European Digital Credentials for Learning

From the origins to future prospects

Europass and Digitally-Signed Credentials
policy-perspective

Action 3 of the [Digital Education Action Plan](#) (Jan 2018) established that the way forward to make **better use of digital technology** for teaching and learning encompasses an action to:

The **European Skills Agenda** is a five-year plan to help individuals and businesses develop more and better skills and to put them to use. It includes 12 actions, of which **Action 11** is the **New Europass** platform, supporting people to manage their learning pathways and career development.

"Provide a framework for issuing digitally-certified qualifications and validating digitally-acquired skills that are trusted, multilingual and can be stored in professional profiles (CVs) such as Europass. The framework will be fully aligned with the European, Qualifications Framework for Lifelong Learning (EQF) and the European Classification of Skills, Competences, Qualifications and Occupations (ESCO)"

Action 11: New Europass platform

The new Europass platform will support people to manage their careers in a fast-changing labour market. With modernised tools and information on learning and working in Europe the upgraded tool will:

- *guide users to assess and describe their skills and communicate their qualifications and experience to training providers and employers, so they can take the next step in training or work;*
- *suggest to Europass users relevant jobs (via EURES[52] and Euraxess[53] jobs portals) and learning opportunities;*
- *make use of skills intelligence to provide tailored information on skills trends and needs to users when planning a change of career or moving to another country;*
- *enable education and training institutions to issue digital diplomas and certificates to learners in a European-wide digital format of 'Europass Digital Credentials', encouraging easier recognition;*
- *support a "fast track" to recognition, reducing administrative burden and decreasing fraud by supporting automatic authentication of qualifications by employers and training providers; and*
- *support legally residing migrants to showcase their skills and qualifications and facilitate their recognition through better information[54]. The EU 'Skills Profile Tool for Third Country Nationals' currently used in reception centres and by organisations guiding and supporting the integration of asylum seekers and refugees will be linked to the new Europass.*

Daniela has been working in a variety of jobs as a car mechanic since leaving high school and is unsure what to do next with her career. Thanks to the new Europass, Daniela can create a personal Europass profile to record all her skills and experiences and store her diplomas and certificates. Europass will suggest jobs and courses to Daniela and she can access information on guidance services near her, as well as information on studying and working across the EU.

Framework for digitally-signed credentials
definition of a digitally-signed credential

- A credential, in its most essential form, is a **documented statement** containing claims made about a person.

- A European Digital **Credential for Learning** describes that the owner has certain skills or has achieved certain learning outcomes through formal or non-formal learning context.

- A **digitally-signature (e-Seal)** guarantees the origin and integrity of the document.

- The **European Learning Model** allows interoperability of Learning Opportunities, Qualifications and Credentials in Europe and supports a fast track to credential recognition, reducing administrative burden and decreasing fraud by supporting automatic authentication of qualifications by employers and training providers.
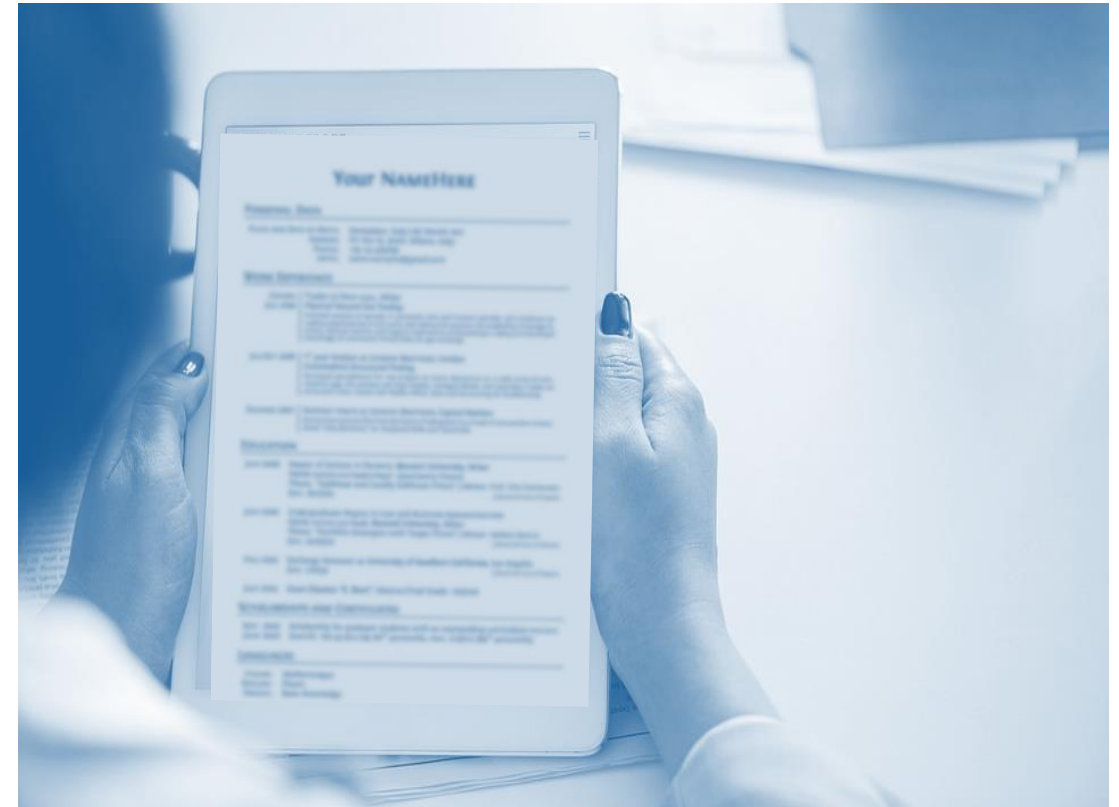
EDCL - Opportunities

