



Good Practices in ECVET Compliant Maritime Education and Training

*Centre for Factories of the Future (C4FF)
on behalf of*

*MariePRO project partners from
University of Turku, Finland, Centre for Factories of the Future, the United
Kingdom, University of Bremen, Germany, Istituto Tecnico Trasportie Logistica
Nautico San Giorgio, Italy, Mediterranean Maritime Research and Training Centre,
Malta.*

Contents

Catalogue of Best Practices.....	1
1. Introduction.....	2
2. ECVET Formal Structure and Requirements.....	3
3. Partner Examples of ECVET implementation.....	4
3.1 Italy’s Example of Good Practice ECVET.....	4
3.2 Malta Example of Good Practice ECVET.....	5
3.3 Finland’s Example of Good Practice ECVET.....	7
3.4 United Kingdom’s Example of Good Practice ECVET.....	8
3.5 Germany’s ECVET Example.....	8
3.6 EU project example - SeaTALK Project.....	10
4. A System for Compliance with ECVET Requirements – C4FF’s Cross-Referencing Table.....	11
4.1 Template Cross-Referencing Table.....	11
4.2 MariePRO Cross-Referencing Table in use.....	14
5. Conclusions.....	17



1. Introduction

The **European Credit system for Vocational Education and Training (ECVET)** is the new European instrument (recommended in 2009) to promote **mutual trust** and **mobility** in vocational education and training. ECVET is a European system of accumulation and transfer of credits and has been designed to enable the recognition of the learning outcomes of **an individual in a learning pathway** to a **qualification**. The system favours the documentation, validation and recognition of achieved learning outcomes acquired, in particular in the framework of transnational mobility, in both formal Vocational Education and Training (VET) and in non- formal context. It is centred on the individual and based on the learning outcomes approach, **defined in terms of knowledge, skills and competences necessary for achieving a qualification**. This enable a more accurate design of training courses which answers to the training needs of employees. Some of the ECVET concepts and processes are already embedded in many qualifications systems across Europe such as ECTS (European Credit Transfer Scheme).

ECVET was introduced after the introduction of ECTS in higher education sector. Like ECTS, it concerns the recognition of the learning by **an individual in a learning pathway** to a **qualification** and it has a **uniform structure** with a **set of requirements**. However one important difference is that while ECTS does not have to be based on a learning or a set of learning outcomes, ECVET requires the learning to have been or lead to acquisition of a given or a set of competence(s) and defined by a learning or a set of learning outcomes. The implementation of ECTS was primarily a voluntary process, that is to say, when two or a group of HEI (Higher Education Institutions) had agreed that there is a possibility that part of their students' programmes of studies can be undertaken in another university (often in another country) then arrangements are made to apply ECTS. It was pertinent for ECTS to note that both the sending and receiving universities are expected to undertake substantial amount of work to ascertain that the mobility opportunity being considered provides a series of advantages to students and would not academically or professionally disadvantage them. ECVET was initially intended to mirror ECTS in vocational schools/colleges at secondary as well as lower tertiary levels (Vocational diplomas/foundation degrees, and so forth).

The formal structure and basic building blocks of ECVET are described in the following paragraphs. Before considering the structure it is worth noting that ECVET is initiated to provide opportunity for exchange of students/learners/trainees where feasible and therefore may not be possible or desirable to apply it in some industrial applications/environments. The ECVET could apply to a set of formal and/or non-formal learning activities or experiences; in most cases an ECVET practice is developed to create opportunities for learning in another location other than the normal place of learning.

The example of ECVET in practice that have been included in this report have been produced to show the different ways that ECVET is being applied across sectors and countries in the EU. In some instances the initial vision for ECVET is realised - student exchanges, in other cases ECVET is used as a benchmarking tool to integrate learning and industrial requirements to make more labour relevant training courses, and in other cases new qualifications all together have been designed. The key features of the examples in this report is that they are all ECVET compliant and showcase different, innovative and effective approaches to implementing ECVET that other institutions can learn from.



