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D.7.2 Guidelines for use of ARISE trainings to gain CPD points

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D.7.2. Guidelines for use of ARISE trainings to gain CPD points

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Colophon

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Publishable executive summary

This report provides guidelines for use of ARISE training schemes to gain CPD points, based on the model of transaction of developed learning modules in compliance with international system of recognition, which represents deployment of the project international approach towards market appreciation and implementation of skills.

The guidelines are intended, in the first place, for managing authorities of the national qualification frameworks (to upgrade the national qualifications in AEC sectors, by new competences, up to the new needs of the energy-efficient buildings market), then professional bodies in charge of CPD system of recognition, CPD accredited providers, as well as for individual learners, professionals, managers, investors and public administration. This will contribute to an international share of experience and best practices in recognition of qualifications for sustainable energy skills in construction, with a specific focus on NZEBs (Near Zero Energy Buildings).

For that purpose, a survey and analysis were carried out, of national implementation of CPD systems in the AEC sectors in partner countries.

The analysis confirms another dimension of ARISE feature of transferability of learning achievements and competences, in continuation with previously explored inter-changeability and complementarity of learning outcomes of the analysed learning frameworks developed by previous construction skills projects (refer to Deliverable D3.1).



List of acronyms and abbreviations

BIM - Building Information Modelling

EE - Energy efficiency

BIM4EE- BIM for energy efficiency

EPBD – Energy Performance of Buildings Directive

NZEB - Nearly Zero-Energy Buildings

RES - Renewable Energy Source

BSI – Building Smart International

NQs – National qualifications

NQF – National Qualification Framework

VET – Vocational Education and Training

HEI – High Education Institutions

CPD – Continuous Professional Development

EQF – European Qualification Framework

BEM – Building Energy Model

AEC – Architecture, Engineering and Construction

LO - Learning Outcomes

ULO – Units of Learning Outcomes

WP – Work Package

Table of Contents

1. Introduction	7
1.1. Subject and objective of the Report	7
1.2. Basis for development of D7.2	7
1.3. Outputs of the Report	8
1.4. Applied methodology	8
1.5. Content of the Report	8
2. Desk research on CPD system in construction sector	9
2.1. Importance of CPD system	9
2.2. Benefits of CPD	10
2.3. Methods of Learning through CPD	10
2.4. Professional Bodies	13
2.5. CPD in AEC sector	14
2.5.1. The need	14
2.5.2. Stakeholders	14
2.5.3. Professional Bodies in Architecture, Engineering and Construction	15
2.5.4. Relation of CPD points, units and credits to CPD Hours	15
2.5.5. CPD accreditation	16
3. CPD system in AEC sector in partner countries	18
3.1. Introduction	18
3.2. Table overview of results of country - based survey	18
3.3. Findings	22
4. Guidelines to use ARISE training to gain CPD points	24
4.1 Main features of the ARISE training module descriptions	24
4.2. Transaction model to CPD	25
5. Conclusions	27
6. References	29



Table of figures

Figure 1: *Proposal of digital badges used in completion of learning materials ...19*

Figure 2: *ARISE system of international recognition of competences20*

List of tables

Table 1: *Overview of CPD system in construction sector in partner countries18*

1. Introduction

1.1. Subject and objective of the Report

Subject of the Report 7.2 is the analysis of opportunities to apply ARISE training modules within the system of life- long learning of professionals in the AEC sector, through CPD system of recognition of professional development.

Objective of the Report 7.2 is to produce a set of guidelines for use of the ARISE training and upskilling modules and platform operations to gain CPD points. The guidelines will be presented to national professional bodies as well as to a wider group of stakeholders, as a further opportunity for ARISE full programme specification and implementation, by creation of a basis for market implementation of ARISE framework by its recognition in CPD system.

The Report is an output of Task 7.2 in which CPD certification schemes for individual qualifications were explored, in order to provide relevant certification bodies a unified European system to certify the competencies in EE, RES, EPB, and BIM4EP. This will allow international recognition of sustainable energy skills, as a pre-condition of their wide marketability in construction projects and will facilitate the mobility of workers and services.

The Guidelines will facilitate CPD transaction of the ARISE matrix of competencies presented in terms of maturity levels.

