PACT FOR SKILLS IN CORRECTIONAL JUSTICE

# Methodology for Micro-Credential Design

An initiative of the European Commission

# Methodology for Micro-Credential Design

*A practical framework for designing recognition-ready micro-credentials in non-formal, VET, and lifelong learning contexts*

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This document represents the official LiberateSkills Pact methodology for micro-credential design.

The methodology defines the minimum conceptual and design conditions required for a micro-credential to be considered recognition-ready.

Users are free to apply this methodology in their own contexts (projects, courses, systems), provided that:

- the original methodology is not modified, adapted, or altered;
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**Important:**
Implementation of micro-credentials (e.g. delivery format, learning activities, tools, platforms) may vary depending on context. However, any modification of the methodology itself may compromise the integrity of the micro-credential concept as defined in this framework.

For structured implementation, digital design, and issuing workflows aligned with this methodology, dedicated tools and systems may be used.

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# 0. Executive Summary

## Purpose

This methodology provides a practical framework for designing **recognition-ready micro-credentials** in non-formal, informal, and lifelong learning contexts.

It translates the conceptual principles of micro-credentials into an operational design approach that can be applied by training providers, project partners, educational organisations, and other actors involved in competence development and credential issuance.

The methodology builds on the **Council Recommendation on Micro-credentials (2022/C 243/02)** and focuses on the practical conditions required for micro-credentials to be transparent, credible, and usable across different learning and professional contexts.

Rather than introducing a new qualification system, micro-credentials are understood as a complementary instrument that helps make **demonstrated competences visible, assessable, and portable**.

## Audience

This methodology is intended for:

- training providers and educational organisations designing micro-credentials
- project coordinators and partners implementing competence-based learning initiatives
- quality assurance professionals supporting credential design and validation
- organisations issuing micro-credentials in non-formal and lifelong learning environments

It may also be relevant for policymakers, sectoral organisations, and institutions exploring the role of micro-credentials within broader learning ecosystems.

## Core Message

Micro-credentials should be understood and implemented as structured competence attestation instruments, not as shortened courses.

This methodology provides a practical, process-oriented framework to support consistent, credible, and scalable micro-credential implementation across across **informal and non-formal learning settings**, covering **continuous vocational education and lifelong learning contexts**.

It **is** a **formalised competence attestation mechanism** that:

- structures how competences are *defined*
- governs how evidence is *presented*

- frames how validation is *conducted*
- enables recognition *if and when* an external actor chooses to act on it

So the micro-credential exists **before** recognition and **independently** of it.

## Core Message

Micro-credentials are not simply smaller courses or certificates of participation.

A micro-credential represents a **structured and defensible claim about demonstrated competence**, based on clearly defined learning outcomes, appropriate evidence, and transparent assessment.

Their value does not come from the duration of learning activities, but from the **credibility of the assessment process and the clarity of the competence being demonstrated**.

For this reason, micro-credentials should be designed as **recognition-ready signals of competence**.

Recognition itself cannot be guaranteed by the issuer. It is a decision made by external actors such as employers, institutions, or professional bodies. However, a well-designed micro-credential can significantly increase the likelihood that such recognition decisions can be made in an informed and trustworthy way.

This methodology therefore focuses on the **design logic that enables recognition-readiness**, ensuring that micro-credentials:

- describe clearly defined competences
- rely on observable and assessable learning outcomes
- use evidence-based assessment processes
- produce precise and defensible claims
- are issued by accountable organisations

To operationalise these principles, the methodology introduces a **micro-credential lifecycle**, guiding designers through the key phases of development: purpose definition, competence design, learning and evidence collection, assessment and validation, claims construction, and credential issuance.

Each phase contributes to building the transparency, credibility, and trust required for micro-credentials to function effectively across learning and professional contexts.

# Design Principle

## Recognition-Ready Micro-Credential Design

**Micro-credentials do not guarantee recognition.**
**They enable informed recognition decisions.**

Recognition is always an **external and context-dependent decision** made by organisations such as employers, educational institutions, or professional bodies. Because of this, recognition cannot be controlled or guaranteed by the credential issuer.

However, micro-credentials can be **designed to be recognition-ready**.

A recognition-ready micro-credential provides sufficient clarity, transparency, and evidence so that third parties can understand **what competence has been demonstrated, how it was assessed, and on what basis the claim is made.**

Recognition-ready design therefore requires that micro-credentials:

- define a **clear and limited competence**
- express **observable and assessable learning outcomes**
- rely on **evidence that demonstrates achievement**
- apply **transparent and consistent assessment criteria**
- produce **precise and defensible claims**
- are issued by **accountable organisations**

When these conditions are met, micro-credentials become **credible signals of competence** that can be interpreted and potentially recognised across different learning, institutional, and labour market contexts.

# 1. Scope and Purpose of the Methodology

This methodology provides a structured approach for the **design and implementation of recognition-ready micro-credentials** across a range of learning environments.

The framework focuses on practical design conditions that allow micro-credentials to communicate demonstrated competences clearly, transparently, and credibly beyond the immediate learning context.

### This methodology covers

- Design and implementation of micro-credentials
- Non-formal education, vocational education and training (VET), and adult learning contexts
- Project-based learning environments and organisational use cases

### This methodology does not cover

- Full qualification frameworks
- National accreditation procedures
- Credit transfer systems (ECTS or similar mechanisms)

The methodology therefore focuses specifically on **competence-based credential design**, rather than broader education system structures.

## 1.2 Purpose

The purpose of this methodology is to support the **consistent design and implementation of micro-credentials as credible and transparent instruments for competence attestation**.

In many learning environments, competences acquired through non-formal or project-based learning remain difficult to interpret outside the immediate context in which they were developed. Micro-credentials can help address this challenge by making demonstrated competences **visible, structured, and assessable**.

This methodology provides a shared reference framework for micro-credential designers and providers, helping them move from isolated design decisions to **coherent and trust-based implementation practices**.

Rather than standardising learning content or pedagogical approaches, the methodology focuses on clarifying the **minimum design conditions under which a micro-credential can become recognition-ready**.

These conditions include:

- clearly defined competences
- observable and assessable learning outcomes
- appropriate evidence of achievement
- transparent assessment processes
- precise and defensible competence claims

Recognition itself always remains an **external and contextual decision** made by employers, institutions, or other actors. The role of micro-credential design is therefore not to guarantee recognition, but to **enable informed recognition decisions**.

## 1.3 Intended Use

This methodology can be used in several ways:

- as a **design reference** for organisations developing micro-credentials
- as a **training resource** for practitioners working with competence-based credentials
- as a **quality discussion framework** within projects and organisations
- as a **policy-informed but practice-driven guide** for implementing micro-credentials in diverse learning environments

It is particularly suited for organisations designing micro-credentials within **projects, training initiatives, or lifelong learning programmes**, where competence visibility and transparent assessment are key objectives.

## 1.4 Relationship to European Frameworks

This methodology is aligned with the **Council Recommendation on Micro-credentials for Lifelong Learning and Employability (2022/C 243/02)** and with broader European approaches to competence-based learning.

The Recommendation defines a micro-credential as a record of learning outcomes that have been assessed against transparent criteria and that can be shared, combined, and used across different learning and professional contexts.

Rather than reproducing the policy framework, this methodology translates these principles into **practical design guidance**, supporting organisations in developing micro-credentials that are transparent, assessable, and recognition-ready.

The methodology may also align with relevant European competence and transparency frameworks where appropriate.

## 1.5 Operational Alignment with European Policy

This methodology operationalises several key principles highlighted in the European approach to micro-credentials, including:

- outcome-based description of competences
- transparency of competence claims
- credible and documented assessment processes
- issuer accountability and responsibility
- quality assurance mechanisms
- verifiability of credentials

At the same time, the methodology intentionally remains **implementation-neutral** with regard to specific technological systems or policy instruments.

This allows organisations to apply the methodology across different projects, sectors, and institutional environments **without requiring formal accreditation, predefined recognition outcomes, or credit attribution**.

Its primary goal is to support the development of **recognition-ready micro-credentials** that can function effectively within diverse learning ecosystems.

# 2. Core Definitions and Concepts

This chapter establishes the core terminology used throughout the methodology. Clear and shared definitions are essential to avoid conceptual ambiguity and to ensure that micro-credentials are designed and implemented consistently.

## 2.1 What Is a Micro-Credential

A micro-credential is a **credential that records demonstrated learning outcomes within a clearly defined and coherent unit of competence**.

It is awarded following a **transparent assessment process** and issued by an **identifiable and accountable organisation**.

A micro-credential is designed to be:

- **Standalone**
- **Verifiable**
- **portable**

and to enable **informed recognition decisions beyond the immediate learning context in which it was achieved**.

## 2.2 What a Micro-Credential Is Not

A micro-credential is not:

- a certificate of participation
- a shortened or modularised course by default
- a learning activity without assessment
- a digital badge without clearly defined and assessed learning outcomes

While micro-credentials may be supported by courses, training activities, or learning experiences, they **cannot be reduced to them**.

Their value lies in the **demonstration and assessment of competences**, not in participation or duration of learning activities.

## 2.3 Competence and Learning Outcomes

### 2.3.1 Competence

Competence refers to the **integrated application of knowledge, skills, and responsibility or autonomy in a given context**.

In this methodology, competences are understood as **demonstrable and assessable capabilities**, not merely descriptive statements.

A competence must therefore be defined in a way that allows it to be **observed, evidenced, and assessed**.

### 2.3.2 Learning Outcomes

Learning outcomes describe **what a learner is able to demonstrate after learning and assessment**.

Learning outcomes must be:

• **observable**
• **assessable**
• formulated **independently of specific learning activities**

Well-defined learning outcomes form the **foundation for assessment** and support the **claims included in a micro-credential**.

## 2.4 Learning Activities and Evidence

### Learning Activities

Learning activities refer to the **educational experiences designed to support the development of competences and learning outcomes**.

These may include:

- formal instruction
- non-formal training
- self-directed learning
- work-based learning

Learning activities help **build competence**, but they do not by themselves prove that competence has been achieved.

### Evidence

Evidence refers to **verifiable outputs or performances produced by the learner that demonstrate achievement of the defined learning outcomes**.

Evidence may take different forms, such as:

- Assignments
- Projects
- Portfolios
- Demonstrations
- Workplace performance

Evidence must be **suitable for assessment against predefined criteria**.

### Key Principle

Learning activities support **competence development**.
Evidence supports **assessment and recognition-readiness**.

## 2.5 Assessment, Validation, and Recognition

### 2.5.1 Assessment

Assessment is the process of **evaluating learner evidence against predefined criteria to determine whether learning outcomes have been achieved**.

Assessment establishes the basis for the **competence claim expressed in the micro-credential**.

### 2.5.2 Validation

Validation refers to the **confirmation that the assessment process has been conducted according to agreed standards and procedures**.

Validation focuses on the **integrity and quality of the assessment process**, rather than on evaluating individual learner performance.

Validation may be **internal or external**, depending on the credibility requirements of the issuing context.

## 2.5.3 Recognition

Recognition refers to the act by a **third party** of accepting a micro-credential and its claims for a specific purpose, such as:

• employment
• professional development
• progression to further learning

Recognition is always **contextual, purpose-specific, and external to the issuing process**.

It occurs **after issuance** and cannot be guaranteed by the issuing organisation.

Recognition depends on **trust in the assessment and issuing process**, but ultimately remains a decision made outside the control of the issuer.

## 2.6 Issuer and Responsibility

The issuer of a micro-credential is the organisation that **formally awards the credential and assumes responsibility for its claims**.

