

European Digital Credentials for Learning

Koen Nomden, Team leader
Céline Jambon, Policy Officer
15 November 2022



Europass infosite

Presents information as described on the Europass decision and the first access point to register and use the digital tools.

e-Portfolio

Set of online tools & information to manage every step of your learning and career.

Jobs, Courses, and Qualifications Search

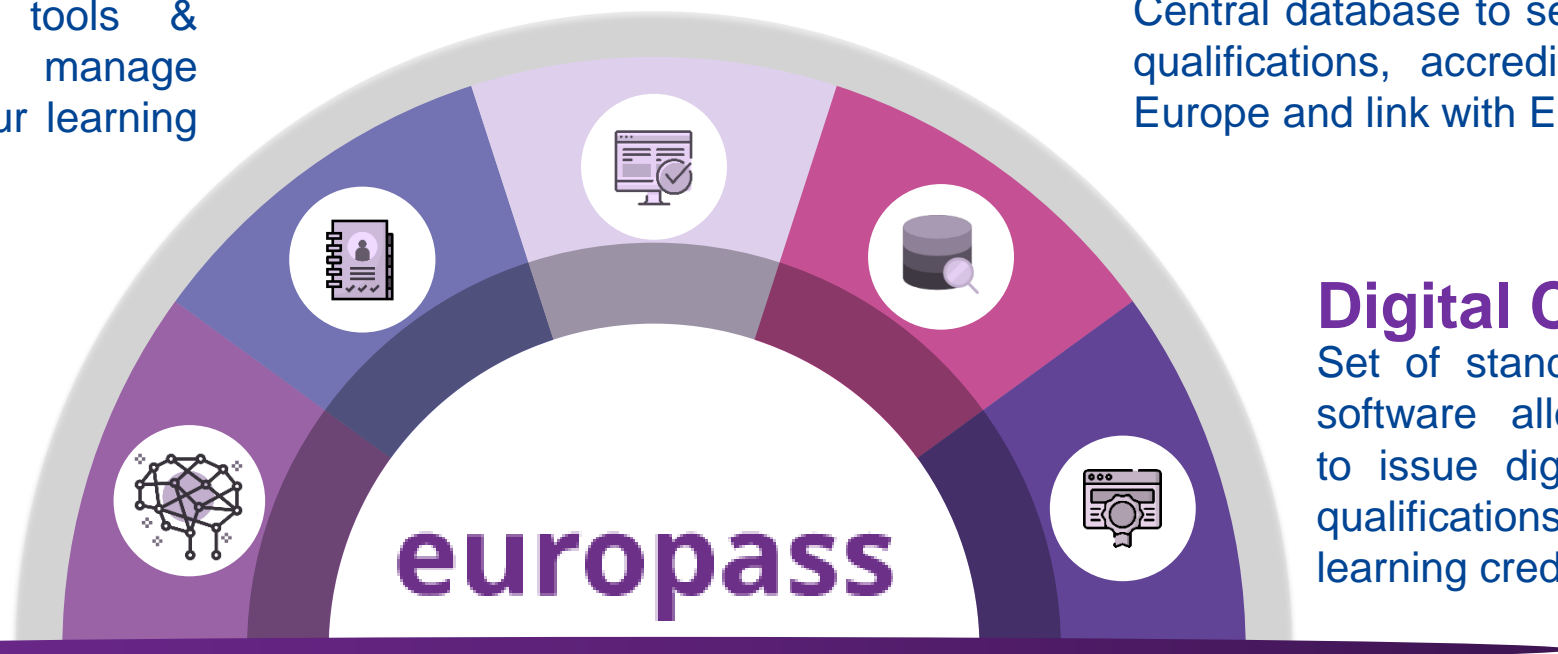
Central database to search for courses, qualifications, accreditation throughout Europe and link with EURES

