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Guideline for operationalization of EWP LOs Qualifications according to ECVET

October 2018



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Introduction

The Guideline for operationalization of European Welding Practitioner LOs Qualifications according to ECVET is a document that intends to guide the implementation of the European Welding Practitioner qualification. It indicates all the phases, steps and tools necessary to implement the EWP LOs Qualification process in all EWF members' countries in Europe.

It also includes ECVET operational templates to support future mobilities of welding personnel across Europe, through the allocation of ECVET points to the Competence Units and templates for establishing a Memorandum of Understanding (MoU), a Learning agreement, a Personal transcript, etc.

This guideline allows the future adoption of the Qualification by all EWF members and the integration of this scheme in EWF procedures, to assure a common acceptance and harmonized implementation in all 31 countries. A continuous feedback from the VET organizations will be of the utmost importance to keep this guideline updated.

Three main points compose this document:

1. The first is related to the requirements of the European Welding Practitioners (EWP), meaning the: general access conditions; routes to qualification and special requirements and theoretical and practical education. In this part, it is already included an approach to the ECVET system.
2. The second point is a general approach to the ECVET system. This point intends to show how the EWP Curriculum is aligned, in terms of implementation, with the Council Recommendation of 22 May 2017 on the European Qualifications Framework for lifelong learning and the Recommendation of the European Parliament and of the Council of 18 June 2009 on the establishment of a European Credit System for Vocational Education and Training (ECVET).
3. The third part concerns the application of the ECVET in the EWP qualification. This part addresses the use of ECVET tools for mobility in qualifications systems. It explains the role of ECVET in facilitating the transnational mobility of learners and details a step-by-step process on what to do to implement ECVET for mobility. Tools such as templates of MoUs, Learning agreements and Personal transcripts will be presented in this document.



1. Requirements of the EWP Qualification

1.1. General Access Conditions to standard training

To access the European Welding Practitioner course, the participants must be skilled in practical welding and have experience in industry as welders. The objective of the course is to develop skills related with welding coordination activities and further develop welding skills.

Standard conditions required to the applicants:

1. Valid welder qualification certificate ISO 9606 H-L045 ss nb in one of the welding processes listed in 5.1 of ISO 9609, or equivalent, or a valid welder qualification as a plate welder for the following conditions: PE ss nb or PC and PF ss nb, according to ISO 9606 at least in one process, and/or another national equivalent in the IIW member country.
2. 3 years minimum of job related experience as a plate or tube welder is required.

1.2 General Access conditions to start an RPL process

A candidate wishing to obtain the European Welding Practitioner qualification via an RPL process must comply with specific requirements:

1. Have a min. 3 years' experience as Welder (plate or tube) in the industry;
2. Have a min. 1 year in the job function as Welding Practitioner in the industry, namely in coordinating welding personnel;
3. Be able to weld according to ISO 9606 H-L045 ss nb in one of the welding processes listed in 5.1 of ISO 9606 OR be able to weld in the position PE ss nb or PC and PF ss nb, according to ISO 9606 at least in one process.

1.2. Routes to Qualification and Special Requirements

About the Curriculum implementation and structure, different learning methods and environments can be implemented to theoretical training, namely face to face training, blended learning programmes (combined system of classroom and e-learning aligned with the IAB-195 - Distance Learning Guideline) and work-based learning, thus under control of EWF Nominated Body (ANB).

The theoretical training includes eight "Competence Units" expressing the expected outcomes regarding the trainee's assessment:

- Competence Unit 1- Introduction to Welding Technology and Arc Power Source
- Competence Unit 2 - Welding and Cutting Processes



- Competence Unit 3- Introduction to Metallic Materials
- Competence Unit 4 - Materials, Their Weldability and Application of Structural and High Strength Steels
- Competence Unit 5- Construction and Design
- Competence Unit 6- General Features for Quality Management
- Competence Unit 7- Quality Assurance/Quality Control on Welded Joints
- Competence Unit 8- Tests Used for the Quality Control of Welded Joints

These Competence Units are organized in smaller components named “Subjects”, which are linked to **specific actions** (referring to a general task the trainee must be able to perform by the of the unit) and **performance criteria** (referring to the necessary steps the trainee should take to achieve the action, and to quality requirements for assessment of its performance). These actions translate the set of learning outcomes (LOs) established for that specific Competence Unit: **knowledge application** (related to memorization and comprehension), **practical application** (related to analysis, evaluation, application and creation) and **autonomy and responsibility**. An estimation of workload - amount of time needed for the trainee to achieve the expected results - has been defined for each subject, which enables the assignment of ECVET points to the Competence Unit, and then to the whole EWP qualification (work package 3 of MAKE IT project).

The course comprises a practical training part consisting of typical test pieces and positions in welding. This part of the curriculum has not been defined in terms of LOs and, as such, it is not addressed in this document.

A final note refers to the Welding processes terminology used within the document, which is according to the EN ISO 4063 standard.

1.2.1. Standard Route

The Standard Route offers the most comprehensive way the syllabus may be covered, and it allows a limited amount of prior learning, approved by the ANB – Authorised National Body.

Teaching hours are the minimum number of hours devoted to the subject and it should comprise, at least, 50 minutes of direct teaching.

Special Requirements

- Candidates must have satisfied the ANB access conditions;
- The maximum number of hours of the classes and syllabus are responsibility of the ANB;



- Objectives of education, training and examinations can be described in two ways: generically, for each competence unit; or specifically, by the learning outcomes of each subunit of the syllabus.

1.2.2. Recognition of prior learning

The EWF alternative route is addressed to candidates that already have experience on the job function without holding the appropriate qualification diploma. In this sense, a Recognition of Prior Learning process in the welding sector was developed. This RPL model has been developed to allow the verification of the candidate's entry requirements by using demonstrations exercises whenever the candidate lacks evidences that prove his/her ability to weld.