Interoperability

Use Data Model
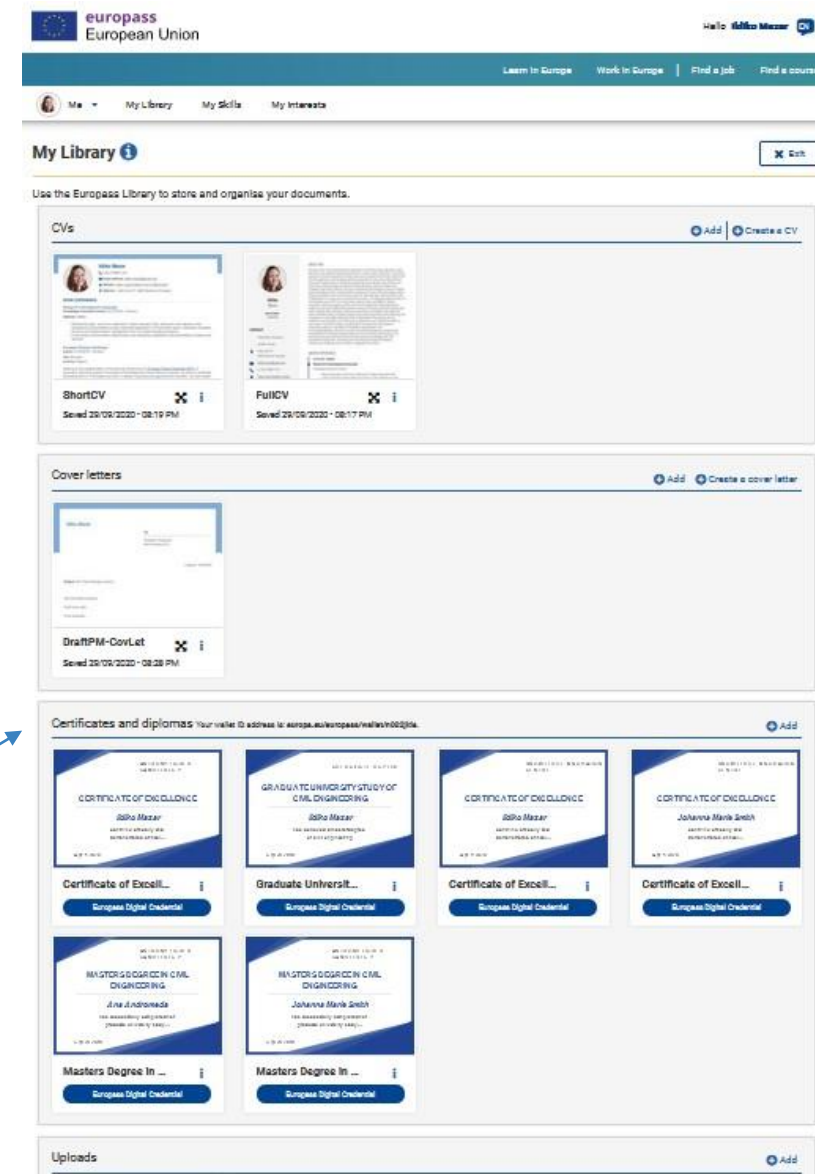
Issue Credentials

Develop own applications

Europass (available in 29 languages)

Access to 2,5 million wallets

Access to Qualification and Awarding bodies data

European Digital Credentials for Learning
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

eIDAS

Standards

Services

Software

Elements of the EDCL Infrastructure

Standards

1. European Learning Model (Linked to W3C VC)

Services

1. Issuer
2. Wallet
3. Viewer
4. Accreditation DB

Software & Support

1. eIDAS & EDCL code libraries
2. Playground & API library
3. Helpdesk

European Digital Credentials for Learning
Functions

Identify

Learners who will be awarded the credential

Issue

credentials and send them to their owners