The Guidelines will be presented to the managing authorities in charge of the national qualification frameworks to upgrade the national qualifications to the new needs of the energy-efficient buildings market. This will contribute to international share of experience and best practices in qualifications for sustainable energy skills in construction.

1.2. Basis for development of D7.2

The basis for development of Deliverable 7.2 were Deliverables 2.2, 2.3, 2.4, 3.1, 3.2 and 3.3.

1.3. Outputs of the Report

The outputs of the Report will be used to inform the managing authorities of national qualification systems, as well as construction market stakeholders of the transferability of the developed units of learning outcomes into CPD points, firstly in the partner countries and then broader.

1.4. Applied methodology

Methodology applied included:

1. Review of the ARISE deliverables from WP2 and WP3 and findings thereof of relevance for D7.2,
2. Desk research on CPD system in AEC sector
3. Survey and analysis of CPD system implementation in partner countries
4. Summary of findings
5. Development of guidelines for use of the ARISE trainings to gain CPD points

1.5. Content of the Report

The content of the Report has been classified in 6 Chapters:

1. Introduction – describing background, scope, subject, objectives and applied methodology
2. Desk research on CPD system in construction sector
3. Summary of findings of the survey on CPD system implementation the partner countries
4. Guidelines for use of ARISE trainings to gain CPD points
5. Conclusions
6. References and literature sources used

2. Desk research on CPD system in construction sector

2.1. Importance of CPD system

With the world of construction constantly changing, professionals in the industry need to keep up to speed with the changing elements of the industry nationally and internationally¹.

CPD stands for Continuing Professional Development and is the term used to describe the learning activities that professionals engage in to develop and enhance their abilities. CPD is a holistic approach towards the enhancement of personal skills and proficiency throughout a professional's career².

Continuing Professional Development is a commitment to ongoing lifelong learning. CPD encourages looking forward and identifying opportunities to learn something new, refresh existing knowledge, improve skills, or simply keep up-to-date with the latest developments within a particular profession or industry.

CPD improves the performance and enhances the career progression of a professional in the construction industry

In practice, CPD encompasses a wide range of activities of professional development, from taking a training course or attending an educational event, to studying for new qualifications or learning new aspects of a job.

Varying and hard to predict conditions that have impact on economy as a whole and construction sector as an important part thereof (such as: global geo - political, health or military conflicts, as well as climate change impacts), require that construction professionals need to keep their knowledge and skills continuously updated, to ensure progression within their company and give them an advantage when looking for work elsewhere.

¹ <https://ukdiss.com/examples/cpd-in-construction.php>

² <https://cpduk.co.uk/explained>

2.2. Benefits of CPD

Continuing Professional Development is a powerful learning tool that professionals from across all industries can apply for improving skills and developing their knowledge. The types of CPD vary depending on a range of different learning methods.

CPD is considered to be the acquisition of knowledge, experience and skills and the development of professional and personal qualities. It embraces both the acquisition of new capabilities to broaden competence and the enhancement of existing capabilities to keep abreast of evolving technology and its application. CPD is essential for the maintenance of high professional standards and enhances the employability and mobility of individual engineers. It assists career progression and strengthens professional satisfaction. CPD benefits society and is of crucial importance in sustaining the competitiveness of European industry in the global market.³

CPD can assist professionals to⁴:

- enhance their credibility as a recruitment professional;
- accelerate their career prospects;
- negotiate better salaries and benefits;
- increase job satisfaction; and
- showcase their achievements

2.3. Methods of Learning through CPD

Types of CPD⁵

CPD revolves around the whole learning process and the methods with which learning is provided is a very important part of the process. These methods ensure professionals can improve their skills and knowledge and gain relevant experience.

Formal, non-formal and informal methods of learning include any process relevant to a profession that improves skills, knowledge and the experiences of a professional. CPD activities can include in-house training, open learning,

³ <https://repositorio-aberto.up.pt/bitstream/10216/138061/2/517823.pdf>

⁴ <https://www.rcsa.com.au/documents/learning/CPD%20Info%20Kit.pdf>

⁵ <https://cpduk.co.uk/explained>



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conferences, seminars, workshops, structured reading, self-study, presentations and being a coach or mentor.