Issuer responsibility includes:

- ensuring the integrity of the **assessment process**
- ensuring the validity of the **competence claims**
- ensuring the **transparency of credential information**
- enabling **verification of the credential**

### 2.6.1 The Awarding Body

In some micro-credential systems, the issuing organisation is also responsible for confirming the achievement decision - that is, for formally authorising that the credential may be awarded based on the completed assessment. In these cases, the issuer and awarding body are the same entity.

In other cases - particularly in multi-partner projects, cross-organisational programmes, or high-stakes credentialling contexts - the awarding decision is delegated to or confirmed by a separate awarding body. The awarding body independently reviews the assessment outcome and authorises the awarding of the micro-credential before or at the point of issuance.

The introduction of a distinct awarding body creates a structural separation between:

- conducting assessment (the assessor)
- validating the assessment process (the validator)
- authorising the awarding decision (the awarding body)
- issuing the credential (the issuer)

This separation is not required in all contexts, but it strengthens credibility and trust in settings where independence and accountability are critical for recognition.

Whether the awarding body is the same as the issuer or a separate entity, its role must be explicitly defined as part of the credential's governance structure and identified in the credential metadata.

The credibility of a micro-credential is therefore closely linked to the **accountability and transparency of its issuer**.

## 2.7 Micro-Credential as Process, Not Product

In this methodology, a micro-credential is understood not as a standalone digital artefact, but as the **result of a structured design and assessment process**.

This process includes:

- competence definition
- learning and evidence generation
- assessment and validation
- issuance and organisational responsibility

Understanding micro-credentials as the outcome of a **structured lifecycle** helps ensure consistency, credibility, and scalability.

## 2.8 Claims

Claims are the **formal statements made by a micro-credential regarding what has been recognised as a result of assessment**.

Claims describe **demonstrated achievements or competences** that are explicitly supported by assessment evidence and for which the issuer assumes responsibility.

Claims are distinct from:

- learning activities
- instructional content
- participation records

They represent **recognition-ready outcomes**, not learning processes.

## 2.9 Recognition and Recognition-Readiness

This methodology distinguishes clearly between **recognition** and **recognition-readiness**.

**Recognition** refers to the act by a third party (such as an employer, education provider, or authority) of accepting a micro-credential for a specific purpose.

Recognition is always:

- Contextual
- Situational
- purpose-specific

and cannot be guaranteed by the issuing organisation.

**Recognition-readiness**, in contrast, refers to the **design quality of a micro-credential that enables informed recognition decisions**.

A micro-credential is recognition-ready when it:

- is based on **assessed learning outcomes**
- makes **clear, limited, and defensible competence claims**
- identifies an **accountable issuer**
- provides sufficient information for **independent verification**

Recognition-readiness therefore exists **independently of whether a credential is recognised in a particular context**.

A micro-credential does not cease to be valid if it is not recognised in a specific situation. Rather, recognition-readiness determines whether recognition **can be reasonably evaluated without additional explanation or negotiation**.

Micro-credentials should therefore be understood as **recognition instruments by design**, whose purpose is to enable informed recognition decisions while acknowledging that recognition itself always remains an external act.

# 3. Micro-Credential Lifecycle Overview

This chapter introduces the **micro-credential lifecycle** as a structured, end-to-end design and implementation process.

It provides an overview of the key phases involved and clarifies how decisions related to **competence design, learning evidence, assessment, and issuance** interact to shape the **recognition-readiness** of a micro-credential.

## 3.1 The Lifecycle Approach

In this methodology, micro-credentials are implemented through a **lifecycle approach**, rather than being treated as isolated design outputs.

The lifecycle perspective recognises that the **credibility, usability, and recognition-readiness** of a micro-credential do not depend on a single design decision, but on the **coherence of decisions made across multiple phases**, from initial purpose definition to issuance and use.

Each phase introduces specific **design responsibilities and quality considerations** that influence whether the resulting micro-credential can support **informed recognition decisions by third parties**.

To better understand how these phases relate to one another, it is useful to consider the underlying conceptual transformation through which competence becomes a micro-credential.

The model distinguishes three interconnected layers:

- **Competence definition** - where a capability is articulated through assessable learning outcomes
- **Evidence of performance** - where learner performance is demonstrated and evaluated
- **Credential construction** - where validated achievements are formulated into competence claims and communicated through a micro-credential.

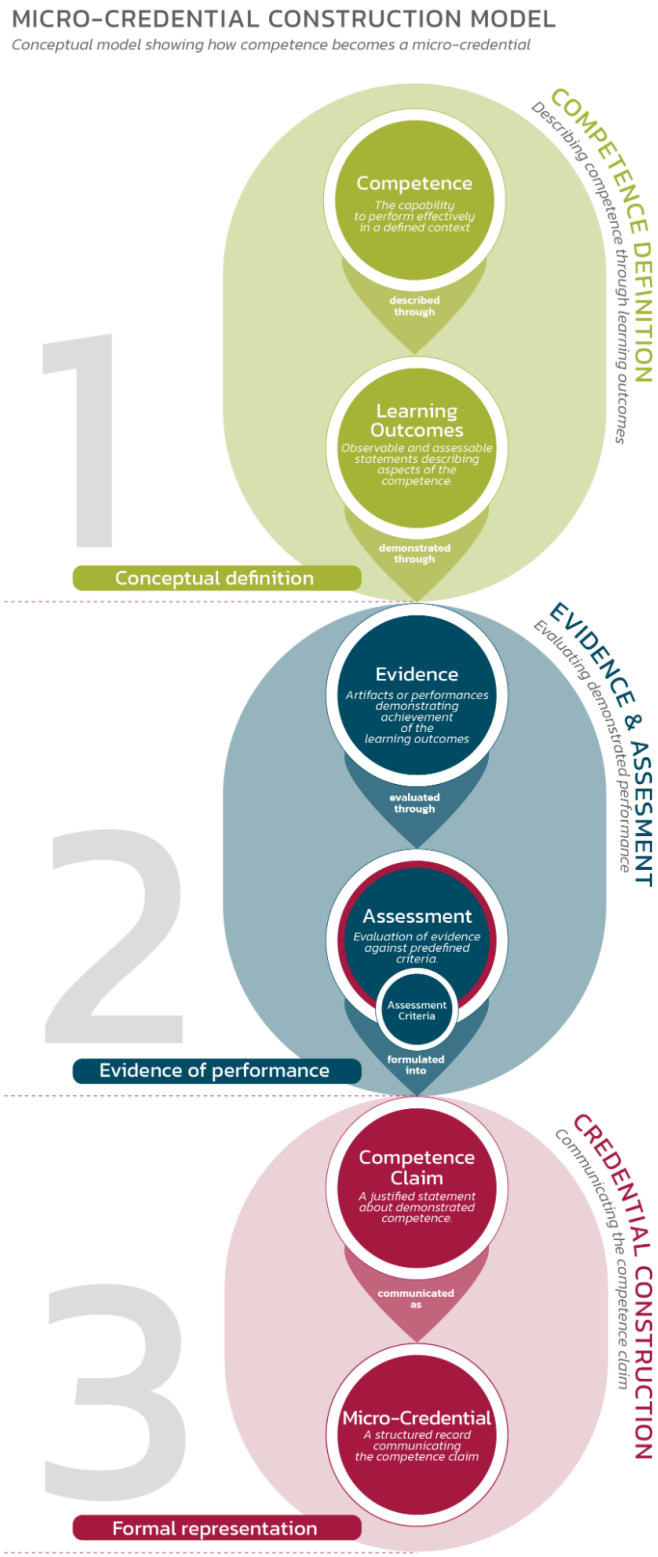


*Figure 1. Conceptual Model of Micro-Credential Construction*

The model clarifies a central principle of the methodology: **micro-credentials communicate assessed competence, not learning activities or course participation.**

The lifecycle phases described in the following sections operationalise this conceptual model into a structured design process.

## 3.2 Overview of the Micro-Credential Lifecycle Phases

The micro-credential lifecycle consists of the following interdependent phases:

1. **Purpose and Context Definition**
2. **Competence and Learning Outcomes Design**
3. **Learning Activities and Evidence Collection**
4. **Assessment and Validation**
5. **Credential Construction and Issuance**
6. **Use, Recognition, and Review**

Although presented sequentially, these phases are **interconnected and iterative**. Design decisions may need to be revisited as implementation progresses and new constraints or insights emerge.

## 3.3 Phase Interdependencies

Decisions made in earlier phases **constrain and shape options in later phases**.

For example:

- poorly defined learning outcomes limit meaningful assessment;
- weak or inconsistent assessment undermines recognition-readiness regardless of learning quality;
- unclear issuer responsibility weakens trust in the credential's claims.

The lifecycle approach therefore emphasises **alignment across phases**, rather than optimisation of individual components in isolation.

A micro-credential becomes credible when **competence design, evidence, assessment, and claims are coherently aligned**.

## 3.4 The Lifecycle as a Trust-Building Mechanism

Trust in micro-credentials is not created at the point of issuance. It is **gradually built through the design and implementation process**.

Transparent competence definition, credible assessment, clear claims, and accountable issuance together create the conditions that allow third parties to interpret and evaluate the credential.

By making each phase explicit, the lifecycle approach supports:

- internal quality assurance
- external transparency
- comparability across micro-credentials
- recognition-readiness and informed recognition decisions by third parties

## 3.5 The Lifecycle as a Dynamic Process

The micro-credential lifecycle can be represented as a **continuous process linking intent, competence design, learning evidence, assessment, issuance, and use**.

This representation highlights that micro-credentials are **not static artefacts**, but dynamic credential instruments whose value depends on the **integrity and coherence of the underlying process**.

Recognition outcomes may vary across contexts, but recognition-ready design ensures that the credential can be **understood and evaluated without additional explanation**.

## 3.6 From Lifecycle Overview to Implementation Phases

The following chapters describe each lifecycle phase in detail, outlining:

- key design questions
- implementation considerations
- common design risks

Together, these chapters translate the lifecycle overview into **practical guidance for micro-credential designers and providers**, with a consistent focus on designing **recognition-ready micro-credentials**, rather than attempting to predetermine recognition outcomes.

# 4. Phase 0 - Purpose and Context Definition

This phase establishes the **foundational intent** of the micro-credential.

A clear definition of **purpose and context** is essential to ensure that subsequent design decisions are coherent and aligned with **recognition-readiness requirements**, rather than based on assumed recognition outcomes.

## 4.1 Rationale for Phase 0

Micro-credentials are often designed by starting with **learning content, courses, or training activities**.

This methodology adopts a different approach: the design process begins by clarifying **why the micro-credential exists, who it is intended for, and how it is expected to be used**.

Without a clearly defined purpose and context, micro-credentials risk becoming **isolated learning artefacts** whose design does not support recognition-readiness or informed recognition decisions.

Starting with purpose helps ensure that competence definition, assessment design, and credential claims remain **aligned with realistic use scenarios**.

## 4.2 Purpose of the Micro-Credential

**Key design question**

What is the primary purpose of this micro-credential?

Possible purposes include:

- supporting **upskilling or reskilling**
- recognising **specific professional competences**
- enabling **progression to further learning**
- supporting **organisational or sectoral capability development**

The purpose of a micro-credential determines the **level of precision required in competence definition, assessment, claims, and issuer responsibility**.

Micro-credentials intended to support recognition **beyond the issuing organisation** require higher levels of:

- transparency

- assessment rigour
- evidence quality
- verifiability

than those designed primarily for **internal, exploratory, or formative use**.

## 4.3 Target Group and Context of Use

**Key design questions**

Who is the intended learner or recipient?
In what context is the micro-credential expected to be used?