The design of a European harmonized scheme for the RPL in the Welding sector was possible because the Welding Guidelines for qualification and training were shifted into a learning outcomes approach, following the European Qualifications Framework (EQF) descriptors, identifying what the learner knows, understands and is able to do after the completion of a learning process.

The MAKE IT validation process for non-formal learning in view of achieving an EWP qualification follows several phases (according to the Recommendation of the Council of the EU), 2012, such as:

- Hosting and documentation
- Recognition
- Assessment and validation
- Award of Qualification or part of qualification

These phases are better detailed in the *Recognition of Prior Learning Guideline and Tools in the Welding Sector*.

Special Requirements

For this RPL process, it was developed the necessary tools for the implementation, at national level, of the RPL. The tools used in the RPL process are very important to the quality, validity and reliability of the process. There is a wide range of tools that can be used either to extract evidence or documenting and presenting those evidences.

It is possible to point out the following tools:

- **Welding Professional and training registration form**
- **Welding Professional and Personal Motivations Form**
- **Welding Interview Guide**



- Self-Assessment Grid
- Portfolio and Portfolio check-list
- Portfolio Technical Review Document
- Welding Technical Interview Guide
- Welding Demonstration (WD)
- Examination

All these tools can be consulted In the *Recognition of Prior Learning Guideline and Tools in the Welding Sector*.

1.3. Theoretical and Practical Education

In MAKE IT project, a general description of the EWP Qualification using the EQF terminology was produced:

QUALIFICATION	KNOWLEDGE	SKILLS	RESPONSIBILITY/ AUTONOMY	EQF LEVEL	WORKLOAD (WL)	TEACHING HOURS	ECVET POINTS
EUROPEAN WELDING PRACTITIONER	Factual and theoretical knowledge (basic understanding) of the theory, principles and applicability of welding and related technologies	Fundamental range of cognitive and practical skills required to identify proper solutions, when applying welding and related technologies, in basic and specific problems	Self-manage, within the guidelines of work, the applications of welding and related technologies, in a predictable context, but subject to change. Take responsibility without autonomy for decision making in basic work and supervise basic tasks of welding and related personnel.	4	247	150	8

The following sections of theoretical and practical education include national inputs from MAKE IT Project partner country in terms of national qualification levels correspondence and ECVET points attribution, which can be used as outline concept for future integration by other EWF country Members in their articulation with their national qualification systems.

1.3.1. Theoretical Education

Competence Unit 1: Introduction to Welding Technology and Arc Power Source

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General Description

Knowledge	Skills	Responsibility/ Autonomy	Training Hours	Workload	ECVET Points	EQF Level	NQF PT	NQF ES	NQF HU	NQF NO
Factual and theoretical knowledge (basic understand) of the principles of welding and cutting processes and applications, either manual, mechanized, automatic or robotized.	Range of cognitive and practical skills required to identify/choose the proper technical and economical solutions when applying welding and cutting processes on basic and specific problems.	Self-manage the welding and cutting processes applications usually predictable but subject to changes. Will act has the responsible person for supervise the welding personnel tasks.	7	16	0,75	4	4	4	4	4

Competence Unit 2: Welding and Cutting Process

General Description

Knowledge	Skills	Responsibility/ Autonomy	Training Hours	Workload	ECVET Points	EQF Level	NQF PT	NQF ES	NQF HU	NQF NO
Factual and theoretical knowledge (basic understand) of the principles of welding and cutting processes and applications, either manual, mechanized, automatic or robotized.	Range of cognitive and practical skills required to identify/choose the proper technical solutions in terms of materials processing and materials behavior during welding and cutting on basic and specific problems.	Self-manage the materials applications and their behavior due to welding and related technologies usually predictable but subject to changes. Will act has the responsible person for supervise the welding personnel tasks.	25	55	2	4	4	4	4	4



Competence Unit 3: Introduction to Metallic Materials

General Description

Knowledge	Skills	Responsibility/ Autonomy	Training Hours	Workload	ECVET Points	EQF Level	NQF PT	NQF ES	NQF HU	NQF NO
Factual and theoretical knowledge (basic understand) regarding classification of structural steels and the influence of the alloying elements on the steel mechanical properties, and how steels storage should be performed.	Fundamental range of cognitive and practical skills required to identify steels according to their classification and to choose technical solutions when applying steels in a certain construction.	Self-manage the structural steels storage, applications and validation to ensure correct conditions and application, usually predictable but subject to changes. Will act as the responsible person for the supervision of the welding personnel tasks	6	14	0.75	4	4	4	4	4

Competence Unit 4: Materials, their Weldability and Application of Structural and High Strength Steels

General Description

Knowledge	Skills	Responsibility/ Autonomy	Training Hours	Workload	ECVET Points	EQF Level	NQF PT	NQF ES	NQF HU	NQF NO
Factual and theoretical knowledge (basic understand) regarding materials	Fundamental range of cognitive and practical skills required to identify/choose the proper technical solutions in terms of	Self-manage the materials applications and their behaviour due to welding and related technologies usually predictable	14	34	1.5	4	4	4	4	4



processing and applications and their behaviour during welding and cutting.	materials processing and materials behaviour during welding and cutting on basic and specific problems.	but subject to changes. Will act as the responsible person for the supervision of the welding personnel tasks									
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Competence Unit 5: Construction and Design