2. ECVET Formal Structure and Requirements

ECVET has a formal structure which includes the following:

- **Learning outcomes**, which are statements of knowledge, skills, and competence that can be achieved in a variety of contexts.
- **Units of learning outcomes** that are components of qualifications. Units can be assessed, validated and recognized.
- **ECVET points**, which provide additional information about units and qualifications in a numerical form.
- **Credit** that is given for assessed and documented learning of a learning outcome of a learner. Credit can be transferred to other contexts and accumulated to achieve a qualification on the basis of the qualification standards and regulations existing in the participating countries.
- **Mutual Trust and partnership among participating organisations**. These are expressed in Memoranda of Understanding and Learning Agreements.

A **Memorandum of Understanding (MoU)** forms the framework for cooperation between the competent institutions. It aims to establish mutual trust between the partners involved. In this MoU partner organisations mutually accept their respective criteria and procedures for quality assurance, validation and recognition of knowledge, skill and competence for the purpose of transferring **Credit**.

There is also a provision for Agreements (within an MoU or as an attachment) set up by sector based organisations (e. g. by Chambers, regional and national authorities). This should include a list of organisations such as VET providers, companies, etc., who are able to operate in the framework set up by the MoU.

In order to recognise **Credit**, the competent institution in charge needs to be confident that the required learning outcomes have been assessed in a reliable and valid manner. It also needs to trust that the learner's credit does concern the learning outcomes expected and these are at the appropriate level.

On the basis of the assessed outcomes, the credit can be validated and recognised by another competent institution. The transfer process includes three distinct stages:

1. The hosting institution assesses the learning outcomes achieved and awards credit to the learner. The learning outcomes achieved and corresponding ECVET points are recorded in a learner's personal transcript.

2. The sending institution then recognises learning outcomes that have been acquired; this recognition gives rise to the award of the units and their corresponding ECVET points, according to the rules of the home system.

3. Credit accumulation is a process through which learners can acquire qualifications progressively by successive assessment and validation of learning outcomes. Accumulation of credit is decided by the competent institution responsible for the award of the qualification. When the learner has accumulated the credit required and when all conditions for the award of the qualification are fulfilled, the learner is awarded the qualification.



The following are five examples, one from each partner country, so that partners' can learn from one another and also for other institutions and organisations who wish to develop an ECVET practice of their own or developing ECVET compliant new skills/competences and/or qualifications that could benefit from this output of the MariePRO Project. The intention is also to tabulate a set of guidelines or a cross-referencing table showing as to whether the requirements of ECVET are met for any ECVET initiative/project, providing an extra row(s)) identifying additional key features of the practice/project.

3. Partner Examples of ECVET implementation

3.1 Italy's Example of Good Practice ECVET

Consortium of Vocational Schools to Send Students to Other Countries Primarily for Short Exchanges and Mainly to Give Recognition to a Set of Non-formal Learning Experiences

The example presented here is an initiative in Italy which has been developed to allow students from vocational schools to seek qualifications and recognition for knowledge and skills/competences gained according to ECVET requirements primarily for encouraging mobility of students to other European countries. Italy's experimentation in applying ECVET is relatively new. In recent years a great deal of work has been carried out in some vocational fields, for instance, this initiative which is a consortium of vocational schools taking an active role in the northern/central part of the country by putting a great deal of efforts in developing and coordinating ECVET mobility activities.

The initiative was instigated by the "Consorzio degli Istituti Professionali" (*Consortium of vocational schools*) which is a well established network of more than 60 vocational schools from several Italian counties, embarking on mobility projects that allow young students from the vocational fields to get competences abroad. The basic concepts that led to these the activities is the deep conviction that the mobility opportunity provides additional experience to normal education process on one's own country, in formal and informal learning environment encompassing: **integrating and interacting** in a different context from a cultural, social, professional and linguistic perspective; **facing** new situations, increasing personal autonomy and responsibility; **improving** social, linguistic and communicational skills; **getting** new educational and training opportunities; **learning** new working practices; **completing** their vocational training in a different learning environment, using personal and professional skills in different situations; **making choices** on the basis of new information and developing new skills to respond flexibly and effectively to the demands, also improving employability. The vocational area in which the consortium is mostly active encompasses a wide range of subjects such as: *Business Administration; Tourism; Catering / Reception; Social Care; Fashion and Mechanic / Electronic*. The consortium has already created opportunities for the mobility of more than a hundred students, in different European countries: *Sweden; Romania, Portugal; Finland; Ireland; Germany and France*.