Possible contexts include:

- employment or professional development
- education or training progression
- organisational capability development
- personal development

Clearly identifying the **target group and context of use** helps ensure that learning outcomes, assessment methods, and claims remain aligned with **realistic recognition scenarios**, without assuming or guaranteeing recognition.

## 4.4 Intended Type of Recognition

Micro-credentials may be designed with different **recognition intentions**, depending on their purpose and context.

Types of recognition may include:

- professional recognition (e.g. by employers or sector organisations)
- educational recognition (e.g. progression to further learning)
- organisational or internal recognition
- informal or self-recognition

Recognition intent influences important design decisions, including:

- assessment requirements
- the level and type of evidence required
- expectations regarding issuer credibility
- validation mechanisms
- verifiability conditions

However, recognition itself always remains an **external and contextual decision**, made by third parties.

The design process therefore focuses on enabling **recognition-readiness**, rather than attempting to guarantee recognition outcomes.

## 4.5 Constraints and Design Conditions

Micro-credential design often operates within practical constraints.

Typical constraints may include:

- regulatory or policy frameworks
- project requirements or funding conditions
- sector-specific norms or expectations
- time, resource, or capacity limitations

Identifying these constraints early in the design process helps prevent **misalignment between ambition and feasibility**, and supports realistic implementation choices that preserve recognition-readiness.

**Awarding authority**

At the design stage, it must be determined who holds the authority to formally confirm and authorise the awarding of the credential. Designers should identify whether:

- the issuing organisation will also act as the awarding body, or
- a separate awarding body will be involved - for example, a coordinating partner, a sectoral authority, or an external quality body operating under a formal mandating agreement.

This decision has direct implications for the governance structure, the division of responsibilities, and the level of trust the credential can claim in external recognition contexts. It should be resolved in Phase 0 and documented consistently across all subsequent phases.

## 4.6 Implications for Subsequent Phases

Decisions made during the **purpose and context definition phase** directly influence all subsequent phases of the micro-credential lifecycle.

Unclear, implicit, or unrealistic assumptions at this stage often lead to:

- weak or inconsistent assessment
- unclear or inflated competence claims
- misalignment between learning outcomes and recognition intent
- reduced recognition-readiness and inconsistent recognition outcomes

For this reason, Phase 0 functions as a **strategic design checkpoint** for the entire lifecycle.

## Design Rule - Phase 0

A micro-credential should not be designed unless its **purpose, context of use, and recognition intent can be clearly articulated**.

When these elements remain unclear, subsequent phases-such as competence definition, assessment design, and claim formulation-are likely to produce credentials that lack transparency, credibility, and recognition-readiness.

# 5. Phase 1 - Competence and Learning Outcomes Design

This phase focuses on defining **what the micro-credential is designed to make visible and recognition-ready**.

Clear and assessable **competences and learning outcomes** form the foundation for meaningful assessment and enable **informed recognition decisions**.

## 5.1 Rationale for Phase 1

Micro-credentials derive their value from the **clarity, relevance, and assessability of the competences they represent**.

Poorly defined competences and learning outcomes undermine assessment quality and reduce the **recognition-readiness and credibility** of the resulting micro-credential, regardless of the quality of learning activities.

This phase therefore establishes the **reference point against which all learning evidence will later be assessed**.

## 5.2 Defining Competences

### Key design question

What **unit of competence** is this micro-credential designed to make recognition-ready?

### Guidance

Competences should be defined as **integrated combinations of knowledge, skills, and responsibility or autonomy that can be demonstrated in practice**.

Competence definitions should:

- be **specific and context-aware**
- reflect **real-world application**
- avoid **vague or purely descriptive formulations**

Competences should be defined as **coherent units**, rather than as lists of unrelated skills.

A well-designed micro-credential typically focuses on **one clearly bounded unit of competence**.

# 5.3 Learning Outcomes as Assessable Statements

## Key design question

What should the learner be able to **demonstrate** in order to evidence the defined competence?

Learning outcomes articulate competences into **observable and assessable statements describing learner performance or capability**.

In the context of micro-credentials, learning outcomes must be formulated in a way that allows **independent verification through evidence**, without relying on descriptions of the learning process.

## Quality criteria for learning outcomes

Learning outcomes should be:

- **Observable**
- **Assessable**
- Clearly linked to the **defined unit of competence**
- Aligned with the **intended context of use and recognition intent**

Well-designed learning outcomes provide the **basis for evidence requirements and assessment criteria** in later lifecycle phases.

## Scope and Number of Learning Outcomes

To ensure clarity, assessability, and recognition-readiness, micro-credentials should include a limited number of learning outcomes.

A typical micro-credential contains between 3 and 5 learning outcomes, with a recommended maximum of 5.

This limitation supports:

- meaningful and valid assessment,
- clear communication of the competence achieved,
- and improved interpretability for third parties involved in recognition decisions.

The number of learning outcomes should be proportionate to the notional workload of the micro-credential.

**Indicative alignment between workload and learning outcomes**

| Notional workload (ECTS) | Typical number of learning outcomes |
|---|---|
| 1-2 ECTS | 2-4 learning outcomes |
| 3-5 ECTS | 3-5 learning outcomes |

**Design note**

The number and scope of learning outcomes directly influence the design of assessment methods and evidence requirements, which are addressed in Phase 2.

## 5.4 Alignment with Competence Frameworks (Optional)

Where relevant, competences and learning outcomes should be aligned with existing competence or qualification frameworks. In the context of European recognition-readiness, alignment with the European Skills, Competences, Qualifications and Occupations (ESCO) classification is considered a minimum condition, not an optional enhancement.

### Why ESCO alignment is required

ESCO provides the shared semantic vocabulary through which learning outcomes become interpretable across European labour market and education systems. Without at least one ESCO reference, a micro-credential's competence claims cannot be automatically understood, compared, or verified within European digital credential ecosystems, including the European Digital Credentials for Learning (EDC) infrastructure.

ESCO alignment is therefore not a quality enhancement - it is the mechanism through which recognition-readiness becomes technically interoperable.

### How to align learning outcomes with ESCO

Each learning outcome defined in Phase 1 should be mapped to at least one ESCO skill or competence, identified by its unique ESCO URI (Uniform Resource Identifier).

The mapping process involves three steps:

First, identify the core capability described by the learning outcome - what the learner can do, know, or apply.

Second, search the ESCO classification (available at https://esco.ec.europa.eu) using relevant keywords. ESCO organises skills and competences into a structured hierarchy, allowing designers to identify the most precise match.

Third, select the ESCO term that best reflects the learning outcome. Where no exact match exists, the closest parent concept may be used, provided the relationship is documented.

### Practical guidance for VET and non-formal contexts

In VET and non-formal learning environments, ESCO alignment should remain practical and proportionate. A micro-credential addressing a clearly bounded unit of competence will typically require between one and four ESCO skill references. More than five references may indicate that the competence scope is too broad.

Alignment with additional frameworks - such as national qualification frameworks or sectoral competence standards - remains optional and should be used to support transparency rather than to replace clear competence definitions and assessable learning outcomes.

**Design note**

Framework alignment supports interpretability. It does not replace the need for clear competence definitions, assessable learning outcomes, and credible assessment processes. A learning outcome mapped to ESCO but not supported by evidence and assessment does not become recognition-ready through alignment alone.

## 5.5 Level and Scope of the Micro-Credential

### Key design questions

What is the **complexity or level** of the defined unit of competence?
How **limited or extensive** is the competence scope?

Micro-credentials should be designed to represent a **limited and coherent unit of competence**.

Overly broad or loosely bounded competence definitions risk:

- blurring assessment criteria
- increasing interpretation ambiguity
- weakening recognition-readiness

Clearly defined scope supports **consistent assessment and credible claims**.

## Assigning an EQF Level - Practical Guidance for VET and Non-Formal Contexts

Every recognition-ready micro-credential issued within European digital credential ecosystems must declare a level on the European Qualifications Framework (EQF). This declaration supports comparability and transparency across national systems.

EQF levels range from 1 (basic, structured knowledge) to 8 (advanced, research-oriented expertise). For micro-credentials in VET and non-formal learning contexts, the relevant range is typically EQF levels 3 to 6.

The following decision table provides practical orientation for level assignment. It is not a formal accreditation instrument - it is a design reference to support consistent and defensible level declarations.**How to use this table**

| EQF Level | Knowledge | Application | Autonomy and Responsibility |
|---|---|---|---|
| **3** | Factual and procedural knowledge in a field | Apply methods and tools in standard situations | Work under supervision; some independence in routine tasks |
| **4** | Broader theoretical and practical knowledge | Apply knowledge and solve specific problems | Act independently within defined contexts; some responsibility for others |
| **5** | Comprehensive, specialised knowledge; some theoretical depth | Manage and supervise activities; adapt to new situations | Take responsibility for completing tasks; supervise others in some contexts |
| **6** | Advanced knowledge in a field; critical understanding | Apply knowledge in complex, unpredictable contexts; develop new approaches | Manage complex activities; take responsibility for decisions and team contributions |

Identify which row best describes the learning outcomes defined in Phase 1 across all three dimensions - knowledge, application, and autonomy. The level where all three dimensions align consistently is the appropriate EQF level for the micro-credential.

Where learning outcomes span two adjacent levels, designers should assign the lower level unless the higher-level demands are consistently met across the majority of outcomes. Overstating EQF level is a form of claim inflation and weakens recognition-readiness.

**Design note**

EQF level assignment is the responsibility of the issuer and must be defensible based on the defined learning outcomes and assessment criteria. It cannot be determined by the duration of the learning activity or the seniority of the learner.

## 5.6 Common Design Risks in Phase 1

Typical risks include:

- describing **learning content instead of competences**
- formulating **learning outcomes that cannot be assessed**
- defining **too many or overly broad outcomes**
- assuming that **alignment with a framework guarantees recognition-readiness or quality**

Avoiding these risks is essential to ensure that the micro-credential can support **credible assessment and transparent claims**.

## 5.7 Output of Phase 1

At the end of Phase 1, the micro-credential design should include:

- a **clearly defined unit of competence**
- a set of **assessable learning outcomes** articulating that competence
- an **explicit link between competence and learning outcomes**
- an indication of the **intended level and scope**

These elements provide the **foundation for evidence definition and assessment design** in the following lifecycle phases.

## Design Rule - Phase 1

If learning outcomes **cannot be assessed through evidence**, recognition-readiness cannot be established - and recognition cannot reasonably be expected.

# 6. Phase 2 - Learning Activities and Evidence Collection

This phase addresses **how learning outcomes are supported through learning activities and how evidence of competence achievement is generated**.

It clearly distinguishes between **learning activities** and the **evidence required for assessment and recognition-readiness**, which may later support recognition decisions.

## 6.1 Rationale for Phase 2

Learning activities play an important role in **supporting competence development**, but they do not in themselves constitute achievement or recognition.

In micro-credential implementation, **recognition-readiness depends on the availability of suitable evidence** demonstrating that the defined learning outcomes have been achieved through assessment.

This phase ensures that **learning design and evidence requirements remain aligned**, without conflating participation with demonstrated competence.

## 6.2 Learning Activities

### Key design question

What learning experiences support the achievement of the defined learning outcomes?

Learning activities may take diverse forms, including:

- formal instruction
- non-formal training
- self-directed learning
- work-based learning
- blended or hybrid approaches

The methodology does not prescribe specific pedagogical models. Instead, it emphasises that learning activities should be selected based on their **capacity to support competence development**.

Learning activities support learning, but **do not determine recognition or recognition-readiness outcomes**.

## 6.3 Workload and Duration

Workload and duration estimates provide contextual information about the learning effort involved in achieving the defined learning outcomes. They support transparency and comparability without functioning as proxies for competence achievement.

