# Technical format – digitalisation of certificates

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Online Validation Event
Updating the European guidelines for validation: Making validation a reality in Europe
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**CERTIFICATION**

the **fourth** (and the final) stage of the **VALIDATION** process

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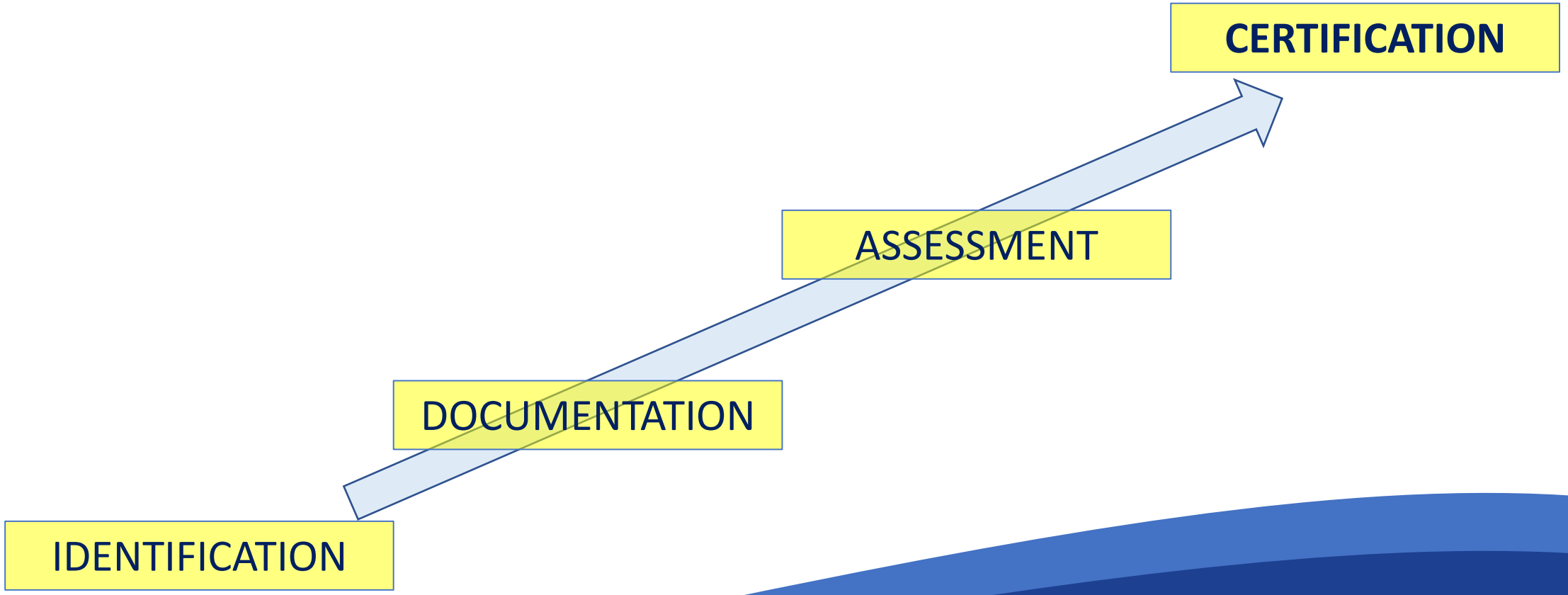

# KEY TRANSPARENCY FACTORS (of certification)

- **Awarding body** (competent body) – a key factor for the currency of a certification (background characteristics of the awarding body)
- **Title** of the credential (or qualification)
- **Learning outcomes** (standard, digitalisation facilitates inclusion of learning outcomes)
- **Learning volume** (credits, ECTS, etc.)
- **Level** (complexity of learning outcomes)
- **Assessment** type
- **Quality assurance**
- **Ways of acquiring** (formal, non-formal, informal)
- Etc.

# CERTIFICATION – POTENTIALS: ENABLING LIFELONG LEARNING AND EMPLOYMENT

- **Diplomas** and other qualifications
- Covers also **alternative credentials** – micro-credentials, digital badges
- **Short formal programmes** – more flexible and learner-oriented forms od education and training
- **Short forms of learning** – can be formal, but mostly non-formal and informal, labour market oriented
- Can **increase potential role** of credentials on achieved learning outcomes and experiences
- Supports **transfer and accumulation** of learning outcomes across both – institutional and sectoral borders
- Represents **truly LLL** – certification through shorter courses, which later can be integrated into full qualification (individual build their qualifications during entire life)

# DIGITALISATION

(one of technical options for certification)

# DIGITALISATION – TECHNICAL FORMAT

**Traditional** format for diplomas and certificates – in paper

**Digital credentials:**

- can make certification **more transparent and more information** can be added
- Various possibilities of **linking** the certificate to information elements

An example – **European Digital Credentials for learning (EDC)** (previous names: *Europass Digital Credentials, and Europass Digitally-signed Credentials*)

**EDC** – an **electronic statement** issued by an **awarding body** to an individual to confirm and provide proof of their **learning outcomes**, leading to easier understanding and verification of qualifications, and other evidence of learning.