Key Features of the Good Practice

The key feature of Italian project is that it is in line with the structure of the EU's ECVET model; the process involves preparing an *agreement* among the schools in the *Consortium*



and *vocational schools in several country* based on ECVET practice. The consortium gives support to the schools in order to coordinate the mobility activities, which in each case often takes 3 weeks and involves about 10 students at a time, with one or two accompanying teachers. It gives support in terms of: Project layout and project management, contacts with National Agency; Engagement of Italian and European partners and sharing of goals and methods of project development through constant contact; Organization of training courses for selection of beneficiaries and accompanying teachers; Organisation of travels, accommodation and logistics internships, local language courses and related costs; Check of insurance (accidents and civil liability of partner schools) and supplementary insurance; Reimbursement of the beneficiaries for any travel, accommodation, transport and cultural training cost incurred during the mobility abroad; Production and collection of the required documentation (evidence of expenditure contracts, training projects, Europass, evaluation sheets, etc.) in collaboration with hosting partners; Support of beneficiaries in evaluation and documentation of experience phases; Reporting and relations (interim and final); Dissemination of the results of the experience. Furthermore, the vocational school has to follow other steps that appear to be less “technical” but far more important in terms of education and that allow to make the experience really effective; for instance, it has to: Identify a contact person of the project who attends all the meetings and fulfils all the procedures for the best realisation of the project; Choose the most suitable participants and an accompanying teacher with a good command of the English language who takes an active role in the fulfilment of the project (Europass procedure, report instructions, formal sheets); Promote the mobility experience as a useful learning opportunity to improve linguistic competences and to learn to work in an international context; recognise the mobility experience as an integral part of the curriculum; Identify all the tools to receive the most reliable feedback of the mobility experience (through logbooks, evaluation sheets, skill certifications); provide a copy of all the bureaucratic files; Guarantee the linguistic training of the students and support them with the mobility documentation; Get in touch with the Consortium in all the different stages of the mobility activities, Answering promptly to its request in case of need and following scrupulously all the Consortium’s requirements as set in the Agreement.

3.2 Malta Example of Good Practice ECVET

Creating a Transnational New Qualification for Pilots Working in Sea, Rivers Ports/Passageways and Applying ECVET Practice in Collaboration with Several European Countries to Enable Recognition of the Qualification in These Countries

The Maltese report concerns the development of a framework that aims at having a transparent recognition of the maritime pilots qualifications under the ECVET and EQF, a qualification focused on Risk Prevention and Environmental Protection, referred to as CERTIPILOT. Their report illustrates the CERTIPILOT project concerns the Maritime Pilot profession in Malta. The report gives a background on the use of competences in the EU – ECVET and EQF, the relevance of competences for Maritime Pilots Qualifications and the skills portfolio for inclusion in the Europass CV. The report also shows how the Learning Outcome approach is applied to the Maritime pilots’ qualification focused on Risk Prevention and Environmental Protection.

Starting from the A960 Recommendation of IMO, CERTIPILOT links the training undertaken by pilots along their career with the European educational system without



introducing new standards or new courses. After following the career development path which is common to Master and officers, Pilots' training needs become more specifically linked to their task of manoeuvring vessels in ports, but there is no system in place to make it possible to assess the competences and the levels related to these competencies. CERTIPILOT fills this gap, in particular in relation to the use of technology in VET and environmental protection.

The project has created a comprehensive framework enabling Pilots' Associations and National Educational Authorities to assess pilots' qualification levels as well as the levels of training undertaken, both internally and abroad; and to facilitate qualifications recognition. Thanks to CERTIPILOT it is possible, for the first time, to take formal, informal and non-formal learning into consideration when assessing a Pilot's training record. This innovative aspect is relevant to the profession, as the qualifications of Pilots are strongly linked with the experience gained through work as well as with testing carried out using the technology available. The solution was proposed by the end users of the service in a bottom up approach. Moreover, the issue of recognition of qualifications is addressed in a holistic manner, i.e. not focusing on just one specific training programme. In terms of comparison with existing solutions it has to be noted that CERTIPILOT focuses, for the very first time, on Maritime Pilots. For the first time, EUROPASS is applied to the Pilots' profession.

