# Updates on the European Digital Credentials for Learning and the European Learning Model

Building Trusted Digital Infrastructures in Education

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# Why a European Year of Skills?

## To further promote a mindset of reskilling and upskilling

**Investment**
Increased, more effective and inclusive investment

**Skills relevance**
Strengthening skills relevance by close cooperation

**Matching aspirations**
Matching people's aspirations and skills-set with labour market opportunities

**Attracting third country talent**
Attracting people from third countries with the skills needed

EUROPEAN YEAR OF SKILLS

# Some figures on skills shortages

**42 occupations** were classified as having **shortages** in 2023

**77%** of companies **struggled to find employees** with the required skills in 2019

**adult learning** participation rate remains **low, around 37%**

**over 90% of jobs** require digital skills, however **54% of the adult** population in Europe has **basic digital skills**

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EDC & ELM

# Central to the EU's Policy Agenda
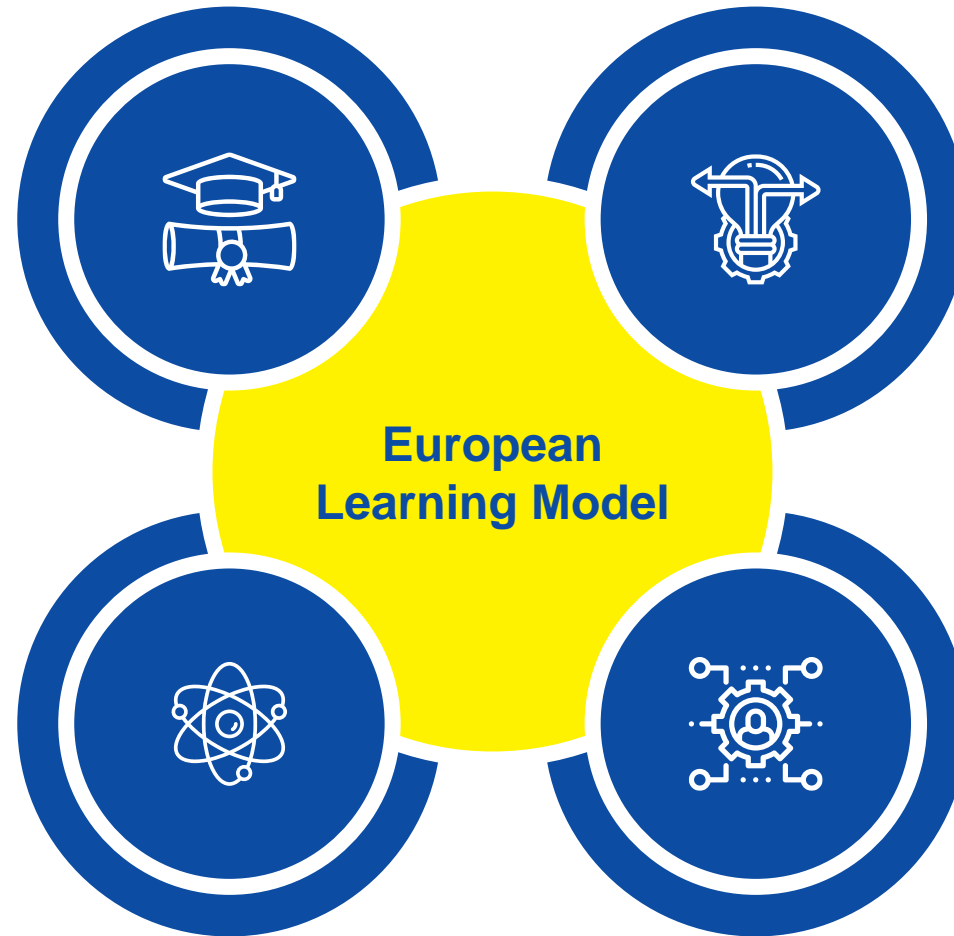
Micro-Credentials Recommendation

Individual Learning Accounts Recommendation

Europass Decision

**European Learning Model**

EQF Recommendation

European Data Strategy

European Skills Agenda

Digital Education Action Plan and Achieving the European Education Area (2025)