In micro-credential design, workload contributes to the interpretability of the credential for third parties - particularly employers and recognition bodies - who may use it as a contextual reference when evaluating claims. Competence, however, must always be demonstrated through evidence and assessment, not inferred from learning duration.

### Expressing workload in VET and non-formal contexts

For VET and non-formal learning environments, workload is most usefully expressed in total hours of learning effort. This includes all learning-related activities - structured instruction, guided practice, self-directed learning, and evidence preparation - but excludes assessment time itself.

As a practical reference, well-scoped micro-credentials in VET and non-formal contexts typically fall within the following ranges:

| Scope | Indicative workload |
|---|---|
| Narrow, single-skill competence | 15 - 30 hours |
| Bounded unit of competence (typical) | 30 - 60 hours |
| Broader competence cluster | 60 - 120 hours |

These ranges are indicative, not prescriptive. What matters is that the stated workload is realistic, internally consistent, and coherent with the scope of learning outcomes defined in Phase 1.

Where a micro-credential is designed for contexts in which ECTS credits are relevant - for example, where recognition by higher education institutions is a stated recognition intent - workload may additionally be expressed as ECTS credits, where 1 ECTS corresponds to approximately 25-30 hours of total learning effort. This conversion should only be used where it is appropriate to the recognition context and should not be applied generically.

**Design note**

Workload estimates that significantly exceed the scope of the defined learning outcomes signal a design misalignment - either the competence scope is too narrow, or the micro-credential is being conflated with a full course. Workload should be proportionate to the unit of competence, not to the learning programme that supports it.

## 6.4 Evidence of Learning Outcomes

### Key design question

What evidence can demonstrate that the defined learning outcomes have been achieved?

Evidence refers to **verifiable outputs, performances, or artefacts produced by the learner** that can be assessed against predefined criteria.

Evidence must be:

- **relevant** to the defined learning outcomes
- **Assessable**
- **authentic and attributable** to the learner

Examples of evidence may include:

- projects or case studies
- Portfolios
- practical demonstrations
- written or oral assignments

Evidence provides the **basis for assessment decisions** and supports the credibility of the resulting competence claims.

## 6.5 Evidence Requirements and Flexibility

While evidence requirements should be clearly defined, micro-credential design may allow **flexibility in how learners demonstrate achievement**, provided that assessment criteria remain consistent.

This approach supports **diverse learning pathways**, while maintaining **assessment integrity and recognition-readiness**.

Different learners may follow different learning paths, but the **evidence requirements and assessment standards must remain stable**.

## 6.6 Learning Path vs Evidence Path

This methodology makes a clear distinction between:

## Learning path

The activities and experiences through which learners develop competence.

## Evidence path

The outputs or performances that are assessed to determine whether the learning outcomes have been achieved.

Multiple learning paths may lead to the **same evidence path**.

Recognition-readiness is established through **evidence and assessment**, not through participation in specific learning activities.

This distinction is particularly important in **non-formal, informal, and work-based learning contexts**, where learning pathways may vary significantly, but assessment and claims must remain consistent and defensible.

## Recognition of Prior Learning (RPL)

A micro-credential designed around a clearly defined evidence path is, by definition, accessible to learners who have developed the relevant competence through routes other than the associated course or training programme.

Recognition of Prior Learning (RPL) refers to the process by which a learner who already possesses a competence - acquired through work experience, informal learning, previous training, or other life contexts - may apply for a micro-credential without completing the learning activities associated with it.

## Why RPL is a core design condition, not an optional feature

The distinction between learning path and evidence path established in section 6.6 directly implies RPL eligibility. If recognition-readiness is established through evidence and assessment - and not through participation in specific learning activities - then any learner who can produce the required evidence and meet the assessment criteria is eligible, regardless of how they acquired the competence.

Excluding RPL applicants without justification contradicts the core logic of competence-based credential design.

## RPL eligibility statement

Every micro-credential design should include an explicit RPL eligibility statement confirming that learners with relevant prior experience may apply for the credential without completing the

associated learning programme, provided they can demonstrate achievement of the defined learning outcomes through the required evidence.

## RPL evidence requirements

RPL applicants must meet the same evidence requirements and assessment criteria as standard pathway learners. The evidence path does not change - only the learning path differs.

Evidence appropriate for RPL contexts may include:

- a portfolio of work samples demonstrating the competence in professional or voluntary contexts
- documented professional experience accompanied by a structured reflection statement
- a workplace reference from a qualified supervisor attesting to observed competence
- prior certification, credential, or qualification in a related area
- a practical demonstration or structured interview, where appropriate to the competence

RPL evidence must remain relevant to the defined learning outcomes, assessable against predefined criteria, and attributable to the applicant.

## Assessment in RPL contexts

Assessment criteria are identical for both standard and RPL pathways. The assessor evaluates evidence against the same predefined criteria, regardless of how the competence was developed.

In RPL contexts, assessors should be particularly attentive to:

- the authenticity and attributability of submitted evidence
- the currency of the competence demonstrated (i.e. evidence of recent application where relevant)
- the alignment between prior experience and the specific learning outcomes defined for the micro-credential

## RPL and issuer responsibility

The issuing organisation assumes the same level of responsibility for credentials awarded through RPL as for those awarded through the standard pathway. RPL does not reduce the rigour of the assessment process or the validity of the resulting claims.

### Design note

RPL eligibility should be communicated transparently to potential applicants as part of the micro-credential's public information. Concealing or discouraging RPL undermines learner agency and limits the recognition potential of the credential across diverse professional and life contexts.

## 6.7 Output of Phase 2

At the end of Phase 2, the micro-credential design should include:

- a **description of learning activities** (indicative rather than prescriptive)
- **workload or duration information** for transparency
- **clearly defined evidence requirements aligned with learning outcomes**

These elements ensure that learning design supports competence development while maintaining **clear and assessable evidence expectations**.

## Design Rule - Phase 2

Learning supports competence development; **evidence enables assessment and recognition-readiness**.

Participation alone cannot establish competence.

# 7. Phase 3 - Assessment and Validation Mechanisms

This phase defines **how learner evidence is evaluated and how the integrity of the assessment process is ensured**.

Robust assessment and validation mechanisms are essential for the **recognition-readiness and credibility of micro-credentials** and for enabling informed recognition decisions.

## 7.1 Rationale for Phase 3

Assessment is the central mechanism through which **assessed learning outcomes are transformed into defensible and recognition-ready claims**.

Without clear assessment criteria and transparent validation processes, micro-credentials risk becoming **symbolic rather than substantive credential instruments**, regardless of the quality of learning activities.

Assessment therefore represents the **core credibility mechanism** of a micro-credential.

## 7.2 Assessment of Learning Outcomes

### Key design question

How will achievement of learning outcomes be assessed?

Assessment involves the **systematic evaluation of learner evidence against predefined criteria** to determine whether learning outcomes have been achieved.

Assessment methods should be:

- appropriate to the nature of the learning outcomes
- aligned with the evidence produced
- transparent and documented

Common assessment methods may include:

- expert assessment
- peer review (when appropriately structured and moderated)
- practical demonstrations
- portfolio assessment
- structured interviews or examinations

The choice of assessment method should reflect the **nature of the competence being assessed and the type of evidence produced**.

### Peer Review as an Assessment Method

When used as an **assessment method**, peer review involves the evaluation of learner evidence by peers against predefined assessment criteria.

In this role, peer review contributes directly to the **assessment decision** and therefore directly affects **recognition-readiness**. It must therefore be designed with particular care.

Where peer review is used for assessment:

- assessment criteria must be **explicit and shared**
- the **role, profile, and competence of peers** must be clearly defined
- moderation mechanisms should be in place to ensure **consistency and fairness**

Peer review as an assessment method is particularly suitable for competences related to **collaborative practices, reflective skills, and creative or design-based outputs**.

## 7.3 Assessment Criteria and Standards

Assessment criteria define the **standards against which learner evidence is evaluated**.

Clearly articulated criteria support **consistency, fairness, and transparency** in assessment decisions and enable **independent interpretation of claims by third parties**.

Criteria should be:

- directly linked to **learning outcomes**
- understandable to **learners and assessors**
- applied **consistently across assessments**

Well-defined criteria strengthen the **credibility and interpretability** of competence claims.

## 7.4 Role and Qualifications of Assessors

### Key design question

Who is responsible for assessment decisions?

Assessors should possess **relevant subject-matter expertise** and a clear understanding of the **assessment criteria and procedures**.

The roles and responsibilities of assessors should be explicitly defined, including:

- decision-making authority
- conflict-of-interest considerations
- documentation responsibilities
- accountability for assessment decisions

Clear identification of assessors contributes directly to **issuer responsibility and recognition-readiness**.

## 7.5 Validation of the Assessment Process

Validation refers to mechanisms that ensure **assessment processes are applied consistently and according to agreed standards**.

Validation does **not re-assess learner performance**. Instead, it examines whether assessment procedures, criteria, and decisions have been **appropriately applied and documented**.

Validation mechanisms may include:

- internal moderation
- peer review of assessment processes
- external oversight or audit

The level of validation should be **proportionate to the recognition intent and context of use of the micro-credential**.

## 7.6 Peer Review as a Validation Mechanism

When used as a **validation mechanism**, peer review focuses on **reviewing the assessment process**, not individual learner performance.

In this role, peers examine:

- the clarity and relevance of assessment criteria
- the consistency of assessment decisions
- the alignment between evidence, criteria, and learning outcomes

Peer review as validation supports **quality assurance and trust** by providing an additional layer of scrutiny without interfering with individual assessment decisions.

Clear separation between **peer review used for assessment** and **peer review used for validation** is essential to avoid role confusion and to maintain credibility.

## 7.7 Transparency and Documentation

Transparent documentation of assessment and validation processes supports:

- internal quality assurance
- issuer accountability
- recognition-readiness and informed recognition decisions by third parties

Documentation should include:

- assessment criteria
- assessment procedures
- validation mechanisms
- decision records, where appropriate

Clear documentation strengthens **trust in the micro-credential and its competence claims**.

## 7.8 Output of Phase 3

At the end of Phase 3, the micro-credential design should include:

- defined assessment methods
- explicit assessment criteria
- identified assessors and their roles
- appropriate validation mechanisms
- clear documentation practices

These elements ensure that competence claims are **supported by credible and transparent assessment processes**.

## Design Rule - Phase 3

Assessment establishes **recognition-readiness**.
Validation safeguards **assessment integrity**.

Peer review in **assessment evaluates the learner**.
Peer review in **validation evaluates the assessment process**.

# 8. Phase 4 - Micro-Credential Construction (Claims and Metadata)

This phase focuses on the construction of the **micro-credential as a credential artefact designed to be recognition-ready**.

It defines **what is formally claimed by the micro-credential and how these claims are documented and communicated** in order to support informed recognition decisions.

## 8.1 Rationale for Phase 4

A micro-credential derives its potential value **not from the learning activities that support it, but from the clarity, precision, and reliability of the claims it makes**.

This phase ensures a clear separation between **learning design and credential construction**, enabling transparency, comparability, and recognition-readiness across contexts.

The micro-credential should therefore communicate **what has been assessed and recognised**, rather than describing the learning experience itself.

## 8.2 From Learning Design to Credential Claims

While learning activities and assessment processes may be complex and context-dependent, the micro-credential itself should communicate **a concise and precise set of recognition-ready claims**.

These claims represent **what has been assessed and validated**, not the full learning experience that led to assessment.

Not all learning outcomes, activities, or experiences need to appear as claims in the micro-credential.