Malta Maritime Pilots Coop was the lead partner. The Maltese Maritime Research and Training Centre was another partner from Malta. The latter was mostly involved in the application of the ECVET framework to the Maritime Pilots' qualification in Risk Prevention and Environment protection. The project involved the Turkish Maritime Pilots Association i.e. the organisation representing the interest of all Turkish Maritime Pilots, which organises training sessions and CPD courses for its members. Another partner was the Colegio Oficial Nacional de Practicos de Puerto from Spain which established under National Law to act as supervisor for all the Spanish Pilots. The Colegio cooperates with the Spanish Government to safeguard the maritime sector and the environment. The fourth partner was CSEL s.r.l., a recognised training provider that delivers vocational training in Italy. The organisation's experience and knowledge of the European VET system was invaluable when it came to integrating the technical experience and skills of the Maritime Pilots within a framework that balances the needs of the profession with the requirements of ECVET and EQF.

For more information about the CERTIPILOT Project and its outcomes, as well as an example of the CERTIPILOT ECVET compliant qualification chart please see: **Annex 1 - FRAMEWORK FOR THE TRANSPARENT RECOGNITION OF MARITIME PILOTS QUALIFICATIONS**

Key Features of the Good Practice

The project is applied to an existing profession relating to an area which currently does not require a formal qualification as against the examples provided by other partners. The aspects of good practice apparent from CERTIPILOT are the framework it has developed which allows for formal, non-formal and informal learning and assessment leading to a qualification for Pilots working in sea and river ports and passageways. It has filled a gap in gathering all the necessary competences for the profession and created an opportunity for other countries to become involved with a view to establish a common qualification in the future. The interaction and involvement of other countries will itself help in comparing practices and adopting good practices.



3.3 Finland's Example of Good Practice ECVET

Implementation of the National ECVET System as an Integral Part of the National Upper Secondary VET Curriculum/Qualification Reform Concerning All VET Qualifications Requirements; Concerning All Students Whether Continuing or Beginning Their Studies

The Finnish VET reform process has been based on the principles of the ECVET Recommendation, i.e. learning outcome-based approach; all qualifications have been divided into units of learning outcomes, and ECVET credit points have been calculated on the basis of the relative importance of the unit of learning outcomes to the overall qualification. The process is aiming towards more comprehensive acknowledgement of skills and competences, and the use of ECVET tools, including MoU, Learning Agreement, ECVET guides and so forth.

To develop a system for ECVET practice in Finland and to test the system a 3-phase national pilot project, FINECVET, was initiated. In the first two phases of the project, the ECVET system was tested with 9 vocational qualifications. The third phase of the project extended the pilot to include further and specialist vocational qualifications, and the piloting processes continued with 8 vocational qualifications, 4 further vocational qualifications, and 3 specialist vocational qualifications. Piloting therefore was widespread and focused on the different stages of the ECVET process and generated implementation models for both, activities and documentation.

For more information on the piloting and incorporation of ECVET into Finland's national curricula please see: **Annex 2 - FINNISH VET CURRICULUM REFORM 2016**

Key Features of the Good Practice

The Finnish practice is based on EU's ECVET model and clearly shows that it is a national scheme applied to several qualifications. What is interesting it has also been applied in on-the-job training which may have an international appeal. This concerned efforts made by the maritime actors to improve the difficult situation in arranging of the on-board training periods; a maritime Apprentice Mill (HarjoitteluMylly) was established in the autumn 2012. The Apprentice Mill serves as a link between maritime institutes and ship-owners. The most important task of the Mill is to co-ordinate training places and to inform the educational institutes and ship-owners of the seafaring apprentice situation. The activities of the mill gather together all the Finnish maritime institutes. There are altogether 85 vessels under the Finnish flag that take students in; the smaller ones take only one student at a time, and the larger vessels take one for the deck and another for the engine department. In addition, cruise ships can take an electrician student, as well.