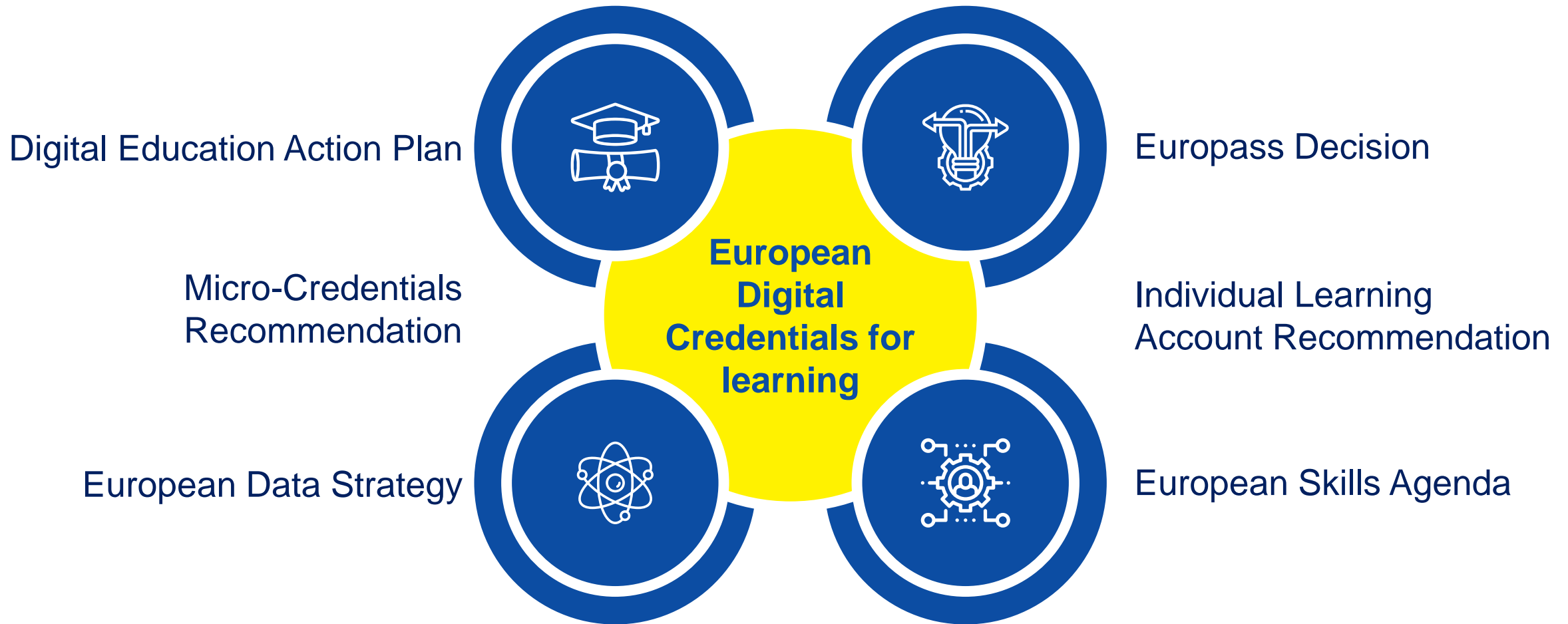
Digital skills Test

Open-source tool to assess and improve digital skills. Based on the Digital Competence Framework.

Digital Credentials

Set of standards, services & software allowing institutions to issue digital, tamper-proof qualifications and other learning credentials.





Completing the European Education Area (2025)

OBJECTIVES

- Empower citizens to own their credentials
- Semantic standards for Dig Cred
- Create an EU Skills Data Space
- Make digital credentials multilingual by default
- Remove barriers to recognition
- Provide accreditation & transparency tools

BENEFITS

- Captures formal, non-formal & informal learning
- Addresses all levels of E&T
- Applicable to the whole course lifecycle
- Interoperable credentials
- Aligned with European recognition instruments
- Free & open source

Benefits



Citizens

- can build an online portfolio to track their learning
- can easily utilise their credentials to get a job or apply for further education and training all across Europe or to obtain recognition
- can present and have their credentials verified at any point in their career