Credential construction therefore involves **translating assessment results into clear and defensible claims that can be interpreted by third parties**.

## 8.3 Types of Claims in a Micro-Credential

### 8.3.1 Achievement Claims

Achievement claims describe the **competences or learning outcomes that have been assessed and successfully demonstrated by the learner**.

These claims form the **core of the micro-credential** and must be directly supported by assessment evidence for which the issuer assumes responsibility.

Achievement claims should clearly state **what the learner has demonstrated**, rather than what the learner has studied or experienced.

### 8.3.2 Skill or Competence Claims

Skill or competence claims articulate the **specific capabilities that the micro-credential makes recognition-ready**.

Such claims should:

- be **clearly defined**
- avoid **vague or aspirational language**
- reflect **demonstrable and assessed performance**

Competence claims should be **interpretable by third parties without requiring additional explanation from the issuer**.

### 8.3.3 Entitlement Claims (Where Applicable)

Entitlement claims describe **rights, permissions, or opportunities that may follow from holding the micro-credential**, such as:

- eligibility for further training
- access to specific roles
- exemptions or progression opportunities

Entitlement claims should only be included **where they are explicitly supported by formal arrangements involving the issuing organisation and relevant stakeholders**.

Where no such arrangements exist, entitlement claims should **not be implied or assumed**.

## 8.4 What Should Not Be Claimed

Micro-credentials should **not include claims that**:

- are **not supported by assessment**
- describe **participation rather than achievement**
- rely on **implicit assumptions or issuer reputation alone**
- cannot be **clearly interpreted by third parties**

Overly broad or ambiguous claims undermine **recognition-readiness** and reduce the usefulness of micro-credentials for informed recognition decisions.

## 8.5 Core Metadata Elements

To support transparency and recognition-readiness, micro-credentials should include **a minimum set of metadata elements**.

Core metadata may include:

- title of the micro-credential
- issuing organisation
- description of assessed competences or learning outcomes
- assessment methods
- date of issuance
- issuer responsibility statement

Additional metadata may be included depending on context, but **core elements should remain concise, consistent, and interpretable by third parties**.

## 8.6 Relationship Between Claims and Metadata

Claims define **what the issuer asserts based on assessment**.

Metadata provides the **context necessary to interpret those claims**.

Clear alignment between claims and metadata enables **independent interpretation and informed recognition decisions by employers, education providers, and other stakeholders**.

Well-structured metadata therefore strengthens **transparency, trust, and recognition-readiness**.

## 8.7 Output of Phase 4

At the end of Phase 4, the micro-credential design should include:

- a **clearly defined and limited set of recognition-ready claims**
- a **clear distinction between claimed achievements and supporting learning activities**
- a **concise and transparent metadata structure**
- **explicit issuer responsibility for the claims made**

These elements enable the micro-credential to function as a **clear and interpretable competence signal for third parties**.

## Design Rule - Phase 4

Only what is **assessed** should be claimed.
Not everything that is **taught** should become a claim.

# 9. Phase 5 - Issuance, Ownership, Responsibility, and Verifiability

This phase defines **how a micro-credential is formally issued, how responsibility for its claims is assumed, and how verifiability is ensured**.

Issuance is a **governance act** that transforms assessed learning outcomes into **publicly assertable and verifiable claims**, enabling recognition-readiness beyond the immediate learning context.

## 9.1 Rationale for Phase 5

A micro-credential becomes meaningful only when its claims are **formally issued and can be verified by parties beyond the immediate learning context**.

Issuance marks the transition from **internal assessment to external availability for interpretation and use**, and therefore carries **institutional, reputational, and accountability implications**.

This phase ensures that **responsibility for claims is explicit** and that the micro-credential can function as a **trusted, recognition-enabling credential instrument**, without presuming recognition outcomes.

## 9.2 Issuance as a Formal and Accountable Act

Issuance refers to the **formal act by which an organisation awards a micro-credential and confirms that its claims are valid, assessed, and supported by evidence**.

Issuance is **not an automatic outcome of course completion or participation**. It is a deliberate decision through which the issuing organisation publicly affirms that:

- assessment has been conducted according to defined criteria
- claims accurately reflect demonstrated achievements
- the credential may be relied upon as a **recognition-enabling instrument within its stated purpose and context**

Issuance therefore represents a **public commitment by the issuer**.

## 9.3 The Issuer

## Key design question

Who issues the micro-credential and assumes responsibility for its claims?

The issuer is the **organisation that formally awards the micro-credential and assumes responsibility for the integrity and validity of its claims**.

The issuer is accountable for:

- the design and implementation of assessment
- the accuracy, clarity, and limitation of claims
- the transparency of credential information
- responding to verification requests and, where relevant, recognition inquiries from third parties

### 9.3.1 Relationship Between the Issuer and the Awarding Body

The issuer is the organisation that formally awards and signs the micro-credential. The awarding body is the organisation that authorises the awarding decision - confirming that assessment has been conducted appropriately and that the resulting claims are valid and warranted.

These roles may be held by the same organisation or by separate entities. Where they are separate, the following conditions apply:

- A formal mandating agreement must exist between the awarding body and the issuer, clearly defining the scope of authority, the conditions for awarding, and the division of accountability.
- The awarding body must be identifiable and verifiable by third parties.
- The awarding body's role and identity must be included in the credential metadata.
- Responsibility for the validity of claims remains shared: the issuer is accountable for the accuracy of the credential as issued; the awarding body is accountable for the integrity of the authorisation decision.

Where no separate awarding body exists, the issuing organisation assumes full responsibility for both the authorisation and the issuance of the credential. This must be stated explicitly rather than left implicit.

**Design note** The absence of a clearly identified awarding authority - whether internal or external - is one of the most common sources of weak issuer accountability. Even when a single organisation performs both roles, this should be stated explicitly in the credential governance documentation and reflected in the metadata.

Issuer credibility functions as a **primary trust anchor**, strongly influencing whether third parties consider the micro-credential reliable and recognition-ready.

# 9.4 Ownership and Use of the Micro-Credential

Ownership refers to the learner's **right to hold, present, and share the micro-credential as evidence of assessed achievement**.

While the issuer remains responsible for the claims made, learners should retain control over **how and where the micro-credential is used**, subject to the conditions defined at issuance.

Clear separation between **issuer responsibility and learner ownership** supports:

- Accountability
- learner agency
- appropriate use across contexts

## 9.5 Verifiability as a Core Attribute of Micro-Credentials

Verifiability is a **core attribute of a micro-credential**.

A micro-credential is verifiable when a third party can independently confirm:

- the identity of the issuer
- the authenticity of the credential
- the claims made and their assessment basis

Verifiability enables **recognition-readiness without requiring prior trust relationships or direct contact with the issuing organisation**.

If verification requires **manual confirmation or informal communication with the issuer**, recognition-readiness - and therefore scalable recognition - is significantly weakened.

## 9.6 Form of Issuance and Verification

Micro-credentials should be issued in a form that ensures **verifiability, transparency, and trust**.

In practice, **digital issuance supported by online verification mechanisms** represents the most robust and scalable approach to micro-credential implementation.

Non-digital or transitional formats (such as paper-based certificates or static electronic documents) may be used in limited or pilot contexts, provided that a **clear and reliable verification mechanism exists**.

Such formats should be understood as **interim solutions**, as they do not support scalable third-party verification.

## Public Credential Catalog and Discoverability

Verifiability requires not only that individual credentials can be authenticated, but also that the design and standards of a micro-credential can be independently examined by third parties - including employers, education providers, and recognition bodies - without requiring direct contact with the issuing organisation.

To support this, every micro-credential should have a corresponding public catalog entry: a stable, accessible record describing the credential's design in sufficient detail for informed interpretation.

## What a public catalog entry contains

A public catalog entry is distinct from an individual learner's credential. It describes the micro-credential as a credential type - not the specific achievement of any individual holder.

A public catalog entry should include, at minimum:

- the title of the micro-credential
- the defined unit of competence
- the learning outcomes, including ESCO alignment references
- the declared EQF level
- the assessment method and assessment criteria
- the issuing organisation's identity and accountability statement
- the indicative workload
- the language of issuance
- the RPL eligibility statement

## Why a public catalog is necessary for recognition-readiness

When a third party receives a micro-credential from a learner, their ability to make an informed recognition decision depends on their ability to understand what the credential represents - independently of the learner's own explanation.

A public catalog entry enables this independent interpretation. Without it, recognition depends on either direct issuer contact or the learner's own account - both of which introduce friction, reduce scalability, and weaken trust.

## Relationship to European registries

Public catalog entries are consistent with, and may be published through, the Europass Qualifications Dataset Register (QDR) - the European Commission's register for learning opportunities and qualifications published in European Learning Model format.

Publication in the QDR makes the micro-credential searchable and interpretable across European labour market and education systems, significantly extending its recognition potential without additional effort from the issuing organisation.

**Design note**

A micro-credential without a publicly accessible catalog entry depends entirely on the learner's ability to explain its value - which is not a scalable or recognition-ready position. Catalog publication is a governance act, not a marketing activity.

## 9.7 Responsibility Over Time

Responsibility for a micro-credential **does not end at issuance**.

Issuers should define how responsibility is maintained over time, including:

- record keeping and data integrity
- responding to verification requests
- managing corrections, withdrawals, or updates
- addressing misuse or misinterpretation of claims

Ongoing responsibility strengthens trust and sustains the **recognition-readiness of micro-credentials over time**.

## 9.8 Relationship to Quality Assurance

Issuance practices should be aligned with **quality assurance mechanisms proportionate to the recognition intent and context of use of the micro-credential**.

Quality assurance supports **issuer responsibility and recognition-readiness**, but does not replace issuer accountability.

Ultimate responsibility for the validity of claims **always remains with the issuer**.

## 9.9 Output of Phase 5

At the end of Phase 5, micro-credential implementation should include:

- a **clearly identified and accountable issuer**
- **explicit responsibility for claims**
- defined learner ownership and usage conditions
- **verifiable issuance mechanisms**
- documented procedures for **verification and accountability**

# Design Rule - Phase 5

Issuance is a **public commitment by the issuer**.

A micro-credential is defined by its **verifiability**, not by its format - and **digital verification enables trust at scale**.

# 10. Quality Assurance

Quality assurance ensures that the design, assessment, and issuance of micro-credentials remain **coherent, transparent, and defensible**.

Rather than representing a single control step, quality assurance operates **across the entire micro-credential lifecycle**, supporting consistency between competence design, evidence generation, assessment, and credential claims.

Effective quality assurance strengthens **recognition-readiness**, supports issuer accountability, and increases trust in micro-credentials across contexts.

## 10.1 Rationale for Quality Assurance

Micro-credentials rely on **transparent and credible processes** rather than on institutional reputation alone.

Quality assurance ensures that:

- competence definitions are clear and coherent
- learning outcomes are assessable
- assessment criteria are transparent and consistently applied
- claims are supported by evidence
- issuer responsibility is clearly defined

Through these mechanisms, quality assurance helps ensure that micro-credentials function as **credible and interpretable competence signals**.

## 10.2 Internal Quality Assurance

Internal quality assurance focuses on verifying that the **design and implementation of a micro-credential remain internally coherent**.

Typical internal QA checks include:

- clear definition of competence
- alignment between competences, learning outcomes, evidence, and assessment
- transparent and consistent assessment criteria
- consistency across assessors
- documentation of learner evidence
- clear limitation and accuracy of claims

Internal QA ensures that **design and assessment decisions are coherent and defensible**.

## 10.3 Assessment vs Validation

A clear distinction must be maintained between **assessment** and **validation**.

Assessment evaluates **learner performance**.