General Description

Knowledge	Skills	Responsibility/ Autonomy	Training Hours	Workload	ECVET Points	EQF Level	NQF PT	NQF ES	NQF HU	NQF NO
Factual and theoretical knowledge (basic understand) of the theory and principles concerning the design and construction related to welding technology.	Fundamental range of cognitive and practical skills required to identify/choose the proper technical and economical solutions in terms of metal fabrication and design when applying welding technology on basic and specific problems.	Self-manage the construction and design of welded products applications usually predictable but subject to changes. Will act as the responsible person for the supervision of the welding personnel tasks.	6	13	0,5	4	4	4	4	4

Competence Unit 6: General Features for Quality Management

General Description

Knowledge	Skills	Responsibility/ Autonomy	Training Hours	Workload	ECVET Points	EQF Level	NQF PT	NQF ES	NQF HU	NQF NO



Fundamental factual and theoretical knowledge concerning the measuring equipment, health and safety, control of welding parameters and repair welding specifications applied to welding and related technologies.	Fundamental range of cognitive and practical skills required to identify/choose the proper measuring equipment and solutions for monitoring and measuring of welding parameters and minimizing distortion and residual stress on basic and specific problems.	Self-manage within the guidelines of work, the applications concerning safe working, monitoring and repair procedures usually predictable but subject to change. Take responsibility without autonomy for decision-making in basic work and supervise basic tasks of welding and related personnel.	12	22	1	4	4	4	4	4
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Competence Unit 7: Quality Assurance/Quality Control on Welded joints

General Description

Knowledge	Skills	Responsibility/ Autonomy	Training Hours	Workload	ECVET Points	EQF Level	NQF PT	NQF ES	NQF HU	NQF NO
Fundamental factual and theoretical knowledge concerning the quality assurance and quality control applied to welded joints.	Fundamental range of cognitive and practical skills required to identify/choose the proper solutions for quality assurance and quality control of welded products on basic and specific problems.	Self-manage within the guidelines of work, the applications concerning quality assurance and quality control of welded joints usually predictable but subject to change. Take responsibility without autonomy for decision-making in basic work and supervise basic tasks of welding and related personnel.	8	12	0.5	4	4	4	4	4



Competence Unit 8: Tests Used for the Quality Control of Welded joints

General Description

Knowledge	Skills	Responsibility/ Autonomy	Training Hours	Workload	ECVET Points	EQF Level	NQF PT	NQF ES	NQF HU	NQF NO
Fundamental factual and theoretical knowledge concerning imperfections, acceptance criteria and destructive tests (DT) and non-destructive tests (NDT) applied to welding and related technologies.	<p>Fundamental range of cognitive and practical skills required to identify/choose solutions on basic and specific problems related with the information given on DT and NDT reports.</p> <p>Implement the use of acceptance standards for weld imperfections.</p>	<p>Self-manage within the guidelines of work, the applications concerning DT and NDT reports.</p> <p>Take responsibility without autonomy for decision-making in basic work and supervise basic tasks of welding and related personnel.</p>	12	21	1	4	4	4	4	4

1.3.2. Practical Education

This part of the training should be done with the candidates individually. If a candidate demonstrates practical skills in welding different materials, it is possible to do the examination without prior practical training.

Typical test pieces *Source: Recommended test pieces and positions for practical examination (IAB Guideline 252r3-2016)*

Welding process		Practical Test		
ISO 9606	ISO 9609	Material Group (ISO TR 15608)	Welding Position	Test Dimension(s) Diameter/thickness
MMA	111	1	PF/BW	6,0 – 13,0
		3	PF/BW	6,0 – 13,0
		4, 5, 6	H-L045/BW	Ø60,3 – Ø114.3/ 3.9 – 7.11
		7	PF/BW	6,0 – 13,0

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		8	PB/FW	6,0 – 13,0
TIG	141	1	H-L045/BW	Ø60,3 – Ø114.3 3.9 – 7.11
		3	PF/BW	2,0 – 6,0
		4, 5, 6	H-L045/BW	Ø60,3 – Ø114.3 3.9 – 7.11
		7	PF/BW	2,0 – 6,0
		8	H-L045/BW	Ø60,3 – Ø114.3 3.9 – 7.11
		22	PF/BW	2,0 – 6,0
MIG	131	22	PF/BW	2,0 – 6,0
MAG (and/or metal cored)	135 (136)	1	PF/BW	6,0 – 13,0
		8	PB/FW	6,0 – 13,0
FCAW (flux cored only)	136	1	PB/FW	6,0 – 13,0
		8	PF/BW	6,0 – 13,0
		3	PA/FW	6,0 – 13,0
GAS	311	1	H-L045/BW	Ø60,3 – Ø114.3 3.9 – 7.11

Practical Examination Criteria: The quality of welding shall comply with ISO 9606, or comparable quality levels defined in national welders' qualifications standards used by IAB (Group A countries). A welder qualification certificate may be issued.

2. European Credit System for Vocational Education and Training (ECVET): a general approach

2.1 European Qualifications Framework – EQF

EQF is a common reference framework that helps Member States, education institutions, employers and individuals compare qualifications across the EU's diverse education and training systems. It is a translation tool, essential for developing a European employment market.

The EQF aims to facilitate mobility of trainees and workers within the EU to encourage the development of a mobile and flexible workforce throughout Europe and to help to promote lifelong learning.

The adoption of the EQF as a reference increases the mobility of workers and trainees and, at the same time, contributes to having their qualifications recognised outside their own country. This tool facilitates the transition from work to training and vice versa, on a lifelong basis.

The EQF is a tool based on learning outcomes rather than on the duration of studies. The main reference level descriptors are:



- Knowledge;
- skills;
- attitudes – autonomy and responsibility.