Education and training providers

- can build EU standard compliant credentials
- can reduce their costs of issuing credentials after an initial investment into transforming from paper to digital
- can better understand credentials from other Member States as EDC contents can be navigated in 29 languages

Employers

- can dramatically reduce the time and cost of processing job applications
- can better understand the credentials of candidates outside of their country
- can immediately see on the instant, automatic authentication and verification check list if a credential has expired or was tampered with

A **digital credential** covers two areas:

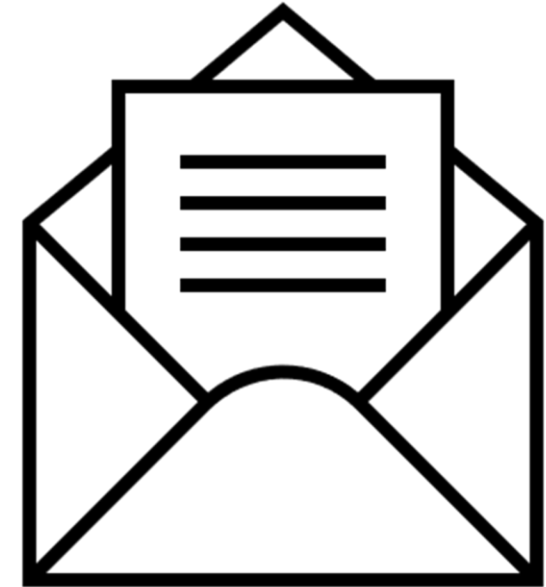
- **Content** = learning outcomes, skills, description of the activities
- **Envelope** = area of identity, authentication, secure delivery policies

A **European Digital Credential for Learning** is a claim related to the learning achievement of a person. It creates the link between an individual, an awarding body, and a learning achievement.

A **European Digital Credential for Learning** consists consists of **data** that is structured in accordance with a data model (the European Learning Model).

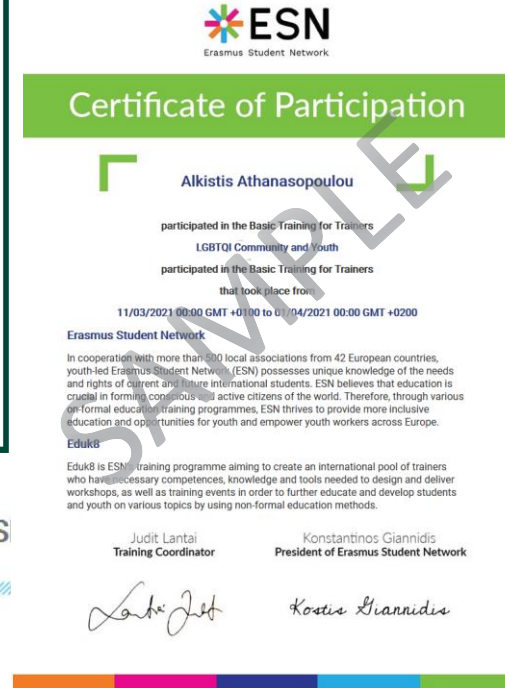
European Digital Credentials for Learning are **tamper-proof** and secure (they respect data privacy). They comply with the **international standards** of “verifiable credentials”.

European Digital Credentials for Learning require an e-seal (= digital signature with legal value in line with e-IDAS regulation).



Types of digital credentials

- A **credential**, in its most essential form, is a **documented statement containing claims made about a person**
- **qualifications** (e.g., professional certificates, university diplomas, VET diplomas, and diploma supplements),
- **activities** (e.g., participation in classes and non-formal learning events),
- **assessments** (e.g., transcripts of records), and
- **entitlements** (e.g., right to enrol in learning opportunities, or to undertake an occupation)



Functions



Components of the infrastructure

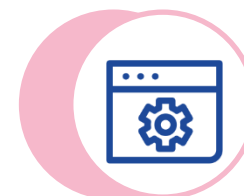
This infrastructure encompasses the technical specifications to implement the framework. It comprises the following core building blocks to help operationalise the framework