Store

credentials securely in a single online or offline wallet

Verify

if the credential is authentic, valid and issued by an accredited organisation

Share

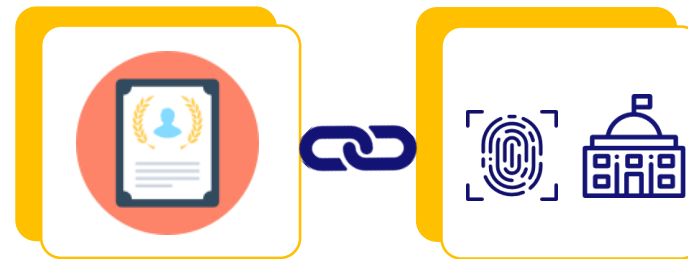the information in the credential with any other person or organisation with just a click

ISSUE

Today: Paper-based

An awarding body sends a list of credentials to be created to an specialised print-shop

The print-shop prints the credentials on paper with security features

The credential is issued

European Digital Credentials for Learning

An awarding body uploads a list of credentials to be created to the EDC Issuer

The EDC Issuer will issue EDC compliant, tamper-proof digitally-signed credentials
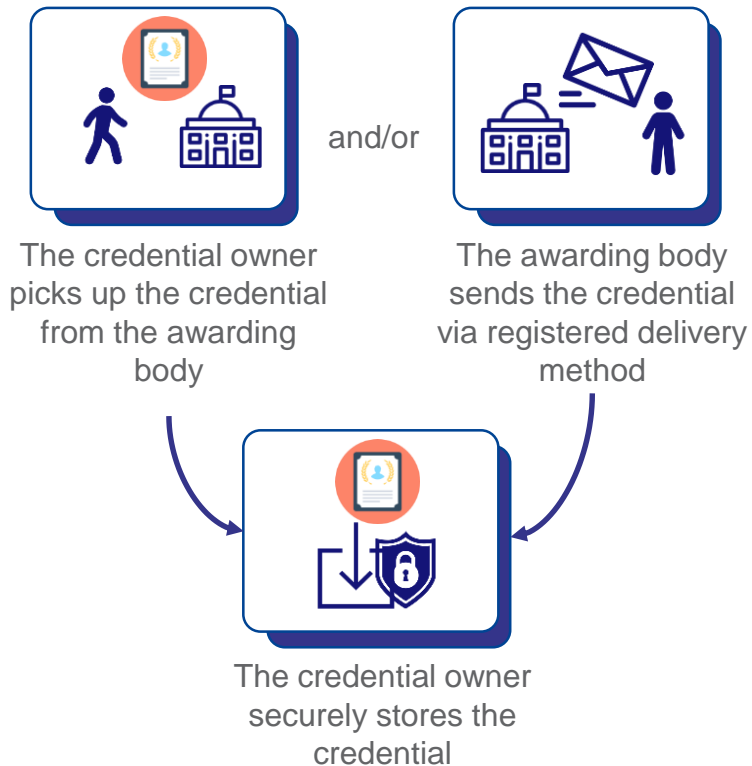
The credential is issued