The development of this guideline is in accordance with the Council recommendation of 22 May 2017 on the European Qualifications Framework for lifelong learning, and more specifically with the Annex 5 (of this recommendation) - Principles for credit systems related to national qualifications frameworks or systems referenced to the European Qualifications Framework (EQF). Link: <https://publications.europa.eu/en/publication-detail/-/publication/cee970-518f-11e7-a5ca-01aa75ed71a1/language-en>

2.2. European Credit System for Vocational Education and Training (ECVET)

The European Credit System for Vocational Education and Training (ECVET) is a common methodological framework to facilitate the transfer of learning credits from one qualification system to another and promotes transnational mobility and access to lifelong learning for learners and workers.

ECVET brings a range of benefits to all those involved in geographical mobility and lifelong learning. In terms of mobility, ECVET works hand in hand with the European Qualifications Framework (EQF) to provide greater transparency in European qualifications, promoting the mobility of workers and trainees, and facilitating lifelong learning.

ECVET brings together a wide range of actors, at local, national and European levels, with a view to encouraging its wider implementation and use, particularly in learning mobility. ECVET centres on technical components that, together, facilitate the process of learning recognition, irrespective of the country or education system in which the learning took place.

For implementing ECVET with success, it requires that qualifications are described in terms of learning outcomes brought together in units, and units often accumulated to form the basis of qualifications or awards. Assessment, validation and recognition processes must also be agreed among all those participating, and should respect existing national, regional, sectoral or institutional practice.

The development of this guideline is in accordance with the RECOMMENDATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 June 2009 on the establishment of a European Credit System for Vocational Education and Training (ECVET). Link: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:155:0011:0018:EN:PDF>

Learning Outcomes

To implement ECVET, it is necessary that qualifications are described using learning outcomes.



Learning outcomes can be used for various purposes such as to establish descriptors of qualifications frameworks, define qualifications, design curricula, assessment frameworks, etc. Learning outcomes are set out in various levels of detail depending on their purpose and context.

Assessed learning outcomes constitute credits. Credits are the basis for enabling the transfer between learning contexts and for the accumulation of learning outcomes - and learning units.

In ECVET, learning outcomes are used as a basis for credit transfer and accumulation. Learning outcomes are not dependent on the learning process or the learning context in which they have been achieved and therefore it is possible to use them to identify whether what the learner has achieved in one learning setting or context is comparable to what s/he is expected to have achieved in another setting or context.

Units

A **unit** is a component of a qualification, consisting of a coherent set of knowledge, skills and competence that can be assessed and validated (ECVET Recommendation 2009). Units enable progressive achievement of qualifications through transfer and accumulation of learning outcomes. They are subject to assessment and validation which verify and record that the learner has achieved the learning outcomes expected.

Units should be described in legible, understandable and unambiguous terms by referring to the knowledge, skills and responsibility and autonomy contained in them.

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

ECVET points

Concerning the ECVET points, these 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. Together with units, descriptions of learning outcomes and information about the level of qualifications, ECVET points support the understanding of a qualification. The number of ECVET points allocated to a qualification, together with other specifications, can indicate for example, that the scope of the qualification is narrow or broad.

The number of ECVET points allocated to a unit provides the trainees with information concerning the relative weight of what s/he has accumulated already. It also provides the learner with information concerning what remains to be achieved.



It is important to say that ECVET points and credits are two different things. While credits designate the learning outcomes the learner has already achieved successfully, ECVET points provide information about the qualification and the units. A credit is related to a person and his/her personal achievement; ECVET points are linked to the qualification structure and description. In the scope of the EWF Qualifications according ECVET, it is important to explain how the ECVET points were allocated to EWP qualification. In this sense, **the relational used for the definition of teaching hours, workload and ECVET points was the following:**

- **TEACHING HOURS** refer to the minimum hours of face to face training defined in the EWF Guidelines (IAB 252_r3-16 for the European Welding Coordinator & IAB 089r5-14 for the European Welder);
- **WORKLOAD** for the EWP was calculated based on the assumption that each teaching hour will imply an additional effort of about the double time of self-learning, meaning 1 teaching hour will correspond to a 2 - 2,5 hours of workload; no workload was estimated for practical training;
- **ECVET POINTS** allocation was done considering that 1 credit is attributed for an estimated workload between 25 – 30 hours. The rounding rules applied to the credit system was to round up to the closest quarter unit, as follows: [0,25]; [0,50]; [0,75]; [0,00].

MAKE IT project partner countries already have National contact points regarding ECVET implementation, and both Hungary and Portugal have National Qualification systems referenced to EQF and national qualifications learning outcomes based. In Norway, there is a national center that handles ECVET questions at a national level, and five regional ECVET experts that give guidance at regional level.

Although the ECVET points allocation has been made during MAKE IT project for the EWP Qualification and Competence Units, as referenced in the Council Recommendation of 22 May 2017 on the European Qualifications Framework for Lifelong Learning, it is recommended that ECVET points should be allocated through National Qualification systems. Therefore, the established points should be considered as a reference, but validated at National level with the corresponding responsible Agencies.

Credit accumulation

Regarding credit accumulation, it is a process through which trainees can acquire qualifications progressively by successive assessments and validation of learning outcomes.

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



Credit transfer is the process through which learning outcomes achieved in one context can be considered in another context. Credit transfer is based on the processes of assessment, validation and recognition.

Based on the assessed outcomes, credits can be validated and recognised by another competent institution.

Assessment of outcomes

About the assessment of learning outcomes, the hosting institution organises the assessment of learning outcomes as specified in the Learning agreement. The assessment can be done by teachers, trainers, employers, etc. depending on the education and training centre and assessment arrangements and procedures that are used in the host context.

It is important that the hosting and sending institutions discuss, prior to the mobility, the assessment methods used and the profile of the assessors, to make sure that these meet the quality assurance requirements expected by the home institution which will validate the credits.

In the scope of the mobility, before this mobility period, partners institutions discuss and agree on the ways in which learning outcomes will be assessed during the mobility period. They also agree on who and how the quality of this process is ensured. That's what Make It partners did.