The ECVET initiative is hence a national initiative enforced by legislation with support from key stakeholders. Its strength is its transparency, which include a core national curriculum for all VET qualifications including maritime. This create a an opportunity for a uniform practice throughout the country and assessed and evaluated on a national basis. Its key feature is also the fact that it is student-oriented providing individual study paths to enhance learning and providing opportunity for tighter cooperation among MET institutes and the shipping industry.



3.4 United Kingdom's Example of Good Practice ECVET

Developing a transnational ECVET Curriculum and Qualification for a New Set of Design Knowledge and Skills/Competences Encouraging Continuous Professional Development and Seeking International Recognition

The ECVET initiative in the UK presented here is based on the development of a new skills for designing a curriculum for Wind Farm Support Vessels (WFSV) with a view to ensure it complies with the requirements of the European Credit system for Vocational Education and Training framework (ECVET) and at the same time ensuring the requirements of the Royal Institution of Naval Architects for their Initial and/or Continuing Professional Development (RINA's IPD/CPD). The practice in the UK is based on EU's ECVET norm but the recognition by RINA, a respected professional institution, with worldwide recognition under the Washington Treaty, is a novel aspect of this initiative.

For more information in the Wind Farm Support Vessels course, how it was developed to be ECVET compliant and to incorporate the professional industrial requirement please see: **Annex 3 - DEVELOPMENT OF EBDIG-WFSV CURRICULUM IN LINE WITH ECVET AND RINA.**

Key Features of the Good Practice

The process of professional development whilst being continuous during a career, it is often considered as two stages: Initial Professional Development (IPD) and Continuing Professional Development (CPD). The work carried out to seek accreditation for WFSV curriculum and qualification from the Royal Institution of Naval Architects (RINA) should be considered a key feature of this initiative. Given the equal level of intended professional engagement in the design process between naval architects and marine designers, the WFSV's IPD/CPD training course learning outcomes and its mapping against RINA IPD development objectives for naval architects, the initiative was highly challenging. In addition to the Accreditation of WFSV's IPD/CPD courses by an international chartered professional body such RINA, the opportunity for WFSV to support vertical and horizontal mobility of higher education and VET in the long run necessitated the implementation of ECVETS into this mapping process so that both RINA and ECVET requirements are met. It is also very important to note that the formal assessment of the WFSV course is implemented through the academic partners of WFSV and is ensured that the assessment meets the ECVET requirements.

Cross-referencing two sets of requirements was also a key methodology in ensuring two totally separate set of requirements are satisfied. The project involved some 6 European partners and currently the curriculum/qualification is been evaluated in these partner countries. The cross-referencing technique also helped on deciding a right balance between marine engineering design naval architecture.

3.5 Germany's ECVET Example

The AEROVET project focuses on the development and piloting of learning outcomes oriented units within the context of the transnational mobility of trainees (EQF level 4).



AEROVET project involved the four countries of France, Germany, the United Kingdom and Spain, the principal nations which participate in the Airbus Group. Testing of ECVET took place within the transnational exchange of VET-students/apprentices between Airbus plants. Initial analyses of the national curricula within this sector in the four countries were enough to show that these could not serve as a basis for joint learning units. Spain, for example, does not have any occupation in the area of production. Work is carried out by workers from associated occupations (e.g. vehicle mechatronics technicians) who have been trained for the specific construction sites. Within the field of maintenance, Spain only trains higher level technicians (EQF Level 5). In Germany, on the other hand, skilled workers in the sector undergo a 3,5 year training programme to qualify in one occupations. The occupation of electronics technician for aviation systems forms part of the occupational group of electrical occupations, whereas the occupation of aircraft mechanic is a mono-occupation divided into three specialisms (maintenance engineering, production engineering and engine technology). Despite the different training approaches, it comes as very little surprise that the occupational work tasks, i.e. the competence fields of qualified workers are similar. Regardless of whether a landing flap is fitted at Airbus Bremen (DE) or Airbus Broughton (UK) and irrespective of whether the functionality of the onboard communication system is tested and repaired where necessary at a Spanish or French airport, work contents, processes, manuals and types of documentation are identical with each other or at least similar. Expert-skilled worker workshops have thus been able to draw up a total of 22 learning units which cover the essential work tasks carried out by both electronics technicians and mechanics within the sector and which, potentially, could be learned in a mobility phase. The main products of the AEROVET project are a description of the competences, elements of knowledge and skills which each of the 22 units contains, and a matrix comprising the mobility units which are an integral component of the unit and of the evaluation system which has been developed. Details can be found on ADAM-database.