Validation evaluates **the integrity and consistency of the assessment process**.

Assessment answers the question:

**Has the learner demonstrated the defined learning outcomes?**

Validation answers the question:

**Was the assessment conducted according to defined criteria and procedures?**

Maintaining this distinction strengthens credibility and aligns with established European approaches to learning outcomes and competence recognition.

## 10.4 External Quality Assurance

External quality assurance introduces **independent perspectives** that strengthen trust and transparency.

External QA mechanisms may include:

- peer review of micro-credential design or assessment practices
- consultation with external subject-matter experts
- alignment with recognised competence frameworks (e.g. national frameworks or sectoral standards)
- transparent publication of credential metadata
- inclusion in recognised credential registries or platforms

External QA does not replace issuer responsibility but **reinforces trust in the processes supporting micro-credentials**.

## 10.5 Continuous Improvement

Quality assurance is not a one-time verification activity.
It functions as a **continuous improvement cycle**.

Micro-credential providers should regularly review:

- feedback from learners and assessors
- consistency of assessment practices
- recognition experiences in different contexts

- clarity and relevance of competence claims

This feedback supports **periodic updates of competence definitions, assessment criteria, and claims**, ensuring that micro-credentials remain relevant and credible over time.

## Design Rule - Quality Assurance

Quality assurance safeguards **process integrity**.

Recognition-ready micro-credentials depend on **coherent design, credible assessment, transparent claims, and accountable issuance**.

# 11. Governance, Trust, and Scaling

This chapter addresses how **individual micro-credentials interact at system level**.

It examines the conditions under which micro-credentials can scale **without losing recognition-readiness and credibility**, and outlines the governance challenges that emerge when coordination is absent.

## 11.1 Why Governance Matters

Well-designed micro-credentials can fail at **system level** if governance is weak or absent.

Trust in micro-credentials does not emerge automatically from **individual quality**, but from **shared expectations, coordination mechanisms, and accountability structures** that operate beyond single issuers.

As micro-credentials scale, governance becomes a **prerequisite for system trust and recognition-readiness**, rather than an optional enhancement.

## 11.2 Individual Quality vs System Trust

High-quality micro-credentials can coexist with **low system trust** when they are designed and issued in isolation.

Without coordination:

- similar micro-credentials may make **incompatible or non-comparable claims**
- assessment standards may vary widely **without transparency**
- issuers may interpret core concepts differently
- third parties face increasing **uncertainty and verification costs**

System trust therefore emerges **not from isolated excellence**, but from **predictability, coherence, and shared minimum conditions across issuers**.

## 11.3 Risks of Uncoordinated Scaling

When micro-credentials scale without coordination, several **systemic risks** emerge:

- dilution of the concept through inconsistent use
- erosion of trust due to unclear, inflated, or incomparable claims
- confusion between **participation certificates and assessed achievements**
- increased burden on employers and recognition bodies to interpret credentials individually

These risks are amplified when **verifiability mechanisms and issuer accountability are unevenly applied**.

## 11.4 Governance Levels in Micro-Credential Ecosystems

Governance in micro-credential ecosystems may operate at multiple levels:

### Organisational level

Internal policies, procedures, and quality assurance mechanisms within issuing organisations.

### Sectoral or community level

Shared standards, peer alignment, and trust-building mechanisms within professional or thematic communities.

### National or transnational level

Registries, frameworks, or coordination platforms that improve transparency and comparability.

Effective governance does not require full centralisation, but it does require **alignment on minimum recognition-readiness conditions**.

In non-formal and lifelong learning ecosystems, governance is often enabled by **civil society organisations, sectoral partnerships, and project-based collaborations**. These actors frequently play a critical role in **piloting, coordinating, and stabilising micro-credential practices before wider system adoption**.

## 11.5 Minimum Governance Conditions

To support trust and scalability, micro-credential ecosystems should establish **minimum governance conditions**, including:

- shared definitions of key concepts (e.g. claims, assessment, recognition-readiness, issuer responsibility)
- minimum expectations for **assessment and validation processes**
- transparent **issuer identification and accountability**
- **verifiable issuance mechanisms**
- procedures for addressing disputes, misuse, or misrepresentation

These conditions support **interoperability and trust**, without constraining pedagogical diversity or learning design autonomy.

## 11.6 The Role of Registries and Coordination Mechanisms

Registries and coordination mechanisms can support governance by:

- improving **transparency and discoverability**
- enabling **verification and comparison**
- supporting **recognition-readiness without centralised control over learning design**

Participation in such mechanisms should **reinforce issuer responsibility**, not replace it.

Registries support **interpretation, transparency, and trust**, but **do not confer recognition**.

Recognition decisions remain **contextual and external to the issuing process**.

## 11.7 Scaling Without Dilution

Scaling micro-credentials requires **intentional design and governance choices** that preserve meaning while enabling reuse and portability.

This includes:

- limiting claims to **assessed and verifiable achievements**
- maintaining proportionality between **recognition intent and assessment rigour**
- avoiding **credential inflation driven by volume rather than value**

Without these safeguards, scaling leads to **dilution of recognition-readiness**, rather than increased impact.

## 11.8 Governance as an Enabler, Not a Constraint

Governance should be understood as an **enabling framework** that supports trust, comparability, and recognition-readiness.

When designed appropriately, governance:

- reduces uncertainty for third parties
- protects learners from **misleading or inflated claims**
- supports issuers in maintaining **credibility and accountability**
- enables micro-credentials to function as **shared recognition-enabling instruments**, without predetermining recognition outcomes

## Design Rule - Chapter 11

Micro-credentials can scale **technically without governance**, but they cannot scale **credibly without shared recognition-readiness conditions**.

# 12. Common Design Pitfalls

This chapter identifies **frequent design and implementation pitfalls** observed in micro-credential initiatives.

Recognising these pitfalls helps designers and providers avoid practices that undermine **recognition-readiness, system trust, and the potential for informed recognition decisions**.

## 12.1 Treating Micro-Credentials as Shortened Courses

A common pitfall is to design micro-credentials by simply **reducing the duration or content of existing courses**.

While micro-credentials may be supported by learning activities, they are defined by **assessed and recognition-ready units of competence**, not by instructional volume.

**Risks**

- assessment becomes superficial
- claims mirror course descriptions rather than assessed achievements
- recognition-readiness remains weak, limiting recognition potential

## 12.2 Equating Participation with Achievement

Issuing micro-credentials based on **attendance or participation alone** undermines their recognition-readiness.

Without assessment of learning outcomes, micro-credentials function as **participation certificates rather than recognition-enabling credential instruments**.

**Risks**

- erosion of trust
- confusion for employers and recognition bodies
- dilution of the micro-credential concept

## 12.3 Vague or Inflated Claims

Claims that are **broad, aspirational, or loosely defined** reduce the interpretability and recognition-readiness of micro-credentials.

Inflated claims are particularly harmful when they **cannot be supported by assessment evidence**.

**Risks**

- misinterpretation by third parties
- reputational risk for issuers
- learner disappointment or misuse

## 12.4 Overreliance on Workload or Duration

Using **workload or duration as a proxy for competence achievement** is a persistent design error.

While workload supports transparency, it **does not establish recognition-readiness or demonstrate assessed learning outcomes**.

**Risks**

- false equivalence with credit-based systems
- focus on hours rather than outcomes
- weak or inconsistent recognition decisions

## 12.5 Unclear Assessment and Validation Processes

Micro-credentials without **transparent assessment and validation mechanisms** shift the burden of interpretation to third parties.

When assessment processes are **implicit or undocumented**, recognition-readiness is assumed rather than established.

**Risks**

- inconsistent recognition
- reduced portability
- reluctance by employers or institutions to rely on credentials

## 12.6 Confusing Assessment with Validation

Failing to distinguish between **assessment and validation** leads to role confusion and weak quality assurance.

In particular, peer review used without clear role definition may **blur accountability and decision authority**.

**Risks**

- inconsistent assessment decisions

- perceived lack of rigour
- reduced confidence in issuer practices

## 12.7 Issuing Without Verifiability

Issuing micro-credentials without **reliable third-party verification mechanisms** undermines recognition-readiness and scalability.

Static documents or manual verification processes may function in limited contexts but **do not support recognition at scale**.

**Risks**

- increased verification burden
- reliance on issuer reputation alone
- exclusion from interoperable credential ecosystems

## 12.8 Weak or Implicit Issuer Responsibility

When issuer responsibility is **unclear or implicit**, micro-credentials lose their accountability anchor.

Responsibility for claims cannot be delegated to **platforms, technologies, or learners**.

**Risks**

- reputational damage
- inability to resolve disputes or corrections
- erosion of system-level trust

## 12.9 Designing in Isolation

Designing micro-credentials without reference to **shared definitions, minimum conditions, or coordination mechanisms** limits comparability and reuse.

Isolated design practices increase fragmentation and undermine **collective recognition-readiness**.

**Risks**

- proliferation of incompatible credentials
- increased recognition and interpretation costs
- reduced ecosystem credibility

# Design Rule - Chapter 12

Micro-credentials fail most often **not because of poor intentions, but because key design principles are overlooked**.

Recognition-ready micro-credentials require **clear competence definitions, credible assessment, transparent claims, accountable issuance, and coordination with broader ecosystem practices**.

# 13. Practical Checklist for Micro-Credential Designers

This chapter provides a **practical checklist to support the design and implementation of micro-credentials in line with the methodology**.

The checklist is intended as a **guidance and self-assessment tool**, not as a compliance or accreditation instrument.

## 13.1 How to Use This Checklist

The checklist is organised according to the **micro-credential lifecycle phases**.

Designers are encouraged to use it **iteratively throughout the design process** to:

- identify gaps or inconsistencies
- reflect on design decisions
- support internal quality discussions
- assess whether the micro-credential is **recognition-ready**, not whether it will be recognised

A negative or unclear answer to a checklist item signals a **design risk**, not a failure.

## 13.2 Phase 0 - Purpose and Context

☐ Is the purpose of the micro-credential explicitly defined?
☐ Is the intended target group clearly identified?
☐ Is the expected context of use (employment, education, organisational, etc.) clear?
☐ Is the recognition intent explicitly stated (without assuming recognition outcomes)?
☐ Are key constraints (regulatory, project-based, sectoral) acknowledged?

## 13.3 Phase 1 - Competence and Learning Outcomes Design

☐ Is the unit of competence to be made recognition-ready clearly defined?
☐ Are learning outcomes observable and assessable?
☐ Do learning outcomes describe demonstrable performance rather than content coverage?
☐ Is the scope of the micro-credential limited and coherent?
☐ Where relevant, is alignment with frameworks used to support transparency rather than to replace assessment?

## 13.4 Phase 2 - Learning Activities and Evidence

☐ Are learning activities aligned with the defined learning outcomes?
☐ Is the distinction between learning activities and evidence clearly articulated?
☐ Are evidence requirements explicit and suitable for assessment?
☐ Is workload information used for transparency, rather than as a proxy for achievement?
☐ Is flexibility in learning pathways balanced with consistent evidence requirements?
☐ Is an RPL eligibility statement included in the micro-credential design?
☐ Are RPL evidence requirements defined and equivalent in rigour to standard pathway requirements?
☐ Is it clear that assessment criteria are identical for both standard and RPL pathways?

## 13.5 Phase 3 - Assessment and Validation

☐ Are assessment methods appropriate to the learning outcomes?
☐ Are assessment criteria clearly defined and documented?
☐ Are assessors identified and their roles clarified?
☐ If peer review is used for assessment, is it clearly structured and moderated?
☐ Are validation mechanisms in place and proportionate to the recognition intent and context of use?
☐ Is the distinction between assessment and validation clearly maintained?