Standards

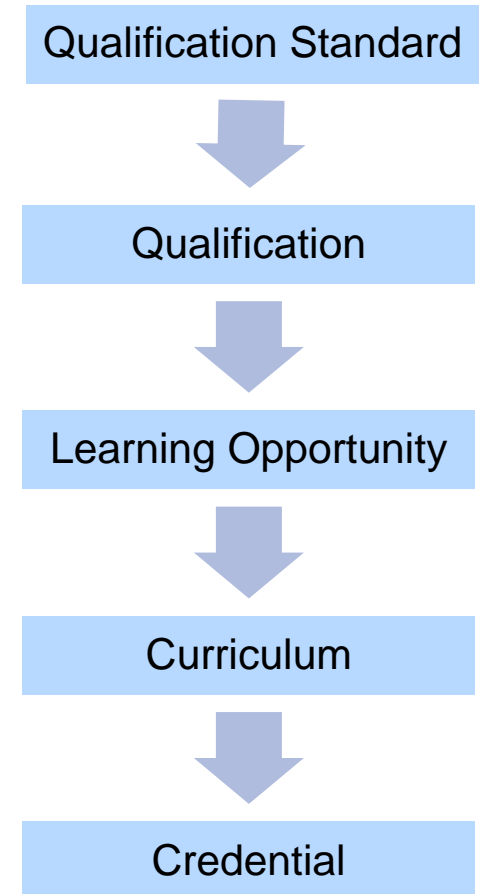


Services



Software

- A single data model which can be used at all stages of a learning lifecycle
- Can be applied to any educational/learning process, whether formal, non-formal or informal
- Includes information on accreditation (where relevant)
- ELM is used on the Europass platform & in other EC services (eg European Blockchain Service Infrastructure)
- ELM has the potential for a much wider use (Erasmus+ mobility, Single Digital Gateway)