The requirements on assessment are described in the learning agreement and may be formalised in a Memorandum of Understanding (MoU). This means that ECVET practitioners can benefit from the use of common European tools that promote quality in learning mobility, namely:

- Memorandum of Understanding (MoU): a voluntary agreement, between competent institutions, which sets out the framework for credit transfer and accumulation; the MoU formalises the ECVET relationship through confirming mutual acceptance of the status of, and the procedures put in place by, competent institutions.
- Learning Agreement (LA): a contract signed by all mobility parties, including the learner, in which the learning duration and expected learning outcomes are confirmed alongside mechanisms for assessment, validation and recognition.

3. ECVET kit

It is necessary to know how to prepare for ECVET, confirming its added-value and becoming aware of how to work with different national and international partnership models.



There are important phases which are associated to the planning, delivery and follow-up of a geographical mobility. Quality Assurance should be considered, providing an insight into the main quality concepts in ECVET and relating these to the steps of the EQAVET quality cycle (PDCA – Plan, Do, Check, Act).

In this sense, after **preparing for ECVET** and **building a partnership between VET provider institutions**, a good planning of the **ECVET MOBILITY** requires that a series of steps/phases are considered. These are explained next, addressing the main issues to be taken into account in using the ECVET kit for mobility. It is structured according to the three main phases of the mobility: before, during and after mobility. These phases are identified in figure 1, below:

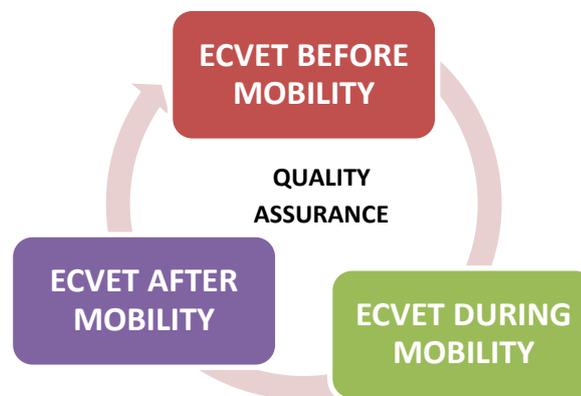


Figure 1. Phases of using ECVET for organized mobility.

3.1 ECVET before mobility

The use of ECVET relies on a certain number of processes such as the identification and description of units of learning outcomes – Competence Units - (including the allocation of ECVET points), the assessment of learning outcomes and decisions on the validation and/or recognition of the learners’ previously gathered credits. Depending on the way, the qualifications system is organised, different organisations can be involved in different aspects of these processes.

In the scope of this project, the learning outcomes, including descriptions in terms of ECVET point is already done and is detailed in the Qualification Competence Matrix.

In the following table are listed the necessary key actions in this phase:

ECVET Before Mobility	
What is necessary to do?	Formalising a partnership for the learning mobility considering ECVET.

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	Defining the conditions for the mobility of each individual learner.
How?	Analysing qualifications and learning opportunities abroad. Identifying units of learning outcomes to be acquired during mobility, agreeing on the assessment procedures and on how learning achievements should be documented, specifying the role of partners involved and under which conditions credits can be transferred (validation and recognition). Preparing the Learning Agreement. Involving and seeking the approval of relevant national and/or sectoral partners having responsibility for different ECVET functions and at the appropriate level of qualifications.
Who?	Competent institutions in host countries. Sending and hosting organisations and the learner/training in mobility.
Which supporting tools?	Memorandum of Understanding (MoU). Learning Agreement (LA) in the framework of a MoU.

MAKE IT ECVET Kit includes **three tools**:

01 – Memorandum of Understanding (see Appendix 2)

The Memorandum of Understanding (MoU) aims to establish the conditions for a national/international VET mobility programme between partners from different institutions/countries.

It is a voluntary partnership agreement and sets the general framework of cooperation and networking within the partnership, regarding the recognition of Learning Outcomes and credit points (if applicable) within the European Welding Practitioner training course.

Each MoU is a unique document, adapted to the specific conditions within the agreement between organizations, and the specific context of the mobility as well. The MoU can be established within a national or transnational partnership, within two or more partners. Therefore, it must be adapted to each specific context. Nevertheless, all MoU must cover the following items:

- General objective of the MoU;
- Period of Eligibility;
- Information about the Partners
- Information about the training program or qualification concerned;
- General agreement on the Competence Units that can be considered under the MoU;
- Responsibilities;
- Quality Assurance;



- Conditions for the establishment of the Learning Agreement; and
- Signatures.

02 – Learning Agreement (see Appendix 3)

If the MoU settles the framework between partners from different institutions/countries, the Learning Agreement brings the focus to the most important part within the whole process: the learner. It is signed between the partners and the learner, which should all keep a copy of it, and contains information about the learner and the partners involved in the MoU in the framework of the Mobility. It can also contain, as an appendix, the description of the Competence Units established for the mobility period, the Personal Transcript, in which the assessed Learning Outcomes are registered, and the rules and regulations of the host Organization.

Prior to signing the Learning Agreement, the home institution should discuss all aspects of the mobility period with the learner concerned, as the Learning Agreement defines the conditions for the mobility of this individual learner. It defines, for the specific mobility period, what Competence Units the learner will try to achieve abroad, how and when these will be assessed and how the unit(s) will be recognised.

03 – Personal Transcript (see Appendix 4)

The personal transcript is a document that belongs to the trainee.

This tool is used during the next phase - during mobility. In MAKE IT ECVET Kit, (see Appendix 1) the Personal Transcript is an appendix of the Learning Agreement.