# EUROPEAN DIGITAL CREDENTIALS for learning (EDC)

# EU PLATFORM FOR THE EDC

**The EU Decision (2018) on Europass Framework** – outlines the importance of authentication measures to support the verification of digital documents on skills and qualifications:

*"Europass shall support authentication services for any digital documents or representations of information on skills and qualifications (Article 4(6) Europass Decision)"*

The Commission adopted the **Digital Education Action Plan (2018)** with a goal to support technology-use and digital competence development in education and announced the work on digitally-signed qualification:

*"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 EQF and ESCO. (Action 3)"*

# EDC – KEY ELEMENTS

The **EDC** – is defined by **key elements**:

- **Awarding body** – e.g. *University of Split*
- **Individual** receiving the credential – e.g. *Name of the individual*
- **Learning outcomes** represented by the credential – including basic characteristics on learning outcomes, such as *title*, *levels*, *volume/workload*, etc. – e.g. *Master of Science in Biology*
- **Visual** representation of the achievement – to be viewed on any device of medium
- **Digital signature** (e-Seal)

# EDC – BENEFITS IN GENERAL

- Offering a **secure, trustworthy and fraud-resistant system** that ensures **data privacy and data protection**
- Offering a **common technical approach** for issuing digital credentials so that certificates from one Member State can be understood and verified in any other
- Supporting learners to **provide evidence of their learning in electronic format** to employers or education and training providers
- Employers, education and training providers and other bodies will be able to check that certificates and other qualifications are **valid and authentic**. They can also have easy access to background information on a certificate of qualification

# EDC – THE CONCEPTUAL MODEL

- **Blockchain technology –** securing the information contained in certificates
- **Functions –** serving an ecosystem of stakeholders (education and training institutions, employers, accreditation bodies, etc.):
  - **Identify** the individual
  - **Issue** the digital certificate
  - **Store** the digital certificate
  - **Share** the digital certificate
  - **Verify** the authenticity of the digital certificate
- **Infrastructure –** address the needs of the functions and specificities of the standards (e.g. services and software)
- **Standards – combination of:**
  - **Base standards** (minimum properties of any qualification, ESCO), **metadata standards** (e.g. EQF, ECTS), **technical standards** (e.g. for signature), **workflow standards**

# EDC – DATA STRUCTURE (XLSM-files)

- **Credentials –** title, date of issuance, expiry data, owner, issuer, data for design
- **Persons –** personal data, e-mail, wallet
- **Organisations –** data on organisation
- **Achievements –** basic data on credential, learning settings
- **Learning outcomes –** description, links, etc.
- **Activities –** data on programme
- **Assessment –** data on assessment

# EDC @ SEA-EU

(an example of digital certification)

# European University of the Seas (SEA-EU)

## Challenges that the SEA-EU has faced

- Understanding the potentials of the EDC Framework and the concept behind, etc.
- Understanding the basic IT elements; understanding preconditions (operating systems, etc.)
- Providing the qualified e-Seal from the appropriate institution; types of e-Seals; etc.
- Understanding data model, expressed as XLSM
- Integration to the existing databases at institutions and the higher education systems – in order to use already prepared data on qualifications (learning outcomes, assessment, etc.)
- Integration with other transparency tools (automatic recognition, quality assurance, mobility, etc.)
- Legislation issues at national levels
- Motivation of administration staff
- Etc.

## … and the overcome

- Functional Guidelines and explanation of various elements on the EDC – also, supported by the Europass website on the EDC
- Training, meetings and workshops
- Support by EU experts
- Motivated individuals at the UNIST and the SEA-EU, including rectors and deans/leaders of study programmes
- Support by the governance of the UNIST and the SEA-EU, project based activities
- Right time of the idea (digitalisation agenda)
- Producing (simple) examples
- Step-by-step processes

## Potentials, as seen by project leaders/participants the UNIST / SEA-EU

- EDC **valuable for anyone** – universities and other HEIs, professors, students, NGOs, employers, etc.
- EDC Framework is **free and enough simple** for implementation
- Great potential values if linking to **Quality Assurance**, **automatic recognition** of foreign qualifications, **mobilities** of graduates/employers, etc.
- **Potential values for the validation of non-formal and informal learning**
- **Image** of the University and the SEA-EU Alliance
- Potentials for **further development and the use** for other types of credentials at HEIs and the HE research systems (published research papers, citations, patents, etc.)

europass

europass

europass

# Certificate of Completion

The University of Split, NEC Croatia and the EDC Support Team certifies that

## Mile Dželalija

has attended the interactive online workshop "Europass Digital Credentials to Future-Proof Your Potential"



REPUBLIKA HRVATSKA

SVEUČILIŠTE U SPLITU

Podružnica

SVEUČILIŠNI ODJEL
ZDRAVSTVENIH STUDIJA

# DIPLOMA

## JURAJ MRŠA

rođen 22. rujna 1988. godine u Šibeniku, Republika Hrvatska,
završio je dana 31. ožujka 2021. godine diplomski sveučilišni studij

**RADIOLOŠKE TEHNOLOGIJE**

i stekao 120 ECTS bodova te akademski naziv
**Magistar**
**RADIOLOŠKE TEHNOLOGIJE**
**(mag. rad. techn.)**
kao i sva prava koja mu pripadaju po propisima.

Pročelnik: Prof. dr. sc. Stipan Janković, prim. dr. med.
Rektor: Prof. dr. sc. Dragan Ljutić

KLASA: 602-04/21-16/71
URBROJ: 2181-228-103/1-21-15

# Reflection to European Guidelines for validation – digitalisation of certificates

- Digitalisation of certificates – not presented in the Guidelines (2015)
- Does the **European Digital Credentials for learning (EDC)** have full potentials for:
  - flexible certification of full (”*formal*”) qualifications, part, micro-credentials, and any groups of learning outcomes achieved by formal, non-formal and informal learning?
  - easier combination of small parts – creating full qualifications?
- To present **potentials of the EDC** in Guidelines **that are relevant for certification**/validation?
- Is **only the EDC** relevant for the certification/validation of NFIL, or there are some other digital platforms that could be also relevant for the certification/validation of NFIL?
- Relevance of the **ESCO** for digital certification?
- **Quality assurance** and digital credentials (DEQAR, etc.)?

# Thank you for your attention

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