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# The Development of the European Learning Model

- One of the key sources of ELM is the **EQF Recommendation**:

  - Annex VI: "Elements of data fields for the electronic publication of information on qualifications with an EQF level"

  - Recital 24: "…The use of common data structures and formats would …. facilitate the understanding and use of published information on qualifications"

- The **Council Recommendation on a European approach to micro-credentials** for lifelong learning and employability:

  - Recommendation 6: "Member States are recommended to adopt and promote the use of the European standard elements to describe a micro-credential (as described in Annex I)

  - Annex I: "European standard elements to describe a micro-credential"

**ANNEX VI**

**Elements for data fields for the electronic publication of information on qualifications with an EQF level**

| DATA | | | Required/Optional |
|---|---|---|---|
| Title of the qualification | | | Required |
| Field ($^{*1}$) | | | Required |
| Country/Region (code) | | | Required |
| EQF Level | | | Required |
| Description of the qualification ($^{*3}$) | Either | Knowledge | Required |
| | | Skills | Required |
| | | Responsibility and autonomy | Required |
| | Or | Open text field describing what the learner is expected to know, understand and able to do | Required |

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# Why does Europe need a European Learning Model?

| OBJECTIVES | BENEFITS |
|---|---|
| • Semantic Standards for Learning<br><br>• Standardised expression of verifiable knowledge & skills<br><br>• Multilingual (available in 29 languages)<br><br>• Remove barriers to recognition, supporting free movement<br><br>• Provide accreditation & transparency tools<br><br>• Reduce market fragmentation | • Captures formal, non-formal & informal learning<br><br>• Addresses all levels of education and training<br><br>• Applicable to the whole course lifecycle<br><br>• Interoperable credentials<br><br>• Aligned with European recognition instruments<br><br>• Free & open source |

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# Transparency and Portability



**487 properties** describe

- Credential owner
- Organisations
- Achievements
- Activities
- Assessments
- Entitlements

# European Learning Model

**01 European Information Model**

Definitions and Standards in EQF and Micro-Credentials Recommendations, Diploma Supplement, Europass Decision, etc. supplemented by glossaries for additional terms

**03 Application Profiles**

Specific sets of rules for publishing learning opportunities, qualifications, accreditations and credentials in Europass
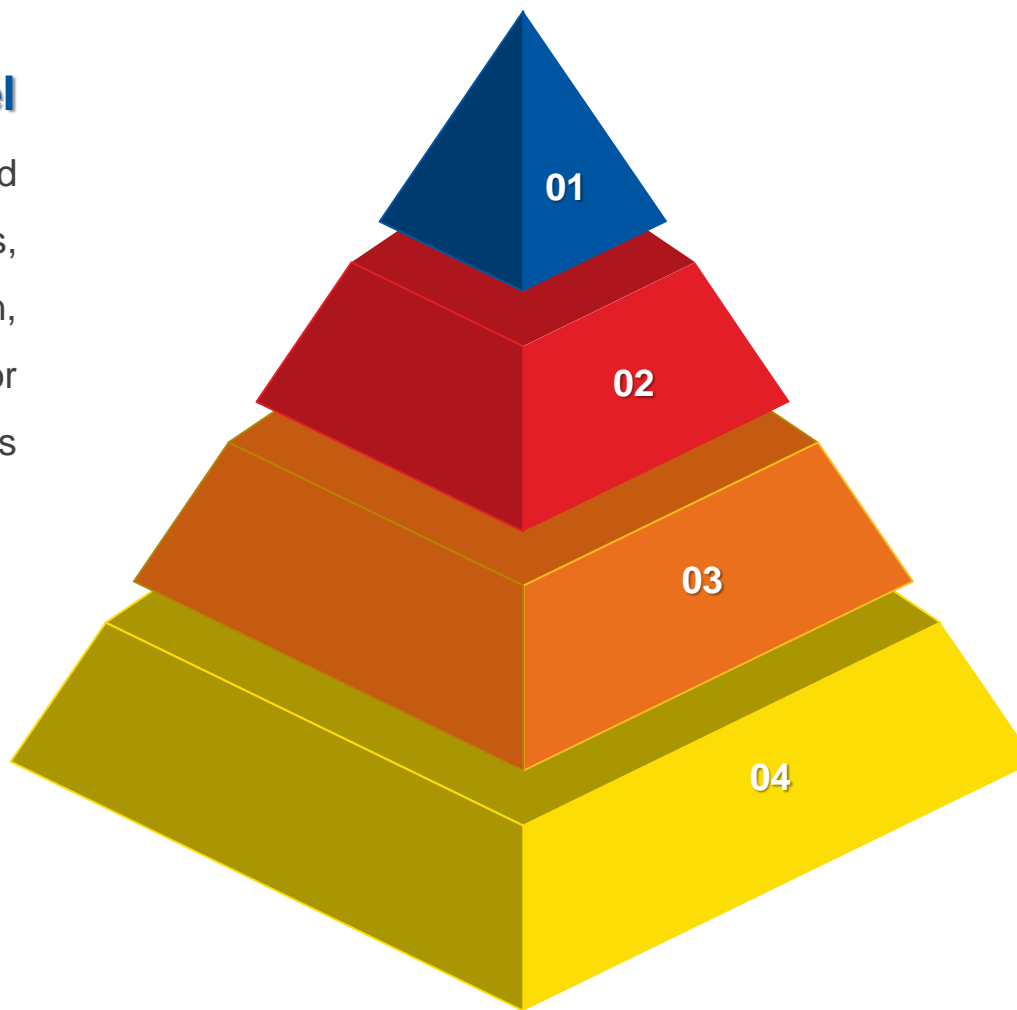
**02 European Learning Model**