Structured & Unstructured CPD:

All CPD comes under the heading of structured or unstructured CPD. Structured CPD is where the learning outcomes are identified in advance of learning. This CPD does not have to be provided or accredited by the participant's records or a certificate to prove process has been successfully completed. institution or professional body. Structured CPD covers any educational event or programme run by a recognised educational or professional institution. Structured CPD must also be accompanied by attendance.

Unstructured CPD is an unplanned CPD activity that can be completed at any time or anywhere at the participant's discretion. Activities that qualify as unstructured CPD include personal study or development, peer review and other activities such as case studies that are not part of other course requirements. Reflection on both of these CPD learning methods is crucial before CPD can be recorded.

Structured CPD / Active Learning

Structured CPD typically involves interactive and participation-based study. It is often proactive and can include attending training courses, workshops, seminars, conferences, eLearning courses or CPD certified events. CPD active learning can also apply to professionals taking career-orientated exams, however the study and revision would be considered self-directed learning.

Reflective CPD / Passive Learning

Reflective CPD defines learning that often has a structured format, however will typically have no participant-based interaction, and so this form of CPD is much more passive and one directional than structured CPD. Examples of reflective CPD can include watching training videos and tutorials, attending a non-interactive lecture, industry briefings, podcasts, case studies and industry updates.



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Informal CPD / Self-Directed Learning

Self-directed CPD covers all unaccompanied and unstructured learning. This includes discussions in forums, reading books, articles and publications; either in print or online. You could possibly also include industry-specific news or research into relevant fields. Self-directed CPD often does not have specific learning time frames, is informal and learning outcomes can vary for each individual.

A full list of CPD activities may include:

- Open distance learning (the internet, video packages, slide/tape packages, correspondence courses)
- Private study including systematic study of appropriate literature or research, or even learning a relevant language
- Technical and professional conferences, lectures, seminars, workshops, study tours, technical visits and short courses
- Courses leading to professional qualification or academic awards
- Writing articles for publication
- Teaching (for those not at teaching posts)
- Practice (for those in teaching posts)
- Preparing papers and contributing to technical meetings and study groups
- Examining, tutoring or mentoring

For example, the RCSA CPD program recognises 6 learning activity types:⁶

1. Formal education
2. Learning activities
3. Conferences/seminars
4. Presentation of papers
5. Service to the profession
6. Informal learning

⁶ <https://www.rcsa.com.au/documents/learning/CPD%20Info%20Kit.pdf>



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The CPD Certification Service outlines three different forms of CPD or learning that person can undergo to develop their professional knowledge and skills.

Structured CPD/Active learning

This includes any participatory learning and interactive development activities, including:

- Training courses.
- E-learning courses.
- Workshops.
- Seminars.
- Conferences.

Reflective CPD/Passive learning

This is any learning that does not involve participation-based interaction, such as:

- Reading relevant news articles.
- Listening to relevant podcasts.
- Reviewing industry updates.

Self-directed CPD/Unstructured learning

This includes all unaccompanied learning activities, including:

- Reading articles in industry journals.
- Reading books published by leading experts.
-

2.4. Professional Bodies⁷

CPD is important for improvement of performance of working professionals. National sectors assign management of CPD system to professional bodies that provide the platform for this new learning. The majority of professional bodies, are non-profit organizations, established to support their professional members.

⁷ <https://repositorio-aberto.up.pt/bitstream/10216/138061/2/517823.pdf>



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Input based CPD is the most commonly used system where CPD is measured by recording the amount of time put into the process by the participant through the amount of hours they put in. Most professional bodies regulate the number of hours a professional needs to put in to progress within the organization.

2.5. CPD in AEC sector

2.5.1. The need

Professional competencies in the sectors of architecture, engineering and construction are constantly progressing beyond traditional job skills, towards digital and sustainability competences, making their recognition and evaluation more prominent to be able to tackle real global issues⁸;

CPD applied in construction sector at national levels leverages, not only individual professional development of one of the most challenging and demanding professions, but also facilitates adoption of a simplified system of recognition that would be internationally recognized and would ultimately provide mobility and transparency on the engineering job market.