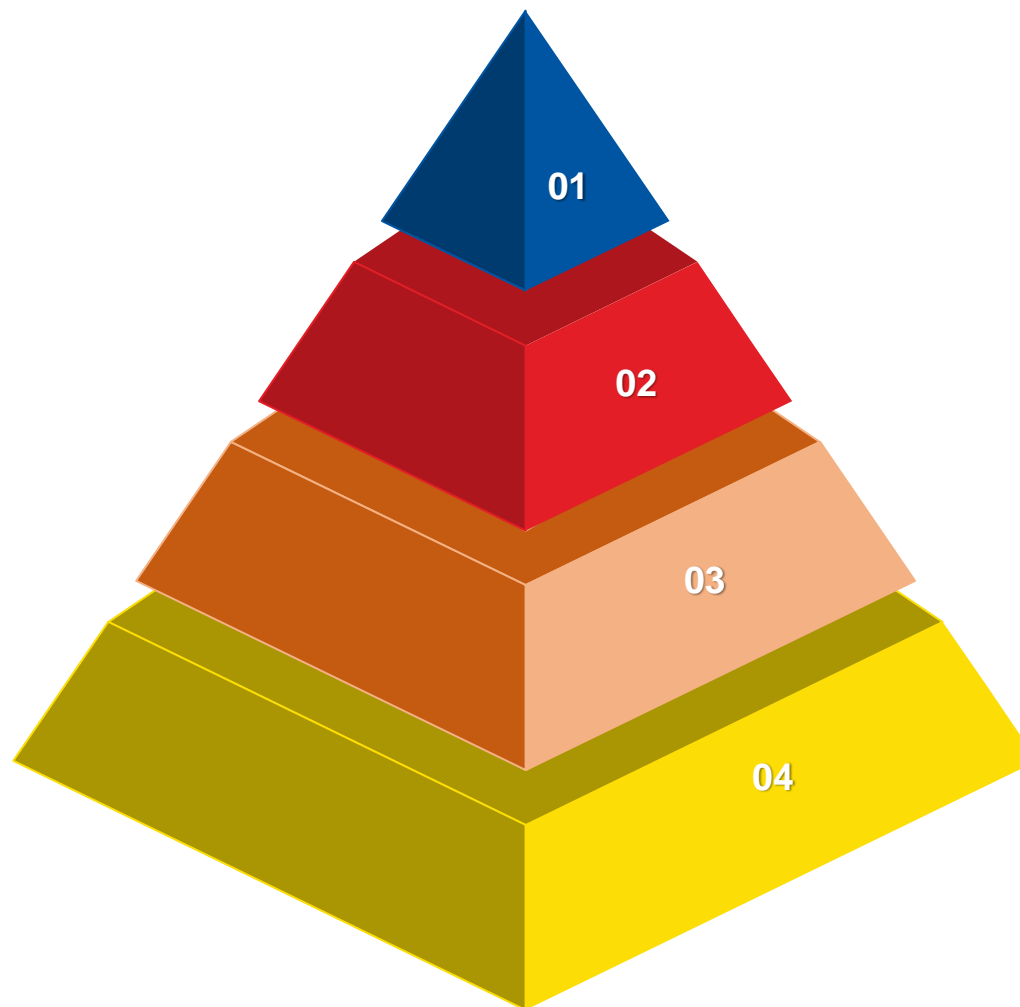


01 European Information Model

Definitions and Standards in EQF Recommendation, 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