No obligation to use EDC Issuer

Any software can be used to issue standard-compliant credentials

STORE

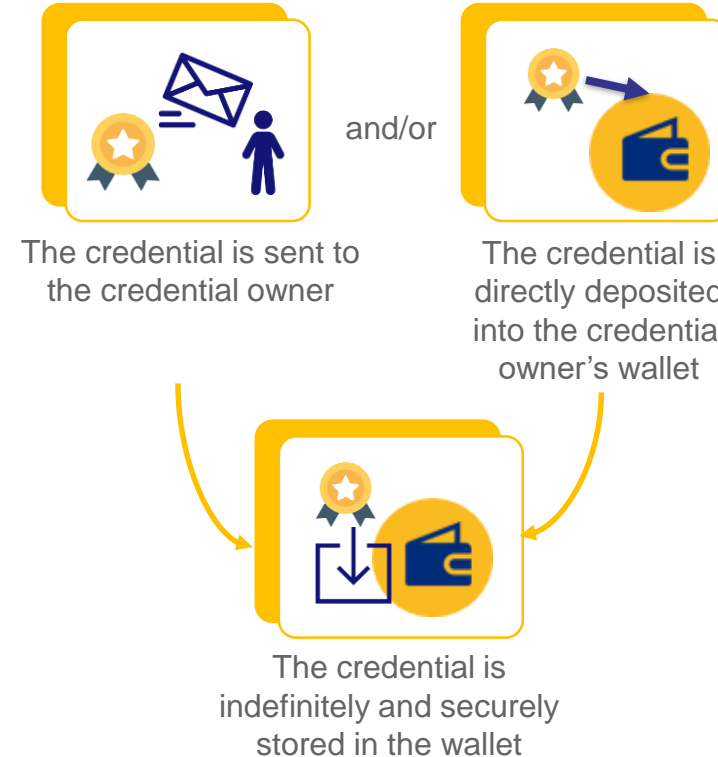## Today: Paper-based

The credential owner picks up the credential from the awarding body

and/or

The awarding body sends the credential via registered delivery method

The credential owner securely stores the credential

European Digital Credentials for Learning

The credential is sent to the credential owner

and/or

The credential is directly deposited into the credential owner's wallet

The credential is indefinitely and securely stored in the wallet
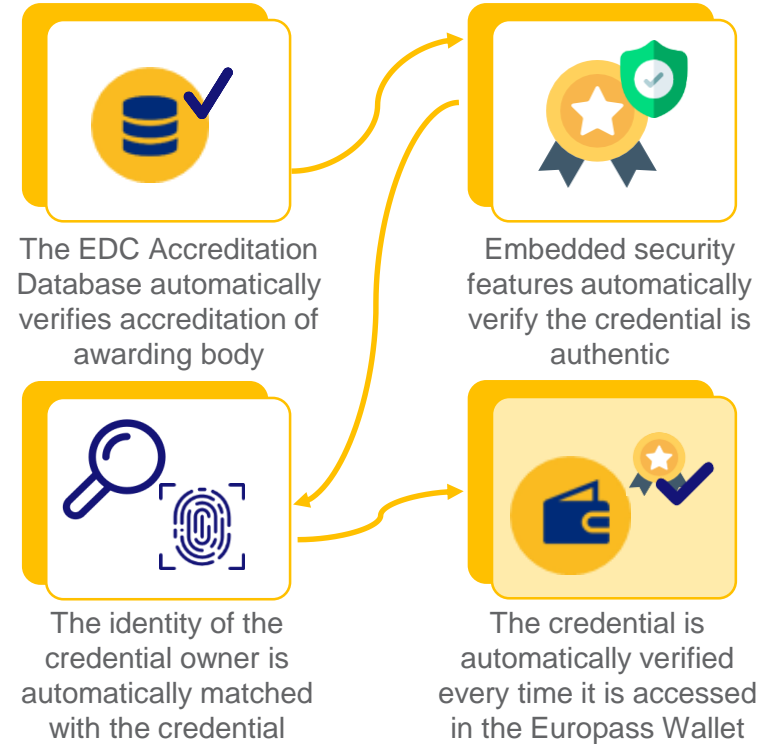
No obligation to use Europass Wallet.