According to the *Guidelines on CPD Systems, issued by Architects' Council of Europe, on the Second General Assembly in 2006* [7],

“Continuing Professional Development (CPD) for architects is, at European level, of professional and public interest. Its necessity has been affirmed in directives of the European Union and its relevance is even greater in the enlarged European Union. As the diversity of training and practice has increased, CPD has become a necessary obligation for practising architects and for the organisations that represent them.”

2.5.2. Stakeholders

The need and benefits of CPD the construction industry has been recognized and put in action in many countries. There are three main parties that need to co-operate fully in order to extract the most from CPD, the professional themselves, their employer and the professional body they are a member of. All three have responsibilities to uphold to carry out successful CPD which will be discussed

8

https://www.researchgate.net/publication/261204689_Engineering_continuing_professional_development_and_mobility_in_the_European_green_job_market



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later in the chapter. Other parties that also play a part include the government and independent CPD providers⁹.

2.5.3. Professional Bodies in Architecture, Engineering and Construction

Professional bodies are the key to the advancement of any professional in construction. Without them there would be no base for the continual learning and development of professionals outside their workplace. They provide a suitable environment and many useful resources for professionals to increase their knowledge and sharpen their skills

The Members Organisations of the ACE, who adopted the CPD Charter in 2001, undertook to promote, for their architect members, systems of CPD programmes of a high and equal level in all of Europe that would draw on existing examples. These programmes are to be developed in order to be fully operational by 2010 [7].

2.5.4. Relation of CPD points, units and credits to CPD Hours

The definition of CPD Hours is the time spent for a professional to be in “active learning”. Active learning defines the actual time spent learning something relevant for their Continuing Professional Development objectives.

Studies have showed that 95% of all professional bodies use CPD Hours as their Continuing Professional Development measure and that where the terms CPD points, units or credits are used, these are in a typical 1:1 ratio with CPD Hours.¹⁰

Courses accredited for CPD has a number of points assigned to it, as an important information for learners to know how many CPD points they can get from taking the course.

Points earned per course can usually be found with the course details, enabled from the training provider.

⁹ <https://cpduk.co.uk/explained>

¹⁰ <https://cpduk.co.uk/industries/construction>



CPD points are awarded based on the active time spent learning (without breaks between lessons). After-class assignments as well as guided self-learning are also included.

The length of courses is usually determined by the following features:

- The level of the course – higher level courses may have more points since they can have more detailed content.
- The course subject – some topics take longer to understand and require learning more things that are new to learner.

How specialised the topic is – learning about industry specific subjects can take longer because there are detailed laws and regulations that need to be covered.

Training providers are required to assess the length of the course. From this, the points awarded from the CPD activity will be calculated. The certifying service also checks the course and its contents to confirm the assigned points are correct.

Included in the calculation of CPD points for online training will generally be:

- The time it should take to read and understand the course content.
- How long is spent watching videos or listening to a podcast.
- Time spent completing quizzes to check your understanding.

2.5.5. CPD accreditation

The CPD Certification Service is an accreditation organization that certifies a range of learning activities, including training courses, events, conferences, workshops and seminars. CPD certification is a sign of quality, and demonstrates that a learning activity meets their high standards.

Any activities that provide CPD points will typically show this on a certificate or other document of attendance. In case of the ARISE program, that would be the badges assigned after completion of the course assessment.



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The AEC Guidelines [7] propose “...a flexible approach to CPD for architects that must take into account the diversity of European situations while, at the same time, throwing light on the goals to be reached and the way things can be done by each Member Organisation.

