURspace Project, *competences* are described in terms of what the learner does, applying knowledge, skills and putting in evidence attitudes, personal, social and methodological abilities.

CONTINUING VOCATIONAL EDUCATION AND TRAINING: *Continuing Vocational Education and Training* (C-VET) refers to vocational education and training courses for adults, which privilege the lifelong learning.

CREDIT: 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.

EUROPASS: *Europass* is a portfolio of five different documents and an electronic folder aiming to contain descriptions of the entire holder's learning achievements, official qualifications, work experience, skills and competences, acquired over time. These documents are: the *Europass CV*, the *Diploma Supplement*, the *Certificate Supplement*, the *Europass Mobility* and the *Language Passport*. *Europass* also includes the *European Skills Passport*, a user-friendly electronic folder that helps the holder to build up a personal, modular inventory of his/her skills and qualifications. The aim of *Europass* is to facilitate mobility and improve job and lifelong learning prospects in Europe.

EUROPEAN CREDIT SYSTEM FOR VOCATIONAL EDUCATION AND TRAINING: the *European Credit System for Vocational Education and Training* (ECVET) is a common European technical framework for the transfer, recognition and (where appropriate) accumulation of individuals' learning outcomes in light of achieving a qualification. *ECVET* is foreseen to be a European tool supporting mutual trust in the field of qualifications and increasing transparency in relation to individual learning experiences, making mobility more attractive between different countries and different learning environments. It also contributes towards lifelong learning, recognizing learning outcomes achieved in formal, non-formal and/or informal settings in order to ensure that such achievements can contribute to the acquisition of a qualification.

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM: the *European Credit Transfer and Accumulation System* (ECTS) is a system that describes the programmes of higher education attributing credits to all its components (modules, courses, internships, dissertations, theses, etc.), with a view to: facilitating readability of programmes and establishing comparisons between national and foreign students; promoting students mobility and the validation of learning outcomes; helping universities to organize and review curricula.

EUROPEAN QUALIFICATIONS FRAMEWORK: the *European Qualifications Framework* (EQF) is a common European reference framework which aims to contribute towards the mutual understanding and

transparency of qualifications across different European countries and systems. The *European Qualifications Framework* covers qualifications at all levels and in all sub-systems of education and training. The *European Qualifications Framework* contributes towards the development of a Europe knowledgeable at all levels of education and training, as well as, the internationalization and educational and training excellence in Europe, supporting cross-border mobility of learners and workers and lifelong learning across Europe.

EUROPEAN QUALIFICATIONS SYSTEM: *European Qualifications System* (EQS) means 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. (*Recommendation of the European Parliament and of the Council April 23, 2008 on the establishment of the European Qualifications Framework for lifelong learning*)

EUROPEAN QUALITY ASSURANCE IN VOCATIONAL EDUCATION AND TRAINING: the *European Quality Assurance in Vocational Education and Training* (EQAVET) is a practice that brings Member States, Social Partners and the European Commission together to promote European collaboration by developing and improving quality assurance in Vocational Educational and Training. The aim of the *framework* is to contribute towards quality improvement in Vocational Education and Training systems and Vocational Education and Training policy developments between Member States, in order to increase the transparency, consistency and mutual trust in Vocational Education and Training systems, facilitating the mobility of workers and learners, and lifelong learning.

EUROPEAN UNION: the *European Union* (EU) is a political and economic union of 28 member states that are located primarily in Europe. It has an area of 4,475,757 km² (1,728,099 sq mi) and an estimated population of over 510 million. The EU has developed an internal single market through a standardized system of laws that apply in all member states. EU policies aim to ensure the free movement of people, goods, services and capital within the internal market, enact legislation in justice and home affairs and maintain common policies on trade, agriculture, fisheries and regional development.

INITIAL VOCATIONAL EDUCATION AND TRAINING: *Initial Vocational Education and Training* (I-VET) refers to vocational education and training courses for youths, which privilege the insertion in active life and allow the continuation of studies.

KEY TECHNICAL OUTCOME: within the context of the *EURspace* Project, a Key technical outcome means a statement that expresses the main technical tasks that the learner has to perform to prove a specific output.

KNOWLEDGE: *knowledge* is the result of the assimilated information after a learning process, acquired through study or experience. In the *Recommendation of the European Parliament and of the Council April 23, 2008 on the establishment of the European Qualifications Framework for lifelong learning*, knowledge is described as “the body of facts, principles, theories and practices that is related to a field of work or

study". In the context of the European Qualifications Framework, knowledge is described as theoretical and/or factual. Within the context of the *EURspace* Project, Knowledge is described in terms of what the learner knows and understands.