A Linked Open Data publication of concepts to be used in educational and employment use cases throughout Europe

**04 Extensions**

National, Regional or Sectoral extensions of the data model & application profiles to deal with specific use cases

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# The ELM browser

**A data model browser**

For the visualisation of the properties of the ELM

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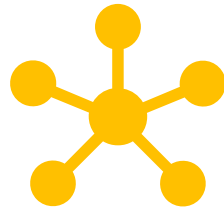
**Available since July 2023**

In English

Multilingual version upcoming

**Different application profiles**

Learning Opportunities and Qualifications (LOQ)

Accreditations (AMS)

European Digital Credentials for Learning (EDC)

Person Identity (PID)

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# European Learning Model + ELMO

- ELM is **strongly inspired** by the lessons and experiences of ELMO and the EMREX community

- ELM takes these concepts and applies them to all levels of lifelong learning, including non-formal and informal learning

- The ELM v.3 is 100% compatible with ELMO

  - every field in ELMO is expressible as ELM

  - will allow for ELMO $\rightarrow$ ELM conversion

  - the final version of ELM has been validated with ELMO community before publication

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# What is offered by the European Digital Credential for Learning infrastructure?

**Start with web-based free tools**

Adopt custom-built implementation with open-source code

**BUILD** → **ISSUE** → **STORE** → **VERIFY** → **SHARE**

credential templates in the Online Builder

Seal and award credentials to owners

credentials securely in one wallet

credential's authenticity and validity

credential information with one click

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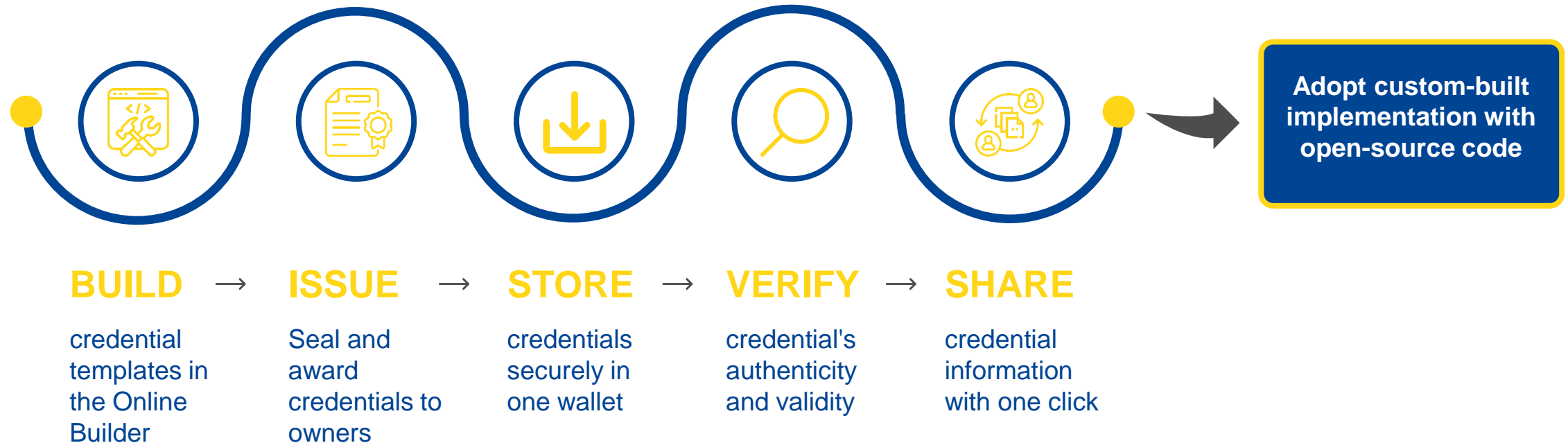
# EDC

## ✓ A new function : Issuance of accredited credentials

An additional layer of verification on top of the e-seal
By linking credential template to a specific accreditation in the Online Credential Builder (OCB)



## ✓ Other Improvements

**Online Credential Builder**

✓ Details from the issuing organisation only come from the electronic seal

✓ Viewing credential recipient data fields

✓ General visualisation improvements

**Credential visualization**

✓ Organisation fields harmonisation

✓ Issuing date in the viewer

✓ Improved downloadable unsigned credentials (JSON files)

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# EDC signature