1. Preparing, in each country, an inventory and evaluation of all the public and private sources of CPD, relevant for architects, that exist, is an essential prerequisite for any action concerned with CPD.
2. The approval of these CPD programmes should only be granted after checking that they match a quality standard (see below) and a real professional need through an adequate evaluation process.
3. To offer architects a voluntary approach for CPD based on three principles:
 - a) Making available, in an accessible form, all the information regarding CPD programmes, the contents, the costs and the financial help available.
 - b) Proposing to all architects that they are involved in a continuous CPD approach and allowing them to define and realise their own CPD plan. This CPD plan should be balanced according to different, relevant, fields of knowledge while allowing each architect the freedom to define his own course.
 - c) Proposing that architects undertake an individual evaluation of their own CPD plan and that they maintain and record it in an appropriate form.
4. To organise a system of recognition of CDP programmes fulfilled by architects in order to create a European label regarding CPD. This label would provide, as quality assurance processes do, criteria for recognition at European level. This label would be guaranteed by a procedure suited to the situation and realised at a national or European level.
5. To encourage Member Organisations who may want it, to make CPD compulsory for each of its members. Membership of an organisation usually implies respect for a particular code of conduct and of the adoption of an ethical approach into which conforming to a CPD requirement is natural.”



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3. CPD system in AEC sector in partner countries

3.1. Introduction

This Chapter includes analysis based on the survey results carried out in partner countries, about operation of CPD system in national construction sector.

The survey was conducted in period January – February 2023, and contained the questions about general and national specifics of CPD in construction sector. The overview of partner responses is presented in the Table 1 below.

3.2. Table overview of results of country - based survey

Table 1: Overview of CPD system in AEC sector in partner countries

Country	Partner organization	CPD in construction sector in force (y/n)	Value of 1 CPD point [in hours]	Number of CPD required annually (structured, not structured)	Type of activities recognized as CPD valued*	Professional organization in charge of CPD recognition	Existing CPD training providers	Other national specifics
Ireland	TU Dublin	yes	<p>-Typically CPD is valued 1 point for every hour CPD</p> <p>-1 hour of learning time = 1 CPD Point unless otherwise specified by professional body (RIAI)</p> <p>-minimum of 30 minute chunks of learning (Engineers Ireland)</p>	<p>-Minimum 20 hours CPD per year, minimum 10 hours Formal CPD and maximum 10 informal CPD (SCSI)</p> <p>- Minimum 40 hours CPD per year split between 20 structured and 20 unstructured (RIAI)</p> <p>-Minimum 35 hours CPD per year (Engineers Ireland)</p>	<p>-Structured CPD:</p> <ul style="list-style-type: none"> - Formal Courses -Company Training & Development -Structured and verified Tool Box talks -Conferences & CPD Events -CIRI Online CPD -eLearning solutions <p>Unstructured / Informal CPD:</p> <ul style="list-style-type: none"> -Publications & Media -Self-directed and informal learning -Non accredited distance learning -Podcasts -Personal activities outside work -Engineers Ireland 	-Construction Industry Register Ireland (CIRI)	<ul style="list-style-type: none"> -Construction Industry Federation -Society of Chartered Surveyors Ireland (SCSI) -Royal Institute of the Architects of Ireland (RIAI) -Register of Electrical Contractors of Ireland -Electrical Contractors Safety and Standards Association -Engineers Ireland 	<p>New legislation has been passed and is coming into force in 2024 mandating the successful completion of a member's annual CPD requirements in order to remain on the register of architects in Ireland (this applied also to other professions). Failure to demonstrate compliance will result in removal from the register.(source: RIAI)</p>
Italy*	iBIMi	Yes	1	30 ¹⁾	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	National Council of Engineers	155 A list can be found at this link	

			1	20 ²⁾	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	National Council of Architects, Planners, Landscape Architects and Conservators	Not Available. The list is in the process of being updated	
			1	60 in 3-year time ³⁾	1, 2, 3, 4, 5, 6, 7, 9, 10	National Council of Surveyors	N/A The list is in the process of being updated	
			1	24 (120 in 5-year time) ⁴⁾	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	National Council of Industrial Experts	40 A list can be found at this link	
Netherlands	BNA	Yes	1 CPD point is equal to 1 hour of learning time	16	1. Classroom training, 2. In house training, 3. On-line course, 4. Workshops, 5. Webinars, 6. Conferences, seminars (attendance, presentation), 7. Articles, publications., 8. Mentoring, tutoring, lecturing, 9. Self - study	We provide CPD courses	ditto	
North Macedonia	IECE	Initiative ongoing	1 hour	30 hours (tentative)	1,2,3,4,5,6 (preliminary selection)	Chamber of Certified Architects and Certified Engineers of North Macedonia	n/a	n/a

¹*CPD recognized activities:

1. Classroom training
2. In house training
3. On- line courses
4. Workshops
5. Webinars
6. Conferences, seminars (attendance, presentation)
7. Articles, publications.
8. Mentoring, tutoring, lecturing
9. Self - study
10. Other

*²*Detailed explanation of the CPD awarding system in Italy*

1) 30 hours

5 CPD/year for participation to working groups, technical commissions;
3 CPD for each session as a commissioner in state examination for the practice of the profession of engineer;
30 CPD/year for PhDs;
30 CPD for each post-graduation course regardless its duration;
3 CPD/day for each visit to a pertinent exhibition, fair or similar events;
5 CPD for internship of the duration of at least 3 months;
15 CPD/year for proved professional activity;
2.5 CPD for each scientific/technical article of at least 5000 characters;
5 CPD for each published essay, manual, monography, study, research;
10 CPD for each patent;
1 CPD for each university training credits for passing individual university examinations on subjects related to the engineer's professional activity

2) 20 hours

20 CPD/year of course for:
Post-graduation courses, research grants, additional degree;
2 CPD/day for Civil Protection exercise;
1 CPD for each session for active participation in working groups or commissions promoted by the Council;
1 CPD for each visit to a pertinent exhibition, fair or similar events;
1 CPD for each technical-professional article;

2 CPD for each monography or publication;
1 CPD/day in Study trips;



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15 CPD for each prize, 10 CPD for each mention, 3 CPD for each participation, 5 CPD for each participation as a jury member in design competitions

3) 60 hours in 3-year time

3 additional CPD when the course includes a final examination;
8 CPD for each university training credits for passing individual university examinations;
30 CPD for participation in post-secondary higher education courses;
1 CPD every 2 hours for technical visits and study tours and school orientation activity;
6 CPD for each session as a commissioner in state examination for the practice of the profession;
5 CPD/day for technical-operational interventions to deal with emergency
Up to 3 CPD for lecturing;
Up to 6 CPD for technical-professional articles;
10 CPD for professional training of at least 6 months;
1 CPD/day for internship in the school-to-work alternation scheme;
situations

4) 24 hours (120 in 5-year time)

3 additional CPD when the course includes a final examination;
2 CPD for each university training credits for passing individual university examinations;
2 CPD/hour for lecturing;
Up to 15 CPD for each session as a commissioner in state examination for
the Up to 3 CPD for conference speaker activity;
Up to 50 CPD for any technical book published;
practice of the

3.3. Findings

1. CPD is in force in all partner countries that responded to the survey, except in North Macedonia, where it is still in the phase of an ongoing initiative and preparation for active introduction.

2. In some of the partner countries (e.g. Ireland, Italy), there are several professional bodies in charge of CPD awarding, recording and recognition exist.



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3. The value of 1 CPD point is equivalent to 1 hour of active learning, in all of the countries included in the survey.

4. Depending on national regulations, terms of the engaged professional bodies and type of activity recognized as professional development, the number of mandatory CPD points per year lays in the span from 16 to 40 hours.

5. Professional bodies in charge of CPD system awarding, recording and following are usually professional associations of engineers and architects.

6. There are variety of activities that are recognized as CPD valued in partner countries. They include almost all specified in the survey, with a different CPD value, depending of the activity type.

In aspect of ARISE program, it is important that in all countries training courses (classroom, on line or blended) are validated as CPD activities.

7. There are registered providers of CPD trainings in partner countries where the system is in force.

8. In aspect of exploitation of project outputs, ARISE can collaborate with CPD providers registered in the partner countries and broader.

4. Guidelines to use ARISE training to gain CPD points

4.1 Main features of the ARISE training module descriptions

The description of ARISE training modules includes:

- Title
- Content
- Objectives
- Learning outcomes
- Learning method
- Assessment method
- Duration

Data needed for recognition of this type of credits can be found on the design of the digital badge acquired after completion of a learning module.¹¹

Badge Name: **Intro to BIM Fundamentals**

Image:	Description:	Criteria:	Skills & Knowledge:	Assessment Method:
Name:				
EQF Level:	Maturity Level:	Issued to:	Date of Issue:	Learning Pathway:
		Issued By:		

Figure 1. Proposal of Digital Badges used in completion of learning material (Source: Deliverable 3.3)

¹¹ ARISE Deliverable 3.3 Qualification framework of sustainable energy skills leveraged by digitalisation incl. BIM

The following headings serve as a flexible, non-exhaustive list that can be revised in the next deliverable:

- Badge Image
- Name
- Description
- Criteria
- Skills & Knowledge
- Skill Maturity Level (Link to Maturity Level with ULO ID Code)
- Assessment Criteria
- Assessment Method
- Issued to / by

4.2. Transaction model to CPD

The type of learning and duration of each ARISE module identify the number of CPD points that can be obtained (refer to Figure 1). Information about the training modules can be found on the ARISE platform and will be accessible for interested learners.

The core of transaction model consists of dividing the duration of the activities included in the training module (e.g. ILT, SGL, assignments, assessment, tests, etc.) by the value of 1 hour, which corresponds to the CPD equivalent of the module activity. The concept of transaction of ARISE training modules into CPD points is presented in the Figure 2 below. The figure also includes feasible transactions to ECVET and ECTS system.

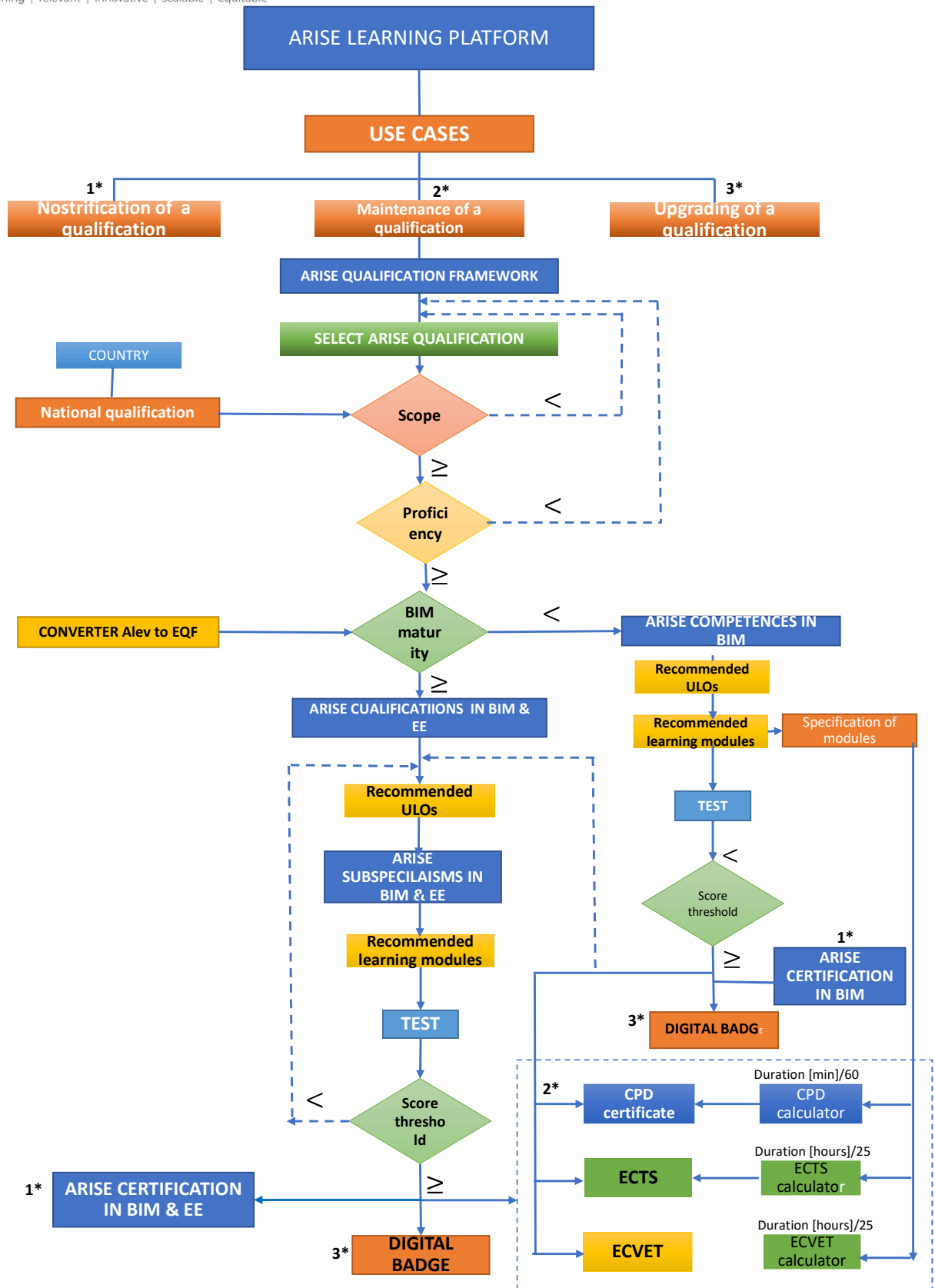


Figure 2: ARISE system of international recognition of competences in CPD, ECVET and ECTS

5. Conclusions

ARISE tends to upgrade and extend the existing competences in national frameworks, in the field of digital and sustainable energy skills,

The specifics of the ARISE framework are:

- A novel system of identification of fields of BIM specialisms,
- A specific method of federation of two frameworks of competences, in digital and sustainable energy skills, thus promoting a new field of BIM and EE specialism,
- Task - based explanation of knowledge, skills and competences, assigned to specific professional profiles and occupations,
- Internal grading system of level of skills proficiency, correlated to the phase of a building life cycle, role in the BIM process of information management and a professional's role,
- Learning outcomes written in accordance with the taxonomy and Competence Quality Standard, developed by the project Train4sustain and evaluated through the CEN Workshop Agreement, CWA 17939, October 2022 (<https://www.cencenelec.eu/news-and-events/news/2021/workshop/2021-12-14-train4sustain/>).

These specific are introduced to meet the identified needs for:

- Improvement and extension of the existing competence frameworks in the subject fields,
- Micro credentials support and compliance,
- Improved transnational recognition of skills,
- A more efficient and attractive process of learning, adjusted to the needs of different target groups of professionals.

ARISE training modules can be transacted to CPD points and that provides opportunity for collaboration with national professional organizations in charge of this type of skills and learning achievements recognition/ accreditation, as well as with CPD accredited training providers.



awakening | relevant | innovative | scalable | equitable

ARISE program meets the requirements of professional bodies for recognition of formal learning.

This brings two - fold impact:

- trans – national recognition of learning achievements through ARISE training platform,
- increased exploitation potential of the program,

Additionality of this ARISE feature of recognition is contribution to professional development and also mobility of construction sector workforce, across Europe.

It is expected that the potential for transaction of training modules into CPD points will leverage the market implementation of the developed learning and competence framework and in the same time, will increase the market recognition and demand for sustainable energy and digital skills.

6. References

1. ARISE Deliverable 3.2: *Maturity based model of digitization skills in sync with sustainable energy skills*
2. ARISE Deliverable 3.3: *Qualification framework of sustainable energy skills leveraged by digitalisation incl. BIM*
3. Engineering continuing professional development and mobility in the European green job market, Abheesha N Busawon, Roger Penlington, Noel Perera CEIS, Northumbria University, UK, https://www.researchgate.net/publication/261204689_Engineering_continuing_professional_development_and_mobility_in_the_European_green_job_market
4. Continuing Professional Development Best Practice Guidance European CPD Framework and CIC Users Guide to Managing your own CPD <https://www.cic.org.uk/uploads/images/best-practice-guidance-european-cpd-framework-cic-users-guide-to-managing-your-own-cpd.pdf?v=1652715190>
5. Engineering Professional Context and CPD, Karel de WEVER Dirk BOCHAR European Federation of Engineers - FEANI, BE, <https://repositorio-aberto.up.pt/bitstream/10216/138061/2/517823.pdf>
6. Summary of ACE and ENACA Survey on Accreditation of Architecture Programmes within Europe – 2016
- 7 Guidelines to Continuous Professional Development, Architect’s Council of Europe, Document noted on Second General Assembly, 2006