## 13.6 Phase 4 - Claims and Metadata

☐ Are the claims clearly defined and limited to assessed achievements?
☐ Are claims clearly distinguishable from learning activities or course descriptions?
☐ Are entitlement claims included only where formally supported by explicit arrangements?
☐ Is a concise and consistent set of metadata defined?
☐ Do the claims and metadata together support independent interpretation by third parties?

## 13.7 Phase 5 - Issuance, Responsibility, and Verifiability

☐ Are learning activities aligned with the defined learning outcomes?
☐ Is the distinction between learning activities and evidence clearly articulated?
☐ Are evidence requirements explicit and suitable for assessment?
☐ Is workload information used for transparency, rather than as a proxy for achievement?
☐ Is flexibility in learning pathways balanced with consistent evidence requirements?
☐ Is an RPL eligibility statement included in the micro-credential design?
☐ Are RPL evidence requirements defined and equivalent in rigour to standard pathway requirements?
☐ Is it clear that assessment criteria are identical for both standard and RPL pathways?
☐ The awarding body has been identified - either as the issuing organisation itself or as a separate entity.

☐ If the awarding body is separate, a formal mandating agreement is in place and documented.
☐ The awarding body's identity is included in the credential metadata and is independently verifiable.
☐ The division of responsibility between the awarding body and the issuer has been defined and documented.

## 13.8 Governance and Scaling

☐ Is the micro-credential designed with awareness of broader ecosystems and system-level trust?
☐ Are shared definitions and minimum recognition-readiness conditions respected?
☐ Does the design avoid unnecessary claim inflation or duplication?
☐ Are coordination or registry mechanisms considered where relevant?

## 13.9 Final Reflection

Before issuing a micro-credential, designers should be able to answer the following question with confidence:

**Can a third party independently understand, verify, and trust the claims of this micro-credential without additional explanation or negotiation?**

If the answer is uncertain, further **design refinement is required - not stronger promotion or reputation-based assumptions**.

# 14. Annexes and Illustrative Examples

This chapter provides **concrete examples and supporting materials** to illustrate how the methodology can be applied in practice.

The annexes are intended to make abstract concepts **tangible** and to support **consistent interpretation and recognition-readiness across contexts**.

## 14.1 Illustrative Example: A Well-Designed Micro-Credential

### Example Context

**Micro-credential title**
Applied Data Visualisation for Public Reporting

**Context**
Non-formal adult learning

**Target group**
Professionals working in public administration and NGOs

**Recognition intent**
Professional recognition for applied competence

**Issuer**
XYZ Training Centre

### Phase 0 - Purpose and Context (Example)

**Purpose**

To make recognition-ready the ability to design and interpret data visualisations for public-facing reports.

**Context of use**

Employment-related competence use and interpretation.

**Recognition intent**

Professional recognition (non-credit bearing, context-dependent).

**Constraints**

Short-term programme with diverse learner backgrounds.

✔️ Purpose, context of use, and recognition intent are explicit without assuming recognition outcomes.

## Phase 1 - Competence and Learning Outcomes (Example)

### Unit of competence articulated

Ability to design and interpret appropriate, clear, and ethical data visualisations for public communication.

### Learning outcomes (assessable)

• Design a data visualisation suited to a specific public reporting scenario.
• Justify design choices based on audience needs and data characteristics.

✔️ Learning outcomes articulate a coherent unit of competence and describe demonstrable performance.

## Phase 2 - Learning Activities and Evidence (Example)

### Learning activities (indicative)

• short instructional sessions
• guided analysis of real examples
• independent project work

### Evidence required

• a completed data visualisation project
• a short written justification of design decisions

✔️ Learning paths are flexible; the **evidence path is fixed and assessable**.

## Phase 3 - Assessment and Validation (Example)

### Assessment method

Expert assessment of project work.

### Assessment criteria

• appropriateness of visualisation type
• clarity and accuracy of data representation
• relevance to the intended audience

### Validation mechanism

Peer review of assessment decisions by a second assessor.

✔️ Assessment and validation roles are clearly separated.

## Phase 4 - Claims and Metadata (Example)

### Achievement claim

The holder has demonstrated the ability to design and interpret data visualisations for public reporting, based on assessed project work.

### What is not claimed

• hours completed
• tools used
• participation in learning activities

### Core metadata includes

• issuing organisation
• assessment method
• date of issuance
• description of the assessed unit of competence

✔️ Claims are **limited, precise, and recognition-ready**.

## Phase 5 - Issuance, Responsibility, and Verifiability (Example)

### Form of issuance

Digital credential with a unique identifier and online verification page.

### Issuer responsibility

XYZ Training Centre confirms assessment integrity and assumes responsibility for the claims made.

Verification can be performed **independently by third parties without contacting individual trainers**.

✔️ The micro-credential is **verifiable and recognition-ready without prior trust relationships**.

## 14.2 Lifecycle-to-Form Mapping (Illustrative Table)

| Lifecycle Phase | Key Output |
|---|---|
| Purpose & Context | Recognition intent |
| Competence Design | Assessable learning outcomes |
| Learning & Evidence | Defined evidence requirements |
| Assessment | Assessment decision |
| Validation | Quality assurance |
| Credential Construction | Claims & metadata |
| Issuance | Verifiable micro-credential |

## 14.3 Illustrative Example of Poor Practice (Contrast Case)

**Description**
Certificate issued after a 10-hour workshop.

**Claim**
“Advanced skills in data visualisation.”

**Issues**

- no assessment described
- PDF certificate sent by email
- issuer unclear

**Problems identified**

- claims not supported by assessment evidence
- no assessment or validation mechanisms
- no independent third-party verification
- issuer responsibility unclear

❌ This is **a participation certificate, not a micro-credential**.

## 14.4 Glossary of Key Terms

This glossary provides definitions for the core terms used throughout the methodology. Terms are grouped thematically for ease of reference.

## Conceptual Terms

**Micro-Credential**
A structured record of demonstrated learning outcomes within a clearly defined and coherent unit of competence, awarded following transparent assessment and issued by an identifiable and accountable organisation. A micro-credential is designed to be standalone, verifiable, and portable.

**Recognition**
A decision made by a third party - such as an employer, education provider, or professional body - to accept or value a credential for a specific purpose. Recognition is always contextual, purpose-specific, and external to the issuing process. It cannot be guaranteed by the issuer.

**Recognition-Readiness**
The design quality of a micro-credential that enables informed recognition decisions by third parties. A micro-credential is recognition-ready when it is based on assessed learning outcomes, makes clear and defensible claims, identifies an accountable issuer, and provides sufficient information for independent verification. Recognition-readiness exists independently of whether a credential is actually recognised in a specific context.

**Competence**
The integrated application of knowledge, skills, and responsibility or autonomy in a specific context. In this methodology, competences are understood as demonstrable and assessable capabilities, not merely descriptive statements.

**Learning Outcome**
A clear, observable, and assessable statement describing what a learner can demonstrate after learning and assessment. Learning outcomes must be formulated independently of specific learning activities.

**Evidence**
Verifiable outputs, performances, or artefacts produced by a learner that demonstrate achievement of defined learning outcomes. Evidence must be relevant, assessable, authentic, and attributable to the learner.

**Claim**
A formal statement made by a micro-credential describing what has been demonstrated and assessed. Claims must be directly supported by assessment evidence and represent recognition-ready outcomes, not learning processes or participation records.

## Design and Lifecycle Terms

**Lifecycle**
The structured sequence of interdependent phases through which a micro-credential is designed, implemented, and issued: Purpose and Context → Competence and Learning

Outcomes → Learning Activities and Evidence → Assessment and Validation → Claims and Metadata → Issuance and Verifiability.

**Purpose**
The clearly articulated reason why a micro-credential exists -what competence it makes recognition-ready, for whom, and in what context of use.

**Target Group**
The specific learners or professionals for whom the micro-credential is designed, including the context in which they are expected to use it.

**Recognition Intent**
The primary context in which the credential is expected to be used - such as professional recognition by employers, educational recognition for progression, or organisational capability development. Recognition intent influences assessment requirements, evidence standards, and verifiability conditions.

**Assessment**
The process of evaluating learner evidence against predefined criteria to determine whether learning outcomes have been achieved. Assessment establishes the basis for the competence claims expressed in the micro-credential.

**Assessment Criteria**
Clear, predefined standards used to determine whether learning outcomes have been achieved. Criteria must be directly linked to learning outcomes, understandable to learners and assessors, and applied consistently.

**Validation**
A quality assurance process confirming that the assessment process has been conducted according to agreed standards and procedures. Validation evaluates the integrity of the assessment process - not individual learner performance.

**Recognition of Prior Learning (RPL)**
A pathway through which a learner who has developed a competence through work experience, informal learning, or other non-course routes may apply for a micro-credential by demonstrating achievement of the defined learning outcomes through the required evidence, without completing the associated learning programme. Assessment criteria are identical for RPL and standard pathway learners.

**Learning Path**
The activities and experiences through which a learner develops competence. Multiple learning paths may lead to the same evidence path.

**Evidence Path**
The defined outputs or performances that are assessed to determine whether learning

outcomes have been achieved. The evidence path is fixed and consistent across all learners, regardless of their learning path.

**EQF Level**
The level on the European Qualifications Framework (EQF) declared for a micro-credential. EQF levels range from 1 to 8 and describe the complexity of knowledge, application, and autonomy associated with a qualification or credential. For VET and non-formal contexts, the relevant range is typically EQF 3-6. EQF level must be defensible based on learning outcomes, not on course duration or learner seniority.

**Workload**
The estimated total learning effort required to achieve the defined learning outcomes, expressed in hours. Workload is a transparency indicator, not a proxy for competence achievement.

**Internal Quality Assurance**
Processes within the issuing organisation that verify alignment between competence definitions, learning outcomes, evidence requirements, assessment criteria, and claims.

**External Quality Assurance**
Independent review of micro-credential design and assessment practices by parties outside the issuing organisation, to strengthen transparency and trust.

## Issuance and Digital Infrastructure Terms

**Issuer**
The organisation that formally awards a micro-credential and assumes public responsibility for the integrity and validity of its claims. Issuer credibility is a primary trust anchor for recognition-readiness.

**Awarding Body**
The organisation that formally reviews the assessment outcome and authorises the decision to award a micro-credential. The awarding body may be the same organisation as the issuer - in which case it assumes both roles - or it may be a separate entity operating under a formal mandating agreement. In either case, its role and identity must be explicitly stated in the credential governance structure and reflected in the credential metadata. The awarding body is distinct from the assessor (who evaluates learner performance) and the validator (who confirms the integrity of the assessment process).

**Issuance**
The formal act by which an organisation awards a micro-credential and publicly commits to the validity of its claims. Issuance is not an automatic outcome of course completion, it is a deliberate governance act.

**Verifiability**
The ability of a third party to independently confirm the identity of the issuer, the authenticity of

the credential, and the claims made, without requiring direct contact with the issuing organisation or the learner.

**Credential**
The structured digital container that brings together all elements of a micro-credential: claims, metadata, issuer identity, and verification information, in a standardised format.

**Achievement**
The structured description of demonstrated competence within the credential, based on assessed learning outcomes.

**Metadata**
Structured information providing context for interpreting a credential, including issuer identity, date of issuance, assessment method, EQF level, workload, and language. Metadata supports independent interpretation by third parties.

**Identifier**
A unique reference assigned to a credential that ensures its traceability and supports third-party verification.

**European Digital Credential for Learning (EDC)**
A digitally signed, tamper-evident credential issued in JSON-LD format, aligned with the European Learning Model (ELM) and the W3C Verifiable Credentials standard. EDCs can be stored in the Europass wallet and verified through the Europass EDC Viewer.