For more information on the AEROVET project and its approach to transparent industrial training courses please see: **Annex 4 - AEROVET**

Tested and approved Good Practice

The method of Expert-Workers-Workshops (EWW) led to mutual trust on the content of the units (activity fields):

The underlying objective of the initial phase is to describe occupational profiles (jobs) in the workplace by relying on core professional tasks, so-called “activity fields” in the model. In this case, the blueprint aims to outline what professional tasks are deemed relevant for a range of job profiles in the sector of interest. Core professional tasks are specific activities of determined jobs. The tightening and loosening of structural components, for instance, is a core task of an aircraft mechanic. Three reasons explain why focusing on professional tasks to describe people’s jobs in the sector is better than other approaches:

- Workers are better equipped than external observers in describing comprehensively their tasks
- A bottom-up approach fits well the context: occupations are well-described if one looks at the different professional tasks composing them
- All sorts of professional tasks need a sufficient amount of knowledge and skills to be performed successfully.



Workshops in this first stage are the practical tools to achieve such goals. First they lead to the specific definition of professional tasks, then, once these are obtained, they group them together into well-defined jobs. Two types of actors take part in the workshops: facilitators and participants. Facilitators smooth out the discussion among participants with a neutral, yet possibly well-informed, attitude to the discussion. Workers with expertise in technologically advanced work processes who participate to the workshop, instead, bring insightful opinions on machines, tools, methods, work organisation when in the position to share so.

The first workshop-based stage can be broken down into five steps. Starting with analyzing professional tasks and finishing with shaping occupation profiles, it offers a grounded response on how to properly define jobs and units in the analysed sector. The table below summarizes the steps in the cycle and the core elements they foresee on the path to the meaningful definition of activity fields:

Table 1: “Expert Workers Workshops” cycle

STEP	CORE ELEMENT
1	Participants create outline of own professional career history and eventually identify breakthrough moments into it
2	Participants identify challenging, yet skill-enhancing, tasks linked to these breakthrough moments. These should be tasks that were crucial for their professional development
3	Participants compile in group lists with core professional tasks considered key for the specific job concerned (both tasks done and never conducted previously)
4	Participants discuss lists compiled. Similar tasks are merged and streamlined to obtain one final list
5	Participants assess final list of core professional tasks deemed crucial for the job giving score on scale of skills’ complexity to perform them. Disagreements over final score are dealt with by including all various positions. Fine-tuning of results happens too.

The completion of this five-step process lead to the emergence of a range of occupational profiles structured in activity fields, that can be used as units for mobility purposes. With this approach, occupational profiles (jobs) will therefore not be identified as such, but rather through the core professional tasks they will incorporate. As step 3 earlier signalled, **tasks rarely or never performed by the workshop’s participants can equally qualify for being included in the group of core professional tasks for a specific job.**

3.6 EU project example - SeaTALK Project

Multiple EU projects have been funded in a variety of educational and businesses sector in order to widen the understanding and use of ECVET in education and professional training courses. As mentioned previously the Maltese partner to this project carried out the CERTIPILOT project to bring together formal and non-formal learning in an ECVET compliant programme resulting in a new qualification for Maritime pilots. While the UK



partner coordinated the SeaTALK project which designed ECVET compliant competence grids and learning outcomes to allow training institutions to design courses to meet the regulatory standards for Maritime English.

An example of a SeaTALK competence grid, along with explanations as to how were designed and developed to be ECVET compliant are available in the Annex to this Report titled:

Annex 5 - SeaTALK ECVET compliance.