Credential-owner can run a wallet on their own device, or obtain one from any provider.

VERIFY

Today: Paper-based

European Digital Credentials for Learning

The verifier manually checks the accreditation status of the awarding body

The verifier contacts the awarding body to verify the credential is authentic

The verifier manually makes a judgement on validity

The verifier matches the identity of the owner with the credential

The awarding body checks its own database and confirms the details in the credential

The EDC Accreditation Database automatically verifies accreditation of awarding body

Embedded security features automatically verify the credential is authentic

The identity of the credential owner is automatically matched with the credential

The credential is automatically verified every time it is accessed in the Europass Wallet

SHARE

Today: Paper-based

The credential owner requests a new certified copy of the credential from the awarding body

The credential owner sends or presents the copy of the credential to the requester

European Digital Credentials for Learning

The credential owner shares a link to the credential in their wallet

No obligation to use Europass Wallet.

Link can be shared to any cloud-based wallet.

A European Digital Credential for Learning contains information about

- Metadata (data about the credential)
- Issuer
- Subject (claims about person)
- e-Seal

describes claims relates to

- Activities
- Achievements
- Entitlements
- Attestations
- Learning Outcomes
- Assessments

150 hours of coursework

100 hours of apprenticeship

DE Qualification as a Painter

Entitlement to work as a painter

Recognition of qualification in FI

LO of skill of painting

Final Examination Grade B

European Learning Model

includes 250 properties to describe

- Organisations

- Details of the credential owner

- Achievements (including grades and references to learning outcomes, EQF/NQF levels, ISCED-f codes, ESCO skills activities and entitlements)

- Activities (by start and end dates; format, mode and volume of learning)

- Entitlements (Entitlement to work as an attorney or enroll in further education)

Foreseen technical developments

Q4/2021

- ❑ Code and Docker Images available
- ❑ Consultation on standard governance procedures
- ❑ Verifiable Presentations
- ❑ **Official Launch Event**
- ❑ Multilingual Platform and credentials

Q1/2022

- ❑ Diploma Supplement
- ❑ Accreditation DB
- ❑ ELM 3.0
- ❑ JSON support (native verifiable credentials)
- ❑ Enhanced Documentation

Future

- ❑ Archive Wallet
- ❑ Digital recognition statements
- ❑ Resigning service
- ❑ Micro-credential stacker
- ❑ Credential from qualification
- ❑ Revocation list
- ❑ Data Model Browser

AREAS OF EDC ADOPTION

- LU "digital Luxembourg" strategy (1600+ **VET** diplomas issued by Oct-21)

- HR to issue its first multilingual digital **degrees** in Oct-21

- European Universities of the Seas (SEA-EU) and Digital Innovations in Credential Evaluation and the Networks (DigiNet) using EDC for **recognition**,

- MT planning to issue 1000+ **transcripts of records** in early 2022,

- European Student Network issues **non-formal** training certificates from within a few weeks of joining the Early Adopters Programme,

- European Consortium of Innovative Universities (ECIU) **building own solution**,

- Vendors (e.g. Moodle and Digitary) developing own **interoperable credentialing products**

Accreditation Status in Qualification data

Collaboration Europass:

- Upload Deqar accreditation dataset in the Qualification Dataset Register

- Linked to the issuing of digital credentials

- Pilot to explore how data in Deqar can feed into the Europass accreditation database

Why?

- to lessen the burden on institutions by avoiding to upload the same information twice

- to populate the Europass database with accreditation information

Referencing QA Reports from DEQAR

University of Split

Sveučilište u Splitu

Basic information

Identifiers — DEQARINST1268 ETER HR0005

institutional accreditation, Faculty of Civil Engineering, Architecture and Geodesy

DEQAR Report ID	40
Agency	Agency for Science and Higher Education (ASHE)
Type	Re-accreditation of higher education institutions (first cycle)
Status	part of obligatory EQA system
Formal decision	positive
Date	10/03/2016
Valid until	not applicable
Report and decision	Izvješće stručnog povjerenstva; (Croatian)
	Report of the Expert Panel; (English)

New Credential Template > Create organisation

Accreditation

DEQARINST1268

Accreditation not found.