The personal transcript is a record of learning achievements. It contains information on trainees' assessed learning outcomes, units and ECVET points awarded during the mobility period. It also specifies the identity of the learner and the competent institution(s) that assessed, validated and recognised learners' credits. It is the document in which the Host Organisation states the trainee's assessed learning outcomes. Its purpose is to provide evidence that learning outcomes have been successfully achieved by detailing the trainee's assessed learning outcomes or units awarded within the established mobility and the assessment and verification processes undertaken.

In terms of quality assurance, all agreements between the partners that are related to the acquisition and assessment of knowledge, skills and competences abroad and their transfer to the home institution, should be specified in writing.

Concerning validation and the recognition of credits obtained during the mobility period, each qualifications system will have its own rules. It is nevertheless important to make it clear to the learner, before the mobility starts, how validation and recognition will be shaped.



3.2 ECVET during mobility

During the mobility phase, the trainee aims to acquire the knowledge, skills and responsibility and autonomy that s/he is expected to achieve abroad. Several issues need to be addressed during the actual mobility phase.

Trainees can participate in different activities in the host institution, or work environment, with relevant learning to the targeted Competence Units.

Trainees should demonstrate achievement of the targeted learning outcomes through participating in one or more assessment processes, with results then documented to provide evidence of achievement.

In this phase, the learning process takes place. So, according to the information provided in the Memorandum of Understanding and the Learning Agreement, learners will acquire related knowledge, skills and competences during their stay abroad.

Once learning is complete, learners must demonstrate achievement of the targeted learning outcomes as part of a formal assessment process. There can be one or several assessments during the mobility period, depending on the duration of the mobility and on the initial agreement. Those assessment processes should be listed in the learning agreement and can include various assessment methods, such as:

- self-assessment
- structured feedback meetings/discussions
- written assignments
- skills demonstrations
- work samples
- presentations
- simulated conversations

In short, during or at the end of a mobility period, achieved and assessed learning outcomes should be confirmed by the assessor in the host institution. These assessment processes and practices will reflect the norms and expertise of the host organisation and it is important that these are discussed and agreed in advance. These should be reflected in the Memorandum of Understanding and Learning Agreement. This will facilitate the validation and recognition of learning outcomes – and credits - on the learner’s return to the home country and institution. If the assessment does not respect the MoU and the Learning Agreement, the home institution can have difficulties validating and recognising learners’ credits obtained during the mobility period.

In the following table are listed the necessary key actions in this phase:

ECVET During Mobility	
What is necessary to do?	Actual training period abroad.



	Assessing and documenting knowledge, skills and competences acquired by the learner/training in mobility.
How?	<p>Trainees participate in learning activities in the hosting organisation relevant to the unit(s) they are taking.</p> <p>Trainees demonstrate their achievement of the required learning outcomes in an assessment process as specified in the MoU/LA.</p> <p>Host organisations document the assessment results.</p>
Who?	Hosting organisation and the learner/training in mobility.
Which supporting tools?	<p>Assessment sheet.</p> <p>Personal Transcript.</p>

In MAKE IT ECVET Kit, the Personal Transcript is an appendix of the Learning Agreement. Assessment results and related documentation will be used to inform the process of developing a Personal Transcript in which the learning and skills acquired during a (short or long-duration) mobility period are presented for an individual trainee.

3.3 ECVET after mobility

Following completion of the mobility period abroad, the competent institution in the home country is responsible for verifying whether all formal requirements have been met. Following this validation process, steps towards formal learning recognition can be launched.

In this sense, the trainees' credits are validated and eventually recognised. There are different ways in which learners' credits can be validated and recognised, depending on the qualifications system of the home institution.

According to the MoU and the Learning Agreement (LA), in this last phase it is necessary to validate trainee's credits achieved abroad and to recognise the learner's credits achieved.

In the following table are listed the necessary key actions in this phase:

ECVET After Mobility	
What is necessary to do?	<p>Verify that all formal requirements, as well as the stipulations stated in the LA, have been met.</p> <p>Validating and recognising trainees' credits.</p> <p>Reviewing the process and results of the individual mobility.</p>
How?	<p>Comparing the documentation of the learning outcomes assessed by the host organisation with what has been agreed in the LA.</p> <p>Awarding Competence Units or qualification.</p>



	<p>Implementing practical implications agreed beforehand.</p> <p>Reflecting on the entire process to identify any necessary adaptations.</p>
Who?	<p>Validation: sending organisation.</p> <p>Recognition: sending organisation or any other competent institution, if appropriate.</p> <p>Sending and hosting organisations and the learner/training in mobility.</p>
Which supporting tools?	<p>For example:</p> <p>Database of trainees' achievements, certificate or any other document attesting validated and recognised knowledge, skills and competences.</p> <p>Evaluation sheets and action plan for implementing changes.</p>

Following this, it is important to have in mind the validation and recognition processes. These take place when a learner returns to the home organisation or institution, and entail actions usually carried out in line with the provisions of the Learning Agreement.

For the validation of learning outcomes achieved, staff in the sending institution will consider documentation relating to the assessment of learning outcomes, as provided by the host institution, and will compare this to that which has been agreed in the Learning Agreement. In general terms, validation is achieved when the expected and assessed learning outcomes are sufficiently consistent and adequately documented. Final decisions will additionally consider the specific context of learning and assessment taking place during the mobility period, including any possible language barriers that learners may have faced in the host organisation and country.

Recognition of learning outcomes means the process of attesting officially-achieved learning outcomes through the award of credits, units or qualifications.

3.4 Evaluation Process and Results / Added-value

Once a programme of mobility has been delivered, there is merit in reflecting on the entire process, confirming any need for change or improvement. Evaluation can be useful for reflecting on cases where recognition was not possible to be achieved as planned.