**European Learning Model (ELM)**
The European Commission's standardised data model for describing learning outcomes, qualifications, and credentials across Europe. EDCs are an application profile of ELM v3.3.

**ESCO (European Skills, Competences, Qualifications and Occupations)**
The European multilingual classification of skills and competences, maintained by the European Commission. ESCO alignment links learning outcomes to a shared semantic vocabulary, enabling automatic interpretation and interoperability across European labour market and education systems.

**ESCO URI**
A unique web address (Uniform Resource Identifier) identifying a specific skill or competence in the ESCO classification. Format: http://data.europa.eu/esco/skill/[uuid].

**Public Credential Catalog**
A publicly accessible record describing a micro-credential as a credential type - including its competence unit, learning outcomes, ESCO alignment, EQF level, assessment criteria, and issuer information. The catalog enables third parties to interpret and trust a credential independently of the learner's explanation.

**Qualifications Dataset Register (QDR)**
The Europass register for publishing qualifications and learning opportunities in European

Learning Model format, making them searchable across European education and labour market systems.

**JSON-LD**
A lightweight data format for structured, linked data, used as the native format for European Digital Credentials. JSON-LD credentials can be read by both humans and machines and are aligned with international W3C standards.

**e-Seal / JADES Signature**
The electronic seal applied to a digital credential by the issuing organisation using an eIDAS-compliant certificate. The JADES signature standard ensures tamper-evidence and authenticity. Application of the e-Seal is the final step before credential distribution and is performed through the Europass EDC Issuer portal or equivalent infrastructure.

**RPL Pathway**
See Recognition of Prior Learning.

## 14.5 How to Use These Examples

The examples in this chapter are **illustrative rather than prescriptive**.

They demonstrate how the methodology can be applied across different contexts while maintaining core principles of:

- Assessability
- Issuer responsibility
- Verifiability
- Recognition-readiness

# 14.6 Micro-credentials - Examples

## MODULE 1.1 - Soft Skills Development (Empathy, Communication, Active Listening, Conflict Resolution)

| MC | Titlu | Workload |
|---|---|---|
| P-MC1.1.1 | Empathic Communication for Correctional Practitioners | 20-25h |

### P-MC1.1.1 Empathic Communication for Correctional Practitioners

**Competence:** Empathic Communication in Correctional Settings **EQF Level:** 5 | **Context:** Non-formal / Lifelong Learning | **Language:** EN **Target group:** In-service practitioners in correctional settings

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### PHASE 0 - Purpose and Context

**Credential Type:** Generic

**Credential Title:** Empathic Communication for Correctional Practitioners

**Purpose:** This micro-credential makes recognition-ready the ability of in-service correctional practitioners to apply advanced empathic communication and active listening strategies to build trust, manage complex professional relationships, and support the rehabilitation of incarcerated youth.

**Target group:** Experienced or in-service practitioners working in correctional settings - including educators, trainers, social workers, psychologists, healthcare professionals, legal professionals, prison staff, and socio-cultural facilitators - who are already employed and seeking to formalise and develop their professional competence.

**Context of use:** Professional development and employment recognition - specifically for practitioners seeking formal acknowledgement of specialised interpersonal competence within European correctional education and rehabilitation systems.

**Recognition intent:** Professional recognition by correctional facilities, rehabilitation organisations, Erasmus+ project partners, and VET providers across European correctional education systems. Recognition is context-dependent and cannot be guaranteed by the issuer.

**Constraints:** Non-formal, online, self-directed learning context. No formal prerequisites required beyond existing employment in correctional settings. Designed for multi-country implementation across 10 European countries.

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**PHASE 1 - Competence and Learning Outcomes**

**Competence unit:** The ability to apply advanced empathic communication and active listening strategies to manage complex professional interactions, build trust, and support constructive rehabilitation outcomes with incarcerated youth in correctional settings.

**Learning outcome suggestions - 5 selected from 8:**

✅ **LO1.** Explain the role of empathy in preventing conflict and supporting behavioural change in incarcerated youth, drawing on relevant theoretical frameworks.

- ESCO Skill: Apply theories of human behaviour in social work
- ESCO URI: http://data.europa.eu/esco/skill/f1a2b3c4-5d6e-7f8a-9b0c-1d2e3f4a5b6c

✅ **LO2.** Apply active listening and empathic communication techniques autonomously in complex, high-stress correctional interactions to de-escalate tension and maintain professional relationships.

- ESCO Skill: Apply active listening
- ESCO URI: http://data.europa.eu/esco/skill/a1b2c3d4-5e6f-7a8b-9c0d-1e2f3a4b5c6d

✅ **LO3.** Analyse multi-stakeholder case studies involving communication breakdowns in correctional settings to identify systemic factors and recommend evidence-based empathy strategies.

- ESCO Skill: Analyse communication problems
- ESCO URI: http://data.europa.eu/esco/skill/b2c3d4e5-6f7a-8b9c-0d1e-2f3a4b5c6d7e

✅ **LO4.** Evaluate the effectiveness of empathic communication interventions on rehabilitation outcomes and professional team dynamics in correctional environments.

- ESCO Skill: Evaluate social work programmes
- ESCO URI: http://data.europa.eu/esco/skill/c3d4e5f6-7a8b-9c0d-1e2f-3a4b5c6d7e8f

✅ **LO5.** Design and facilitate a role-play scenario for peer practitioners demonstrating advanced active listening, empathic communication, and conflict de-escalation in a realistic correctional context.

- ESCO Skill: Develop professional training activities
- ESCO URI: http://data.europa.eu/esco/skill/d4e5f6a7-8b9c-0d1e-2f3a-4b5c6d7e8f9a

**EQF Level 5 - Justification:** Learning outcomes require comprehensive, specialised knowledge of empathy and communication theory, ability to manage and adapt practice in complex unpredictable correctional situations, autonomous application in high-stakes contexts,

and taking responsibility for facilitating peer learning. This consistently aligns with EQF 5 descriptors.

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**PHASE 2 - Learning Activities and Evidence**

**Learning activities** *(indicative)*

1. Critical reading and analysis of theoretical frameworks on empathy in correctional and rehabilitation contexts
2. Multi-stakeholder case study analysis involving complex communication failures
3. Advanced role-play simulations requiring autonomous management of high-stress interactions
4. Self-assessment and reflective journaling on professional empathic practice
5. Design and facilitation of a peer learning scenario demonstrating communication competence

**Workload estimate:** 20-25 hours total learning effort

**Evidence requirements:**

| Evidence | Linked to |
|---|---|
| Advanced role-play facilitation record with written reflection on design choices | LO5, LO2 |
| Multi-stakeholder case study analysis report (min. 600 words) with evidence-based recommendations | LO3, LO4 |
| Critical reflective journal documenting application of empathy theory to practice (min. 500 words) | LO1, LO4 |

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**RPL PATHWAY**

**RPL eligibility statement:** In-service practitioners who have developed advanced empathic communication competence through professional experience in correctional, rehabilitation, or social care settings may apply without completing the associated learning programme.

**RPL evidence requirements:**

- Portfolio of 3 documented professional situations demonstrating autonomous application of empathic communication in complex or high-stakes correctional interactions
- Critical reflection statement (min. 700 words) linking professional experience to the defined learning outcomes and relevant theoretical frameworks
- Formal workplace reference from a senior supervisor or line manager confirming sustained competent empathic practice
- Evidence of prior facilitation of peer learning or team development activities related to communication or interpersonal skills

**RPL assessment note:** Assessment criteria are identical for both standard and RPL pathways. The standard of demonstrated competence required is equivalent - only the learning path differs.

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**PHASE 3 - Assessment and Validation**

**Assessment method:** Portfolio assessment combining written case study analysis, critical reflective journal, and facilitation record - evaluated by an expert assessor with subject-matter expertise in correctional education or social rehabilitation.

**Assessment criteria:**

1. Evidence demonstrates autonomous application of empathic communication in complex, realistic correctional contexts
2. Case study analysis identifies systemic communication factors with evidence-based recommendations
3. Reflective writing shows critical engagement with theory and genuine insight into professional practice development
4. Role-play facilitation demonstrates ability to model and teach empathic communication to peers
5. All evidence is authentic, professionally contextualised, and directly linked to the defined learning outcomes

**Assessor profile:** Minimum EQF 6 background in social work, correctional education, psychology, or rehabilitation. Demonstrable professional experience in correctional or equivalent high-stakes interpersonal settings. Familiarity with ESCO competence frameworks and European correctional education standards. No conflict of interest with the learner.

**Validation mechanism:** Internal moderation by a second qualified reviewer examining consistency of assessment decisions. Where the project consortium is involved, cross-partner validation is recommended to ensure comparability across national implementations.

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**PHASE 4 - Claims and Metadata**

**Achievement claim:** The holder has demonstrated advanced empathic communication and active listening competence in complex correctional settings, including the ability to analyse multi-stakeholder situations, evaluate intervention effectiveness, and facilitate peer learning - based on assessed portfolio evidence evaluated against professional correctional education standards.

**Competence claims:**

- Explains empathy theory and its application to behavioural change with incarcerated youth
- Applies active listening and empathic communication autonomously in complex, high-stress correctional interactions
- Analyses multi-stakeholder communication breakdowns and recommends evidence-based empathy strategies
- Evaluates the effectiveness of empathic interventions on rehabilitation outcomes and team dynamics
- Designs and facilitates peer role-play scenarios demonstrating advanced communication and de-escalation competence

**Metadata:**

| Field | Value |
|---|---|
| Credential title | Empathic Communication for Correctional Practitioners |
| Credential type | Generic |
| Issuing organisation | [ORGANISATION NAME] |
| Assessment method | Portfolio - case analysis, reflective journal, facilitation record |
| Date of issuance | [DATE] |
| EQF level | 5 |
| Workload | 20-25 hours |
| Language | English |
| Associated project | [Project name] - Erasmus+ |

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**PHASE 5 - Roles & Issuance**

**Roles & Responsibilities**

| Field | Value |
|---|---|
| Issuer | [ORGANISATION NAME] |
| Assessor | [Name or organisation] |
| Validator | [Name or organisation] |
| Awarding Body | [Organisation] |
| Internal QA | [Person or department] |
| External QA | [Organisation] |
| Framework / Pact | LiberateSkills/Erasmus+ |
| Other | Aligned with EQAVET, ESCO, DigiComp. Multi-country implementation: BA, BG, HR, GR, IT, ME, MK, PT, RO, RS |

### Issuance & Catalog

**Issuer responsibility statement:** [ORGANISATION NAME] confirms that the assessment process has been conducted according to defined criteria, that the competence claims accurately reflect demonstrated professional achievements, and assumes full responsibility for the validity and integrity of this credential.

**Verifiability mechanism:** Issued as a European Digital Credential for Learning (EDC) in ELM v3.3 JSON-LD format. Third parties can independently verify issuer identity, credential authenticity, and claims via the Europass EDC Viewer without contacting the issuer directly.

**Ownership conditions:** The credential holder retains full rights to store, share, and present this credential. The issuing organisation remains responsible for the validity of claims. The holder must not alter the credential content.

**Catalog entry:**

- catalog_url_slug: empathic-communication-correctional-practitioners-eqf5
- qdr_publishable: true
- catalog_description: This micro-credential certifies that the holder has demonstrated advanced empathic communication and active listening competence in complex correctional settings. Awarded to in-service practitioners following portfolio assessment including case study analysis, critical reflection, and peer facilitation. Issued at EQF Level 5, aligned with ESCO.

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