Cancel   Save

Accreditation Status displayed in Diploma Supplement

#. Master of Science in Civil Engineering

3.# QUALIFICATION

3.#.1 Name of qualification

Master of Science in Civil Engineering

Title conferred

3.#.2 Main field(s) of study

Engineering and engineering trades

3.#.3 Institution awarding the qualification

Fakultet Gradevinarstva, Architekture i Geodezije

Status

Institutional accreditation by Agency for Science and Higher Education (ASHE) on 10 March 2016

3.#.4 Institution administering studies

Status

3.#.5 Language(s) of instruction/examination

English, Croatian

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
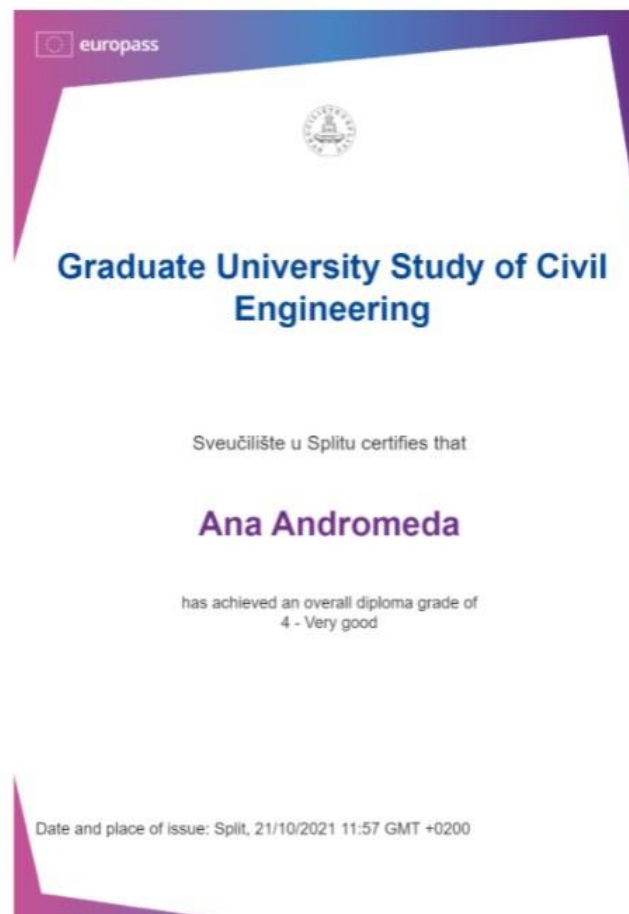
🏅 Master of Science in Civil Engineering ▼

🚶 Applied mathematics Study visit ▼

🚶 Applied mathematics course ▼

🚪 Recognition for credit

🚪 Civil engineer

🚪 Postgraduate doctoral study

◻ europass

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

Authentication and Verification Check

✅ **FORMAT**
This credential is technically valid.

✅ **SEAL**
~~This credential is sealed by Anthony Fisher Candidate Ey. 4 Seal. This credential has not been tampered with since issue.~~

⭕ **REVOCATION**
Verification step skipped

✅ **ACCREDITATION**
University of Split is Accredited by the Croatian Agency for Quality Assurance.

✅ **VALIDITY**
The credential is still valid.

🏅 **VERIFIED**

EARLY ADOPTERS – COUNTRIES AND ALLIANCES

- 18 countries joined the original pilot in 2019 (AT, CY, CZ, DE, EE, ES, FR, GR, HR, IT, LU, MT, NL, NO, PT, RO, SK, SL)

- Additional stakeholders from 7 countries joined early adopters (BE, DK, FI, IE, LT, PL, SE)

- Most implementers are, or involve, educational organisations

- European Universities show particular interest, and may need a support instrument just for them.

- European Universities (e.g. ECIU),

- Skills Alliance,

- European Universities of the Seas (SEA-EU),

- European Credit Clearinghouse for Opening up Education (ECCOE),

- Digitally Signed Credentials and Open Badges in VET and HE (DISCO-VET),

- Digital Innovations in Credential Evaluation and the Networks (DigiNet),

- Erasmus Student Network (ESN),

- European Schools (EURSC)

Thank you!

Contact us at **EDCsupport@ext-ec-europa.eu**