Issuer

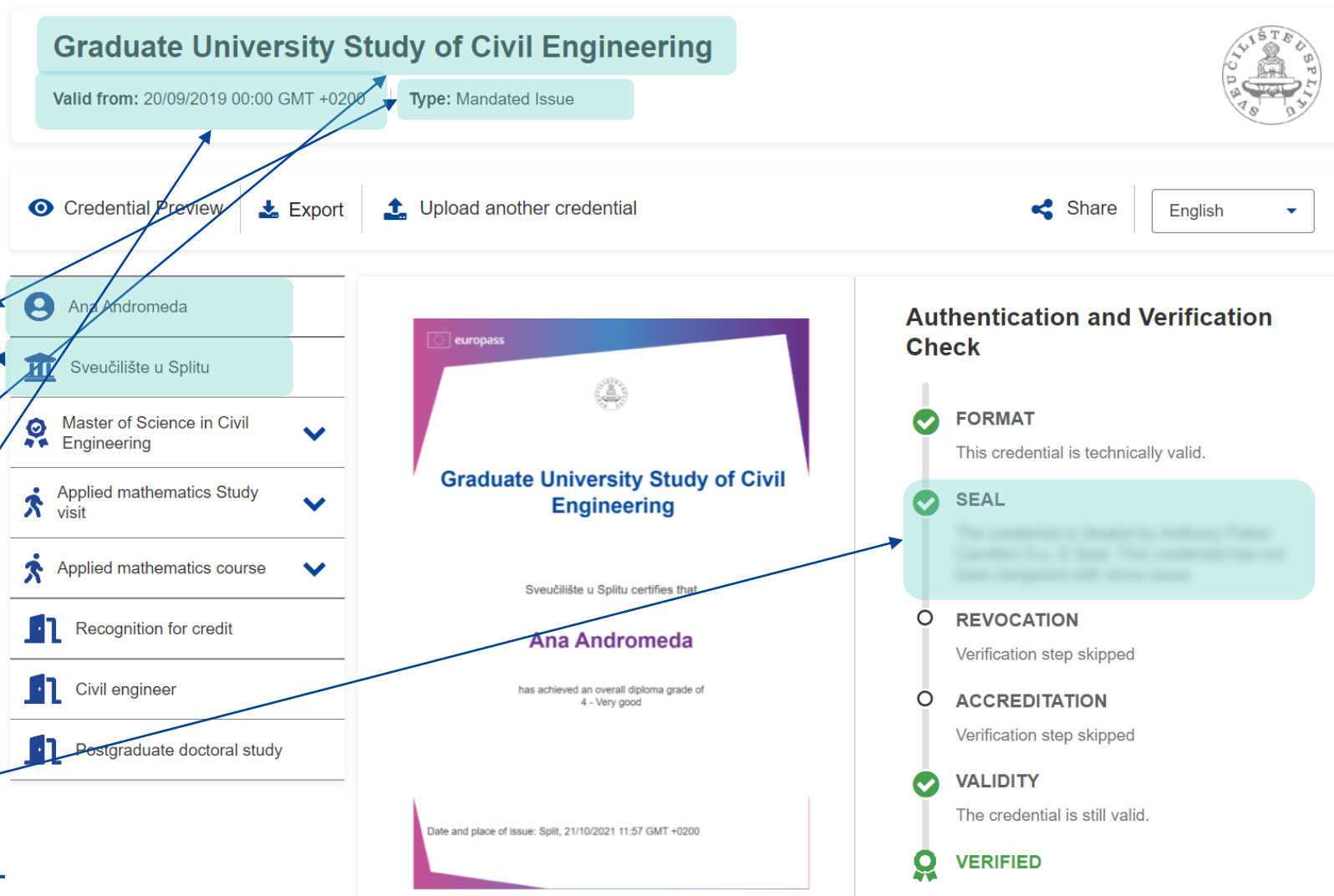
Recipient

Credential type

Credential title

Valid from date

e-Seal



Graduate University Study of Civil Engineering
Valid from: 20/09/2019 00:00 GMT +0200 | Type: Mandated Issue

Credential Preview | Export | Upload another credential | Share | English

Ana Andromeda
Sveučilište u Splitu

- Master of Science in Civil Engineering
- Applied mathematics Study visit
- Applied mathematics course
- Recognition for credit
- Civil engineer
- Postgraduate doctoral study

Authentication and Verification Check


- FORMAT**
This credential is technically valid.
- SEAL**
The credential is signed by the issuer. The issuer's public key is available on the issuer's website.
- REVOCATION**
Verification step skipped
- ACCREDITATION**
Verification step skipped
- VALIDITY**
The credential is still valid.
- VERIFIED**

Graduate University Study of Civil Engineering
Sveučilište u Splitu certifies that
Ana Andromeda
has achieved an overall diploma grade of 4 - Very good
Date and place of issue: Split, 21/10/2021 11:57 GMT +0200

including Accreditation

Graduate University Study of Civil Engineering

Valid from: 20/09/2019 00:00 GMT +0200 | Type: Diploma Supplement (Mandated Issue)



[Home](#) | [Export](#) | [Upload another credential](#) | [Share](#) | English

- Ana Andromeda
- Sveučilište u Splitu
- Master of Science in Civil Engineering
- Applied mathematics course
- Applied mathematics Study visit
- Postgraduate doctoral study
- Surveyors Board Member
- Civil engineer

Sveučilište u Splitu
EUROPASS DIPLOMA SUPPLEMENT

This Diploma Supplement model was developed by the European Commission, Council of Europe and Unesco/CEPES. The purpose of the supplement is to provide sufficient independent data to ensure the international transparency and fair academic and professional recognition of qualifications (degrees, diplomas, certificates, etc.).

1. HOLDER OF THE QUALIFICATION

1.1 Family name (surnames)	1.2 First name (given)
1.3 Date of birth (DD/MM/YYYY)	1.4 Issued ID number or code (for EU citizens only)

2. ISSUING ORGANISATION

2.1 Name of institution (Sveučilište u Splitu)	2.2 Country (Croatia)
2.3 Address (Pločevo ulica 8, 21000 Split, Croatia)	

Authentication and Verification Check

- FORMAT**
This credential is technically valid.
- SEAL**
- REVOCAATION**
Verification step skipped
- ACCREDITATION**
University of Split is Accredited by the Croatian Agency for Quality Assurance.
- VALIDITY**
The credential is still valid.
- VERIFIED**

« < 1/3 > »