To ensure that the entire process (from preparation and implementation, to validation and recognition) is continuously improved, evaluation should involve all partners, including the feedback from the individual trainees that went through the mobility process, as they constitute an integral part of the process. It can be useful to record oral feedback (safeguarding the required permission) so that feedback and suggestions for improvement are not lost. Based on the evaluation actions and results, suggested changes and improvements should be actively considered as part of the preparation of future mobility projects or programmes.



After several individual mobility cycles have been carried out, it can be useful to additionally evaluate the ECVET partnership. Partners should consider data on assessment results, trainees' successes and failures and the impact of the mobility experience on individual pathways, confirming the relevance of continuous participation in all cases. This might also provide an opportunity to expand the partnership into new areas, considering new or additional partners from a wider range of countries, regions or sectors.



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Appendix

Appendix 1. 00_ECVET tools kit user guide_MAKE IT

Appendix 2. 01_MoU_MAKE IT

Appendix 3. 02_Learning Agreement_MAKE IT

Appendix 4. 03_Personal Transcript_MAKE IT



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Appendix 1

00_ECVET tools kit user guide_MAKE IT

Work package 3

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Welcome to the **user guide for MAKE IT ECVET Kit!**

This kit has the objective to support the lifelong learning process of trainees in mobility, with user friendly tools, aiming to facilitate the transfer, recognition and accumulation of the individual learning outcomes within training mobility processes.

The purpose of this guide is to associate a certain training course to the European Qualifications Framework (EQF) and the National Qualifications Frameworks (NQF), in order to create bridges between organizations and trainees in different EU member states.

If everyone shares a common understanding on a certain professional/vocational training course, expressed through the expected learning outcomes and indicating in what level of specialized knowledge, skills and autonomy and responsibility this training will allow the trainee to be at a certain moment of the training, it will be easier to establish a Memorandum of Understanding between organizations, in order to provide the best and more adequate training in national or transnational mobility. Learning outcomes are a useful tool to map knowledge, skills and autonomy and responsibility associated to a certain training course: it allows all VET promoters and suppliers to understand and read the real learning outcomes involved in each course for further mutual recognition among different VET promoters. By clearly understanding the Learning Outcomes to achieve within a learning process (formal, informal or non-formal¹), the establishment of a Memorandum of Understanding, and consequently the attribution of points regarding the recognition, validation and certification of the Learning Outcomes achieved, will be much easier.

Our ECVET Kit includes three tools:

01 – Memorandum of Understanding

The Memorandum of Understanding (MoU) aims to establish the conditions for a national/international VET mobility programme between partners from different institutions/countries.

It is a voluntary partnership agreement and sets the general framework of cooperation and networking within the partnership, regarding the recognition of Learning Outcomes and credit points (if applicable) within the European Welding Practitioner training course.

Each MoU is a unique document, adapted to the specific conditions within the agreement between organizations, and the specific context of the mobility as well. The MoU can be established within a national or transnational partnership, within two or more partners.

¹ For further understanding of the concepts formal learning, informal learning, non-formal learning, check out the Cedefop Glossary, 2011 Ed.



Therefore, it must be adapted to each specific context. Nevertheless, all MoU must cover the following items:

- General objective of the MoU;
- Period of Eligibility;
- Information about the Partners
- Information about the training program or qualification concerned;
- General agreement on the Units of Learning Outcomes that can be considered under the MoU;
- Responsibilities;
- Quality Assurance;
- Conditions for the establishment of the Learning Agreement; and
- Signatures.

02 – Learning Agreement

If the MoU settles the framework between partners from different institutions/countries, the Learning Agreement brings to the main focus the most important part within the whole process: the Trainee.

The Learning Agreement structures the organization of the mobility period of training, and is signed between the partners and the Trainee.

It contains information about the Trainee and the partners involved in the MoU in the framework of the Mobility.

It can also contain, as an appendix, the description of the Units of Learning Outcomes established for the mobility period, the Personal Transcript, in which the assessed Learning Outcomes are registered, and also the rules and regulations of the host Organization.

Both partners and the trainee must have a copy of the Learning Agreement.

03 – Personal Transcript

In MAKE IT ECVET Kit, the Personal Transcript is an appendix of the Learning Agreement.

It is the document in which the Host Organization states the trainee's assessed learning outcomes. Its purpose is to provide evidence that learning outcomes have been successfully achieved by detailing the trainee's assessed learning outcomes or units awarded within the established mobility and the assessment and verification processes undertaken.



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**Let's Make It Happen – a Shift into Learning Outcomes in the Welding
Sector**

Appendix 2

01_MoU_MAKE IT

MEMORANDUM OF UNDERSTANDING

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MEMORANDUM OF UNDERSTANDING

(MAKE IT: Let's Make It Happen – a Shift into Learning Outcomes in the Welding Sector)

1 – General Objective

This Memorandum of Understanding (MoU) aims to establish the conditions for an international VET mobility programme between partners from different institutions within the EU member states.

It is a voluntary partnership agreement and sets the general framework of cooperation and networking within the partnership, regarding the recognition of Learning Outcomes within the **European Welding Practitioner (EWP)** Training Programme.