4. A System for Compliance with ECVET Requirements – C4FF’s Cross-Referencing Table

4.1 Template Cross-Referencing Table

Having reviewed the formal ECVET requirements as published by the EU, as well as external education programme evaluation tools such the C4FF team have developed the MariePRO Best ECVET Practice Cross-Referencing Table. Interested parties may submit their ECVET courses for evaluation at any time.

An example of the cross-referencing table is included on the next page of this report:



Course Title:	ECVET Complaint? (Yes / Referral)	Score: 5 best 1 Least	Comment
1. Is the learning/prior learning/qualification/course/unit competence based where the in the unit's content and assessment are based on ability to do?			
2. Are Learning Outcomes statements of knowledge, skills, and competence that can be achieved in a variety of contexts?			
3. Are Learning Units of learning outcomes components of qualifications where the unit(s) can be assessed, validated and recognised?			
4. Do the ECVET points provide additional information about the unit(s) and qualifications in a numerical form?			
5. Is the Credit given for assessed and documented learning of a learning outcome of a learner where the credit can be transferred to other contexts and accumulated to achieve a qualification on the basis of the qualification standards and regulations existing in the participating countries?			
6. Are the Mutual Trust and partnership among participating organisations are expressed in Memoranda of Understanding (MoU) and Learning Agreements?			
7.1 Does the Memorandum of Understanding (MoU) form the framework for cooperation between the competent institutions, namely does it aim to establish mutual trust between the partners involved. In this/the MoU partner organisations mutually accept/accepted their respective criteria and procedures for quality assurance, validation and recognition of knowledge, skill and competence for the purpose of transferring Credit ?			
7.2 Is it mandatory to recognise Credit , does the competent institution in charge feel confident that the required learning outcomes have been assessed in a reliable and valid manner.			
7.3 Does the competent institution in charge trust that the learner's credit does concern the learning outcomes expected and these are at the appropriate level NB: If there is/was also a provision for Agreements (within an MoU or as an attachment) set up by sector based organisations (e. g. by Chambers, regional and national authorities), this should/should have include/included a list of organisations such as VET providers, companies, etc., who are/were able to operate in the framework set up by the MoU.			
8.1 Does the hosting institution assess the learning outcomes achieved and awards credit to the learner?			
8.2 Are the learning outcomes achieved and corresponding ECVET points recorded in a learner's personal transcript ?			
9.1 Does the sending institution then recognise learning outcomes that have been acquired?			
9.2 Does this recognition given in 9.1 gave rise to the award of the units and their corresponding ECVET points, according to the rules of the home system ?			
10. Is the Credit accumulation a process through which learners can acquire qualifications progressively by successive assessment and validation of learning outcomes; namely the accumulation of credit is decided by the			



competent institution responsible for the award of the qualification?			
11. Is the learner, when they have accumulated the credit required and when all conditions for the award of the qualification are fulfilled, awarded the qualification ?			
Total Score			
Actions/Comments			



Each of the 11 MariePRO Best Practice Criteria is reviewed and graded using the Likert Rating Scale from 1 to 5. The scoring system is defined as follows:

1. Very weak: Significant deficiencies
2. Weak: Addresses the criterion but with some weaknesses
3. Acceptable: Addresses the criterion satisfactorily
4. Good: Addresses the criterion with some aspects of high quality
5. Very good: Addresses the criterion with all aspects of high quality

In order to be ECVET compliant any course must achieve a score of 3 in all 11 criteria totalling an overall score of 33.

In order to qualify as a MariePRO Best Practice the course must achieve an overall score of 44 - this is an average of a score of 4 for each of the criterion.

The total score for a course project is the sum of the scores given to the 11 main performance criteria. The maximum total points that a product or service may obtain is 55.

If any individual criteria does not meet the minimum score of 3 then the course is put into referral with feedback given so that the course can be updated and improved accordingly. The course can then be re-assessed once the feedback has been implemented.

For all criteria, no matter the score achieved, the reviewer is expected to provide comments and feedbacks to identify particular areas of strength and weakness to allow for continued improvement of the course.