**Qualified e-seal**

*Highest level of security*

*High requirements in terms of electronic sealing.*

**Advanced e-Seal**

*Lower level of automatic recognition but still very high level of security*

*To be used to seal and sign EDCs as a default option*

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**➕ Advantages**

No need for additional software

Reduced need to contact the ELM support helpdesk

**➕ New use cases**

**Simplified sealing process** (issuer to store e-seal in Online Credential Builder profile)

One time entering of **password** when issuing a batch of credentials

Processing of a **higher number** of credentials per batch (no limit on the number or size of credentials)

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# Supporting Recognition

- **Verify the origin**: eSeals provide trust in origin

- **Structured data**: A single way of providing data. Improve the understanding of information and interoperability through the use of a single datamodel for learning related information (European Learning Model)

- **Multilingual by default**: Provide and navigate content in 29 different languages

- **Interoperability**: Aligned with existing frameworks (EQF/NQF, ISCED-F, ESCO micro-credentials recommendation, etc)

- **Accreditation**: Instantly verify whether an institution is accredited to award a certain qualification

# EDC Adoption

- CertiDigital, a **Spanish** nation-wide initiative in **HE**, building on ELM, and EBSI and EDC technology

- "Digital **Luxembourg**" strategy

- XBildung towards **German** implementation of digital credentials, using ELM

- **Italian regions** are exploring large scale implementation

- **Irish** Micro-Credential initiative by QQI and Nano-Credentials implemented by Kinia

- **Czech** national Micro-Credential initiative

- Malta is piloting the issue of **digital degrees** and **transcripts of records**

- The **European** Consortium of Innovative Universities (ECIU) is issuing Micro-Credentials in EDC format

- **SEPIE** is scaling up EDC issuance to their trainees and event participants

- **EIT Innoenergy** is preparing to issue EDCs referencing green skills

# EDC next steps

**Finalising the EDC infrastructure**

- Archiving function

- Revocation

- Recognition statement

**EDC–EBSI integration**

**EU level templates**

- Europass Mobility

- Europass Diploma Supplement

- Europass Certificate Supplement

- Youthpass / European Solidarity Corps

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Thank you.