2 – Period of Eligibility

The period of eligibility of the agreement set down in the MoU is from **Month/Year** to **Month/Year**

3 – Information about the Partners

Partner A (Home VET Provider)

Name of the Organization	
Type of Organization	
Address	
City	
Country	
Contact Person	
Job Title	
Phone Number	
E-mail	
Homepage	
Short Description Of Partner	

Partner B (Host VET Provider)

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Name of the Organization	
Type of Organization	
Address	
City	
Country	
Contact Person	
Job Title	
Phone Number	
E-mail	
Homepage	
Short Description Of Partner	

4 – Information about the training program concerned

Training program (in Partner A)	
Title of the qualification (in original language)	
Title of the qualification (in English)	
NQF level	
EQF level	
Learning hours/Workload	
ECVET Points	

Training program (in Partner B)	
Title of the qualification (in original language)	
Title of the qualification (in English)	
NQF level	
EQF level	
Learning hours/Workload	
ECVET Points	

Note: Details should be listed in the Learning Agreement

5 – Responsibilities

The sending organization is responsible for:

- Signing the learning agreement
- Recognizing the Learning Outcomes after the mobility

The hosting organization is responsible for:

- Signing the learning agreement
- Sending an information package
- Assuring an accompanying Tutorship



Note: Provide further information when necessary, e.g., health insurance, travel insurance, arrangements on employment, etc...

6 – Quality Assurance

1. The hosting organization provides a safe training environment for the mobile trainee in which he/she can develop and learn;
2. The hosting organization takes into consideration the level of competence and development of the mobile trainee (the years of training/work experience);
3. The hosting organization allows enough time, room, means and resources for the training and coaching of the mobile trainee;
4. The hosting organization provides a detailed programme/plan including an introduction programme, evaluation interviews with the trainee on the progress of the placement (if applicable), and the final assessment of the trainee;
5. The hosting organization cooperates with the sending organization and makes the appropriate training agreements as described in the Learning Agreement;
6. The hosting organization gives the necessary information on the conditions and equipment concerning the work itself and the work environment (in case the hosting organization is a company) or concerning the training/ classes to be attended.
7. A representative of the hosting organization (tutor or coach), in straight alignment with the sending organization, monitors and evaluates the achievement of the learning outcomes.
8. The trainee shall attend the needed training sessions/school classes in relation to the programme referred in the present MoU, and fulfill other tasks that are part of the agreed training plan.
9. The trainee follows the discipline and teaching hours, and respects the rules in force and legal provisions concerning professional confidentiality.
10. If applicable, the trainee can practice (when necessary and under guidance) in the daily company activities (in case the hosting organization is a company).

7 – Conditions for the establishment of the Learning Agreement



This MoU is subject to a valid Learning Agreement, signed between the above Partners and the trainee concerned, prior to the mobility and includes the following points:

- a) Identification of the training programme concerned in the MoU;
- b) Validation and recognition from the sending organization of the learning outcomes acquired at the hosting organization.

8 – Signatures

By using this agreement, we accept each other's status as competent organizations, as well as each other's quality assurance, assessment, validation, recognition criteria and procedures as appropriate for the purpose of allocating credits at the end of the training/learning period abroad.

IN WITNESS WHEREOF, the parties have executed this Memorandum of Understanding the day and year written above and here below.

SIGNED for and on behalf of
Partner A

SIGNED for and on behalf of
Partner B

Signature

Signature



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Let's Make It Happen – a Shift into Learning Outcomes in the Welding Sector

Appendix 3

02_Learning Agreement_MAKE IT

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LEARNING AGREEMENT

(Nr.)

The Purpose of this Learning Agreement is to structure the organization of the mobility period of training within the **European Welding Practitioner (EWP)** training course.

1 – Trainee Information

Family Name			
First and Middle Names			
Date of Birth	dd /mm /year	Country and City of birth	
Nationality			
Address			
		Postal Code	
Tel.:	e-mail:		

2 – Partner A (Home VET provider)

Name of the Organization	
Type of Organization	
Address	
City	
Post Code	
Country	
Contact Person	
Job Title	
Phone Number	
E-mail	
Homepage	
Short Description Of Partner	



3 – Partner B (Host VET Provider)

Name of the Organization	
Type of Organization	
Address	
City	
Post Code	
Country	
Contact Person	
Job Title	
Phone Number	
E-mail	
Homepage	
Short Description Of Partner	

4 – Framework of the Mobility

Training Course	European Welding Practitioner (EWP)	
Teaching hours (h)	Workload (h)	ECVET Points

4.1 – List of Appendices

Appendix A – Learning Outcomes

Appendix B – Assessment Procedures

Appendix C – Personal Transcript

Appendix D – Administrative and Legal Rules and Regulations (the hosting VET Provider shall include its administrative and Legal Rules and Regulations, e.g. trainee regulation; training course guide, etc.)



5– Dates of the Mobility Period

This Learning Agreement is valid from **Month/Year** to **Month/Year**

6 – Signatures

Trainee: _____

Date: _____ **Signature:**

The Home VET Provider, _____, confirms that the Learning Agreement has been accepted.

Name: _____ **Job**

Title: _____

Date: _____ **Signature:**

The Host VET Provider, _____, confirms that the Learning Agreement has been accepted.

Name: _____ **Job**

Title: _____

Date: _____ **Signature:**



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Let's Make It Happen – a Shift into Learning Outcomes in the Welding Sector

Appendix 4

03_Personal Transcript_MAKE IT

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PERSONAL TRANSCRIPT

The purpose of the present Personal transcript is to detail the trainee's assessed learning outcomes and the units awarded within the **European Welding Practitioner (EWP)** training course.

1 – Trainee Information

Family Name			
First and Middle Names			
Date of Birth	dd /mm /year	Country and City of birth	
Nationality			
Address			
		Postal Code	
Tel.:	e-mail:		

2 - Training Course Information

Name of the Training Course in the Home VET Provider (insert organization name)	Name of the Training Course in the Host VET Provider (insert organization name)

QUALIFICATION	LEARNING OUTCOME/COMPETENCE UNIT	WORKLOAD (WL)	TEACHING HOURS	ASSESSMENT RESULTS - ECVET POINTS
EUROPEAN WELDING PRACTITIONER				

Date & Place: _____

Signature of the Person Responsible in the Host VET Provider:
