

Questions and Answers from the Webinar on Micro-credentials and European Digital Credentials for Learning

1. What constitutes a ‘small volume of learning’ in a micro-credential (1 ECTS for instance)?

In the definition of “micro-credentials” included in the [COUNCIL RECOMMENDATION of 16 June 2022 on a European approach to micro-credentials for lifelong learning and employability](#), an exact volume of learning for micro-credentials is not determined, but it is simply described as “small”. This is how the definition of micro-credentials reads:

*Micro-credential’ means the record of the learning outcomes that a learner has acquired following a **small volume of learning**. These learning outcomes will have been assessed against transparent and clearly defined criteria. Learning experiences leading to micro-credentials are designed to provide the learner with specific knowledge, skills and competences that respond to societal, personal, cultural or labour market needs. Micro-credentials are owned by the learner, can be shared and are portable. They may be stand-alone or combined into larger credentials. They are underpinned by quality assurance following agreed standards in the relevant sector or area of activity*

2. Is an examination or assessment a mandatory element of a micro-credential? Would the completion of training be enough to receive a micro-credential?

According to the definition available in the [Council Recommendation on a European Approach to Micro-credentials](#), assessment is a key element of micro-credentials, and therefore only completing training (e.g. attending a training) is not sufficient.

3. How would you distinguish a micro-credential from a small qualification? They are described with the same elements.

The EQF defines a qualification (regardless of its volume) as ‘the **formal outcome** of an **assessment and validation process** obtained when a **competent body** determines that an individual has achieved learning outcomes to given standards’. There are no exact boundaries between what one could refer to as a “small qualification” and micro-credentials. By way of example Cedefop defines a [partial qualification](#) as “unit(s) of learning outcomes (knowledge, know-how, information, values, skills and competences) acquired by an individual, and which have been assessed and certified by a **competent body** against a predefined standard, but which does not lead to a full qualification”. Although largely described with the same elements, the definition of micro-credentials does not include the “competent body” element.

4. Do micro-credentials need to be linked to an NQF level?

According to Annex I of the [Council Recommendation](#), the level (and cycle, if applicable) of the learning experience leading to the micro-credential (EQF, QF-EHEA) should be specified **if applicable**. However, this may not be always the case.

Micro-credentials may be included in national qualifications frameworks/systems, where relevant, and in line with national priorities and decisions. National qualifications frameworks/ systems are referenced to the European qualifications framework and, for higher education qualifications, usually also self-certified to the qualifications framework of the European Higher Education Area, which can further support the transparency of, and trust in, micro-credentials.

5. How could micro-credentials be combined with Open Badge Systems?

The terms micro-credential and digital credential are often used interchangeably, creating ambiguity in the discussion around micro-credentials and their concrete use. When discussing these terms, we refer to a micro-credential first and foremost as a concept, defined in the Recommendation as *'the record of the learning outcomes that a learner has acquired following a small volume of learning'*. This record may be manifested in several different forms. Digital credentials, on the other hand, refer to a specific format in which (micro-)credentials can be issued and presented.

The European Digital Credentials for Learning can serve as the technical format for issuing micro-credentials comprising the standard elements listed in Annex 1 of the Recommendation. Open Badges are another free and open standard to issue usually non-formal credentials as digital badges.

6. Do micro-credentials need to include ECTS?

One of the standard elements to describe a micro-credential included in the [Council Recommendation](#) is "notional workload needed to achieve the learning outcomes (in European Credit Transfer and Accumulation System – ECTS, wherever possible)". It is therefore encouraged to use ECTS, but this is not mandatory.

As it is detailed in Annex II of the European principles for the design and issuance of micro-credentials, in relation to transparency:

- *Higher education institutions should use the European Credit Transfer and Accumulation System (ECTS) and comply with the principles in Annex V to the EQF Recommendation, where possible, to demonstrate the notional workload needed to achieve the learning outcomes of the micro-credential.*
- *Providers that do not use the ECTS may use other systems or types of information that can effectively describe learning outcomes and workload, in compliance with the principles in Annex V to the EQF Recommendation.*

7. How can I learn more about the eligibility criteria of the micro-credential topic in the open Erasmus+ policy experimentation call?

All information relating to the eligibility criteria is detailed in the call available [here](#). For clarifications, please refer to the contacts provided on the call page.

8. Modules (which is the level of accreditation in Germany) are very often too large for Micro-credentials (Math can be up to 18 ECTS). We are therefore splitting them into smaller parts to test each part separately. These smaller parts are assessed but (only) partial modules: Can they be micro-credentials?

The definition of micro-credentials in the Council Recommendation on the European Approach does not refer to any particular standard volume. Both the modules and the smaller parts (as partial modules) would be in line with the definition on the European Approach.

9. For a stand-alone micro-credential, who is the awarding organisation and how to ensure quality in this perspective? Are there any criteria for an awarding body?

The Council Recommendation does not include information on who can be an awarding body of micro-credentials, neither does it include criteria for awarding bodies. This is a matter of national law, regulations or practice. With regard to quality assurance the Council Recommendation refers in its definition to agreed standards in the relevant sector or area of activity.

10. Is it possible to become part of the Commission Working Group on micro-credentials?

There is no Commission Working Group on Micro-credentials.

11. To increase demand of micro-credentials for learners, we need this to be driven by companies, who should start employing based on digital credentials. How do we raise awareness of digital credentials and incentivize companies to use them?

If digital credentials are built using EDC standards, credentials are tamper-evident (and include a high level of trust) and are rich in data (e.g. on skills), helping employers in their recruitment processes. The European Commission is promoting the use of digital credentials for these reasons, by showing their benefits. It is then the choice of each employer to consider digital credentials in recruitment processes.

12. When should we use ELM, when ESCO?

The two serve different purposes and are complementary. Note that when creating a European Digital Credential (using the available web-tools), this is automatically aligned with ELM. The European Learning Model provides a standard for all learning related information, including references to related skills, while ESCO is specific to expressing skill, competence and occupation concepts via a multilingual controlled vocabulary. You can make use of ESCO in your digital credentials by linking ESCO skills to your [Learning Outcomes](#) and/or linking ESCO occupations to [Learning Entitlements](#).

13. How will you ensure the authenticity of European Digital Credentials for Learning for 20+ years?

The minimum storing time for EDCs is 40 years, and processes are in place to ensure the validity of these credentials. More specifically, every credential stored in a Europass wallet, gets automatically re-signed with a new timestamp, before the electronic seal, that was originally applied to it, expire.

14. Are the ongoing implementations of European Digital Credentials all using the same data model?

Yes, all implementations of European Digital Credentials for Learning are using the European Learning Model. European Digital Credentials for Learning are an application profile of the European Learning Model, and as such, are automatically aligned with the data model.

15. Different (commercial) platforms/systems can be used to award digital credentials/badges beyond EDC. Is there a way users can access all their digital credentials in the same "wallet" regardless of the system used to award them? If not, what are the current barriers preventing this?

Work on interoperability is key to avoid fragmentation and ensure that the digital credentials can be viewed and understood by a majority of actors. This is why the European Commission, within the Europass framework, has developed the European Digital Credentials for Learning. In addition, the European Learning Model is a key tool for interoperability.

The future European Digital Identity Wallet will become the standard for wallets in the European Union.

16. Is there any solution for issuing, validating and storing credentials available which can be installed locally at the institution?

Yes, the full EDC infrastructure (Including the Online Credential Builder, Issuer, and wallet) is available open-source version in our [code repository](#) and can be installed locally by any interested institution.

17. Are European Digital Credentials for Learning available for non-EU citizens?

Anyone can receive a European Digital Credential for Learning, store it in their wallet, and share this credential with a prospective employer or other interested party. There is no restriction in terms of who can receive a European Digital Credential for Learning.

18. Will we need active participation from the learner to put the credential in their wallet?

No, the credential will be directly deposited to the recipient's wallet (if they already have one) and if not, a temporary wallet (in Europass) can be created for them that they can easily claim. In addition, recipients will receive the credential via email, and can choose to manually upload it to their wallet or other chosen storage.

19. How can a credential issuer ensure that they issue micro-credentials aligned with the Council Recommendation and help build trust that the credential is valuable to employers?

To be aligned with the Recommendation, a credential issuer needs to ensure that the micro-credentials:

- a. Respond to the **definition** established in the Council Recommendation.
- b. Contain the **standard elements** listed in Annex I of the Recommendation. A starting point to create an Annex I compliant credential is to follow our training on 'How to build a micro-credential'.
- c. Is issued and designed considering the **European principles for the design and issuance of micro-credentials** (Annex II). Good complementary material can be the [Guide to design, issue and recognize micro-credentials](#) published by ETF in 2023.

20. Is the open-source version of the EDC infrastructure installable by a lay person, or does it require an IT specialist?

The installation would require IT expertise, commonly this is done by a developer, especially to ensure integration with your existing IT systems. Should you have further questions about the necessary steps, do not hesitate to contact us at EMPL-ELM-SUPPORT@ec.europa.eu

21. Is there a way to know when your webinars will take place? Is there a newsletter?

You can keep up to date with the latest developments of the European Learning Model and European Digital Credentials for Learning by being included in our mailing list. To do so, express your interest to EMPL-ELM-SUPPORT@ec.europa.eu

22. Is the European Learning Model (ELM) already available?

Yes, the long-term support version of the European Learning Model (ELM v3) was [launched in April 2023](#). You can view and explore the ELM in our [data model browser](#).

23. How do European Digital Credentials for Learning relate to Action 9 of the Digital Education Action Plan: a European Digital Skills Certificate?

Work on a European Digital Skills Certificate relates to digital skills certification, not to a digital format to issue credentials. Hence, the two initiatives are of a different nature.

24. Which seal is needed to issue European Digital Credentials for Learning?

EDCs are sealed using an electronic seal, which provides a layer of security to the credential, ensuring their origin and making them tamper-evident. This is done with an [eIDAS](#)-compliant advanced or qualified electronic seal. You can acquire one from a [Trust Service Provider](#).

25. What is the format of the identity for the awarding body? Is there a standard specification?

The European Learning Model includes all the standard specifications for the fields contained in a European Digital Credential, and the elements specified in the Annex I of the Recommendation. You can access these specifications and definitions in the [ELM browser](#).

26. If the awarding body of a credential is different from the issuing (sealing) body - which one is (legally) responsible for the correctness of the credential?

The Awarding body of a credential is usually the same as the Issuing organisation, however in some cases these will be different (for instance in the cases of mobility, or joint degrees, where there may be multiple awarding bodies but there can only be single issuing organisation). Additionally, the EDC Issuer allows for “mandated issue”, where an organisation will be issuing credentials on behalf of another (this may be useful for smaller organisations that may not have an electronic seal, or for instance in the context of joint projects). As a rule, it is the issuing organisation (whose information is in the electronic seal) that has the legal responsibility for the content of a credential. However, if using “mandated issue”, an agreement can be included in the credential specifying who is responsible for the information it contains.

27. ECTS are integrated in Higher Education but not in Vocational Education and Training (VET), what would you recommend for VET to indicate notional workload?

The term 'notional workload' is used to denote the learning time spent by a student or a learner in pursuit of a qualification. In vocational education and training (VET), the workload can include different activities such as presential learning, online or offline self-directed learning, guided on-the-job learning, work-based learning in a company etc. It is often indicated as a requirement in the regulatory or other descriptive guiding document for the VET programme (expressed for example in learning hours, days or weeks). It is useful to use this as the basis if available and indicate the overall (average or maximum) time as workload needed to obtain the VET credential.

28. Annex I of the [Council Recommendation](#) specifies that assessment is a mandatory element of a micro-credential. However, grading systems differ from country to country. How can EDCs help understand the different systems and aid comparability, does it provide a grade converting function?

In the EDC Viewer where credentials can be visualised, you do not automatically have a grade converting system. However, when creating a credential, you can specify the applicable grading, and directly link to existing converters or documentation regarding the grading system, for instance a conversion table.

29. What solution is recommended for the "form of participation in the learning activity" if the credential is issued for validation of prior learning (and forms of learning may vary from learner to learner)?

The *activity type* property allows multiple choice to describe the form of a learning activity. The below quoted [specific multilingual controlled vocabulary](#) is readily available for credential issuers to choose concepts from, but the use of this list is optional, and issuers can apply their own terms.

- apprenticeship
- classroom coursework
- e-learning coursework
- educational programme
- internship
- job experience
- lab / simulation / practice coursework
- research
- self-motivated study
- volunteering
- workshop, seminar or conference

Please note that another attribute of a learning activity is its [mode](#), that is informed by a separate controlled vocabulary.

30. How can the EDC framework support the validation of non-formal and informal learning?

EDCs can be issued for any type of learning, including non-formal and informal learning, and can thus be utilised to showcase the skills and learning outcomes resulting from non-formal and informal learning.

31. How can we integrate non-traditional learning outcomes in European Digital Credentials for Learning?

Learning outcomes referenced in a European Digital Credential can be described either generically in free text by using the *learning outcome summary* property, or in detail by linking one or more specific [Learning Outcomes](#) to a learning achievement claim(s) contained in the credential. The added value of utilising the Learning Outcomes as credential components is that the learning outcome data can be presented in a structured manner, referencing concrete knowledge, skill and competence concepts from skill taxonomies and competence frameworks such as [ESCO](#), [DigComp](#), etc.

32. What is the relationship between EDC and EBSI?

Synergies exist between the European Digital Credentials for Learning and the European Blockchain Service Infrastructure diploma use case (EBSI). In particular, the European Learning Model is a registered data model in the EBSI environment. To prepare credentials in EBSI using ELM and the EDC Online Credential Builder, please contact EMPL-ELM-SUPPORT@ec.europa.eu

33. The link of learning outcomes to ESCO skills seems to be a challenge - what is your experience?

The referencing of ESCO skills in digital credentials, although advantageous, by no means compulsory. The "Learning Outcome" templates available in the EDC Online Credential Builder allow users to search for ESCO skills by typing fragments of words into the skill concept field of the online form, and any learning outcome template can reference multiple knowledge and/or skill concepts from ESCO and/or other controlled lists. If tagging your learning outcomes with concrete skill concepts is a challenge, you can describe your learning outcomes more generically in free text by using the *learning outcome summary* property. Please note, that future development plans include the integration of a learning outcome linking tool, that will utilise AI algorithms to find concrete skills matching a learning outcome's natural language description.

34. Are there any recommendations concerning the formulating of Learning Outcomes for micro-credentials?

Cedefop has published extensive guidance material on how to draft learning outcomes: [Defining, writing and applying learning outcomes | CEDEFOP \(europa.eu\)](#). Guidelines on drafting short descriptions of learning outcomes will also be published soon on the Cedefop portal.

35. In the case of MOOCs, can EDCs be issued automatically at the end of the online course? Or should they be manually issued by the awarding body?

It is possible to automate the issuance of European Digital Credentials for Learning, however this would require the implementation of the open-source version of the EDC infrastructure, as well as additional development to it.

36. How can learners create their digital wallet to store their credentials?

The default wallet for storing European Digital Credentials for Learning available to anyone is located within Europass. Any person in possession of a Europass account, also automatically has a wallet (located in the 'My Library' section of the account, under 'Certificates and Diplomas'). You can create a Europass account [here](#).

37. Does the open-source EDC issuer have the same interface as the online credential builder, or does it have an API to be integrated in an information system?

Both options are possible. You can simply run your own instance of the EDC Issuer that will look identical to the available web tools, or you can use it as a basis to integrate it to your own infrastructure and automate the credential creation and issuing process (note that this will require some additional development).

38. What opportunities exist to become active in the field of micro-credentials in the EU? Are there areas where participation for partners from industry is possible?

There is currently an Erasmus+ [Policy Experimentation Call on Micro-credentials](#) that is open until 4 June. It is also possible to work on developing and/or using micro-credentials as part of, for example, Erasmus+ Centres of Vocational Excellence (CoVE) projects. The 2024 CoVE call was open until 7 May. See info page [here](#).

39. Does the EDC Issuer have a limit on the number of certificates issued per account?

No, you can issue as many credentials as you would wish. However, note that we do not recommend the use of the web version of the EDC Issuer for large-scale issuing. When using the web version, it is not possible to automate the credential issuing process, and you will need to issue credentials in batches of maximum 50 credentials. In case you would like to streamline the issuing process and issue at a larger scale, we recommend the integration of the open-source version of the Issuer to your own infrastructure.

40. One of the mandatory fields for an Awarding Body or Organisation in an EDC is the legal identifier. What should be considered the legal identifier?

The legal identifier is the official identification number of the organisation/company, as awarded by the relevant national authority. This can be a company registration number, VAT number, PIC (Participant Identification Code used to apply for EU funding programmes) or other, as relevant in your country.

41. How can the authenticity of European Digital Credentials for Learning be guaranteed to avoid frauds and scams?

EDCs are sealed using an eIDAS compliant electronic seal. This certifies the origin of the credential, as the information on the Issuing organisation will always be informed by the information in the electronic seal. The issuing organisation has legal responsibility over the claims contained in the credential. Additionally, EDCs are tamper-evident. Whenever viewed, EDCs are subject to a series of verification checks. If the credential has been tampered with, these checks will appear as failed, directly informing the viewer that this credential has been altered in some way, helping build trust in the content of the credentials.

42. So ECTS are NOT required, but if an organization does choose to give them, are they only qualified if they are a higher educational institution?

According to the ECTS Users' Guide the National authorities should indicate which institutions have the right to award ECTS credits. Normally this concerns higher education institutions. But ECTS is in practice also used more widely, such as in higher VET.