Q1 2023 developments

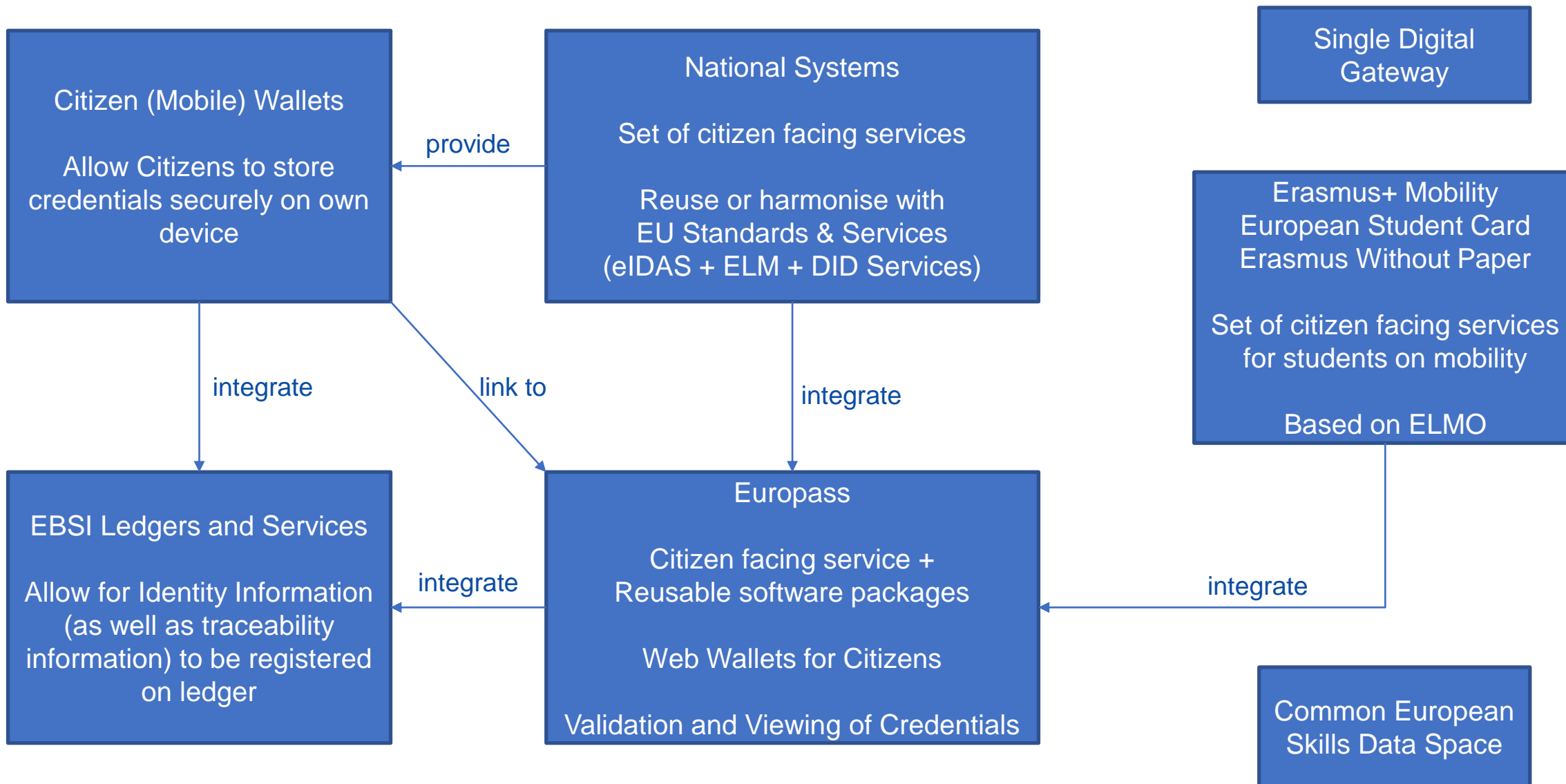
- **Native Verifiable Credentials**
- **JSON-LD**
- Upgrade of Mandated Issue

Q2-4 2023 developments

- Archive Wallet
- Revocation list
- Data model browser
- Europass Mobility

Future developments

- Recognition statements
- Credential re-signing
- Qualification Templates
- Certificate Supplements
- Support for Self-Sovereign Identity



Thank you!

Contact us at

EMPL-ELM-Support@ec.europa.eu