LEARNING AGREEMENT: the *Learning Agreement* (LA) is an agreement developed for a mobility of a learner in order to provide a binding commitment among the three parties involved: the sending organization, the receiving organization and the learner before the start of the mobility. The *Learning Agreement* contains the learning outcomes and the units of learning outcome that the learner is planning to take at the receiving organization, together with the code numbers (if applicable) and the ECVET credit points or similar allocated to the units. The *learning agreement*, together with the transcript of records, is designed to ensure full recognition of the learning outcomes acquired at the receiving organization.

LEARNING OUTCOMES: in the context of the *EURspace* Project, *Learning Outcomes* (LO) are understood as a set of knowledge, skills and competences needed to put into practice key technical outcomes or key tasks. Therefore, *learning outcomes* are described in terms of knowledge, skills and competence. The description of the knowledge, skills and competence are interconnected for each key technical outcome.

MEMORANDUM OF UNDERSTANDING: a *Memorandum of Understanding* (MoU) is a document, recommended by ECVET, which provides a framework agreement between partner organizations, from two or more countries, confirming cooperation arrangements and procedures. The *Memorandum of Understanding* sets out the roles of the involved parties and details the conditions via which learning outcomes can be achieved, assessed and potentially transferred.

NATIONAL QUALIFICATIONS FRAMEWORK: a *National Qualifications Framework* (NQF) is a formalized structure in which learning level descriptors and qualifications are used in order to understand learning outcomes. *National Qualifications Framework* means 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. (*Recommendation of the European Parliament and of the Council April 23, 2008 on the establishment of the European Qualifications Framework for lifelong learning*)

OUTPUTS: Within the context of the *EURspace* project, the outputs are the results of a learning process, the obtained products or the proof. The outputs are directly associated with key technical outcome and performance criteria, being the observable result of the performance.

PARTNERSHIP: within the Erasmus+ programme a partnership means an agreement between a group of participating organisations in different Programme Countries to carry out joint European activities in the fields of education, training, youth and sport or establishing a formal or informal network in a relevant field such as joint learning projects for pupils and their teachers in the form of class exchanges and individual long-term mobility, intensive programmes in higher education and cooperation between local and regional authorities to foster inter-regional, including cross-border, cooperation.

PERFORMANCE CRITERIA: performance criteria are the quality requirements associated with performance and the quality standards that ensure that the individual acts competently (required quality for achievements). Within the *EURspace* methodological approach, the performance criteria are specifically associated with each key technical outcome and respective set of knowledge, skills and competence.

QUALIFICATION: *qualification* means a formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards. (*Recommendation of the European Parliament and of the Council April 23, 2008 on the establishment of the European Qualifications Framework for lifelong learning*)

RECEIVING ORGANIZATION: for the purposes of an Erasmus+ mobility project for I-VET learners (KA1 – learning mobility of individuals) the receiving organization is the participating organization receiving one or more participants and organizing one or more activities of an Erasmus+ project.

SENDING ORGANIZATION: for the purposes of an Erasmus+ mobility project for I-VET learners (KA1 – learning mobility of individuals) the sending organization is the participating organization sending one or more participants to an activity of an Erasmus+ project.

SKILLS: *skills* can be described as a set of abilities available to perform a specific task. “Skills’ means the ability to apply knowledge and use know-how to complete tasks and solve problems.” (*Recommendation of the European Parliament and of the Council April 23, 2008 on the establishment of the European Qualifications Framework for lifelong learning*)

In the context of the *EURspace* Project, *skills* are described in terms of what the learner is able to do.

UNIT OF LEARNING OUTCOME: a *Unit of Learning Outcome* is a component of a qualification, consisting of a coherent set of knowledge, skills and competence that can be assessed and validated with a number of associated ECVET points. A qualification comprises several units and is made up of the whole set of units. Thus, a learner can achieve a qualification by accumulating the required units, achieved in different countries and different contexts (formal and, where appropriate, non-formal and informal), while respecting national legislation relating to the accumulation of units and the recognition of learning outcomes.

VOCATIONAL EDUCATION AND TRAINING: education and training which aims to equip people with knowledge, know-how, skills and/or competences required in particular occupations or more broadly on the labour market. For the purpose of Erasmus+ projects focusing on initial or continuing vocational education and training are eligible under VET actions.

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