4.2 MariePRO Cross-Referencing Table in use



Course Title: MariePRO: Maritime Environment Awareness Course	ECVET Complaint? (Yes / Referral)	Score: 5 best 1 Least	Comment
1. Is the learning/prior learning/qualification/course/unit competence based where the in the unit's content and assessment are based on ability to do?	YES	4	Competances taken directly from industry regulations and so accurately reflect the needs of the industry. Multiple competences covered - need to ensure that sufficient time is given to learning and delivery (teaching) and assessing each competence and the appropriate delivery (teaching) and assessment methods used.
2. Are Learning Outcomes statements of knowledge, skills, and competence that can be achieved in a variety of contexts?	YES	5	Clear information provided matching each learning outcome with the competence, knowledge, skill, assessment method and delivery (teaching) time.
3. Are Learning Units of learning outcomes components of qualifications where the unit(s) can be assessed, validated and recognised?	Yes if all stated are one learning Unit	5	NB: If Learning outcomes are not part of a single unit then the units have to be identified and assessment for each Learning Unit described.
4. Do the ECVET points provide additional information about the unit(s) and qualifications in a numerical form?	TBA	TBD	ECVET points not currently assigned
5. Is the Credit given for assessed and documented learning of a learning outcome of a learner where the credit can be transferred to other contexts and accumulated to achieve a qualification on the basis of the qualification standards and regulations existing in the participating countries?	TBA	TBD	Credit points not currently assigned
6. Are the Mutual Trust and partnership among participating organisations are expressed in Memoranda of Understanding (MoU) and Learning Agreements?	Under construction	TBD	MOU not yet drafted
7.1 Does the Memorandum of Understanding (MoU) form the framework for cooperation between the competent institutions, namely does it aim to establish mutual trust between the partners involved. In this/the MoU partner organisations mutually accept/accepted their respective criteria and procedures for quality assurance, validation and recognition of knowledge, skill and competence for the purpose of transferring Credit ?	Under construction	TBD	MOU not yet drafted
7.2 Is it mandatory to recognise Credit , does the competent institution in charge feel confident that the required learning outcomes have been assessed in a reliable and valid manner.	Under construction	TBD	MOU not yet drafted
7.3 Does the competent institution in charge trust that the learner's credit does concern the learning outcomes expected and these are at the appropriate level	Under construction	TBD	MOU not yet drafted
NB:			



If there is/was also a provision for Agreements (within an MoU or as an attachment) set up by sector based organisations (e. g. by Chambers, regional and national authorities), this should/should have include/included a list of organisations such as VET providers, companies, etc., who are/were able to operate in the framework set up by the MoU.			
8.1 Does the hosting institution assess the learning outcomes achieved and awards credit to the learner?	Under construction	TBD	MOU not yet drafted
8.2 Are the learning outcomes achieved and corresponding ECVET points recorded in a learner's personal transcript ?	Under construction	TBD	Leaarners Personal Transcript not drafted
9.1 Does the sending institution then recognise learning outcomes that have been acquired?	Under construction	TBD	MOU not yet drafted
9.2 Does this recognition given in 9.1 gave rise to the award of the units and their corresponding ECVET points, according to the rules of the home system ?	Under construction	TBD	MOU not yet drafted
10. Is the Credit accumulation a process through which learners can acquire qualifications progressively by successive assessment and validation of learning outcomes; namely the accumulation of credit is decided by the competent institution responsible for the award of the qualification?	Under construction	TBD	Credit points not currently assigned
11. Is the learner, when they have accumulated the credit required and when all conditions for the award of the qualification are fulfilled, awarded the qualification ?	Under construction	TBD	Credit points not currently assigned
Total Score			
Actions/Comments			



5. Conclusions

The report presented here gave the key requirements of any EU compliant ECVET scheme. Five different examples were considered identifying their key features. A system for cross-referencing of ECVET schemes were developed to ensure compliance with all aspects of ECVET system. An additional indicator was added for any additional features to be included when any other set of requirements is also expected to be satisfied.

The course, Maritime Environment Awareness, developed by the partnership was evaluated using the criteria developed and scoring system adapted.

More to be added later

.