A Diploma Supplement network kick-off webinar 28.5.2024, report

Introduction

In the ENIC-NARIC Annual Meeting in Stockholm June 2023 an initiative to create a Diploma Supplement (DS) network was presented and received positive feedback from the participants. Therefore the Swedish ENIC-NARIC, represented by Yolanda Brännström and Petra Nord, and the Finnish National Europass Centre, represented by Susanna Kärki, decided to take an initiative and a next step towards a Diploma Supplement network.

In the kick-off webinar we heard inspiring examples from the digitalisation of the Diploma Supplement, latest news, opportunities and solutions that have been found. We had speakers from the European Commission; Ladok - the educational administrative system of Swedish higher education institutions; and the Ukrainian e-Governance Academy working with educational credentials in Diia digital wallet.

We also had a possibility to innovate the Diploma Supplement network further together and to discuss the digitalization of DS a bit further together with the representatives from the European Commission.

If you are interested in joining the DS network, wish to learn more about the network or the webinar, please do not hesitate to contact us.

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Summary of the webinar

The webinar discussed the digitalization of the Diploma Supplement and the establishment of an international Diploma Supplement (DS) network.

Digitalization of the DS was presented from different viewpoints, with contributions from Diia, Ladok, and the European Digital Credentials (EDC) infrastructure. Diia's platform integrates various public services in Ukraine, including educational documents, providing easily accessible digital credentials that can be shared and validated across systems. Ladok, owned, among others, and used by Swedish higher education institutions, is a system that supports universities in educational administrative processes and facilitates the issuance of digital degrees and supplements, ensuring secure access and verification capabilities and makes use of EMREX. The EDC infrastructure in turn supports a comprehensive system for managing digital credentials, offering secure, verifiable, and standardized digital representations of traditional learning credentials. These systems aim to enhance the accessibility, security, and usability of educational credentials in a digitalising world, addressing the needs for trust and recognition of skills across borders.

Key conclusions from the discussion on the establishment of a DS network included the need for a gradual, step-by-step approach to create a simple and effective network, avoiding excessive complexity and time investment. Participants recognized the challenges posed by the varying national contexts of DSs across Europe. Discussions covered challenges such as time constraints and network structure, the benefits of sharing experiences and facilitating future DS development, the vision of an organically growing network for information sharing and peer learning, and the necessary next steps, including organizing annual workshops and maintaining communication through an email list.

Participants provided positive feedback on the webinar, emphasizing the value of the network for professional collaboration and development. The next steps proposed by Group 2 include establishing a mailing list to facilitate ongoing communication and collaboration, organizing annual DS workshops centered around relevant topics, and conducting a Webropol questionnaire to gather participant input on the network and future workshops.

Programme

13.30 Welcome and introduction to the webinar, Susanna Kärki, The Finnish National Europass Centre at the Finnish National Agency for Education, Yolanda Brännström and Petra Nord, ENIC-NARIC Sweden at The Swedish Council for Higher Education, Koen Nomden, European Commission

13.35 European Digital Credentials for Learning and the Diploma Supplement, Ildiko Mazar and Koen Nomden

14.00 Ladok, Anna Sandberg Telléus and Tor Fridell

14.25 Digital credentials in Diia, Kateryna Suprun, Andrii Piskun

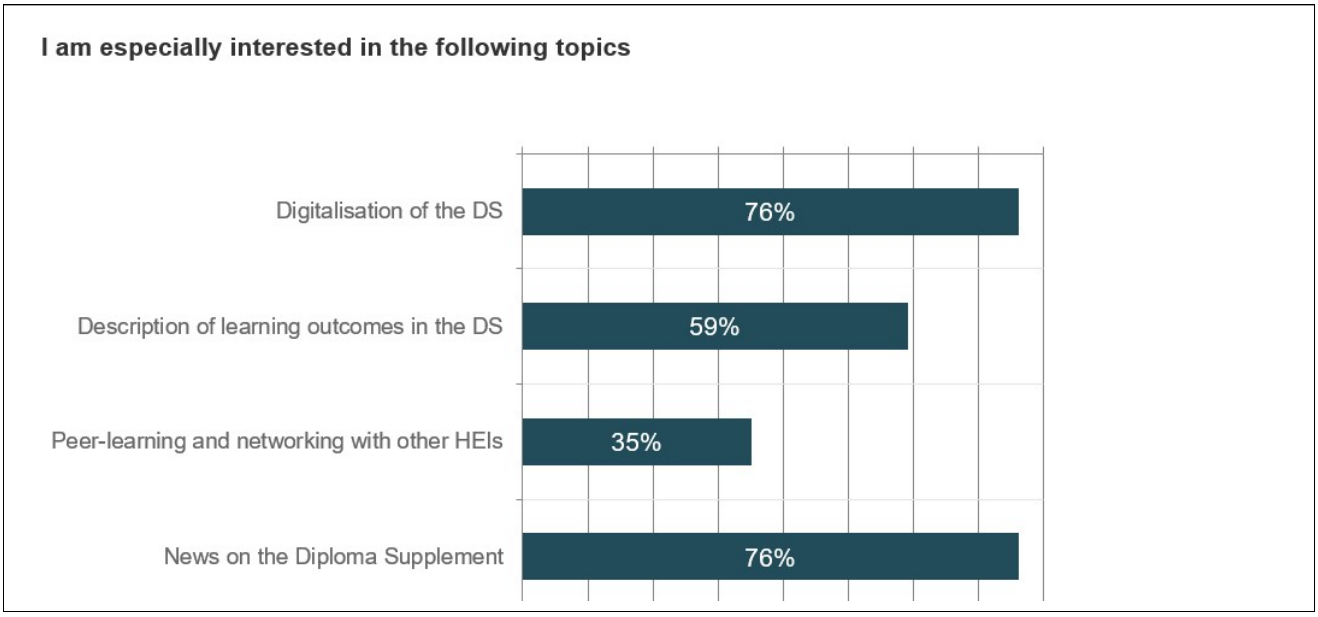
14.50 Discussion groups: 1. The current practice of issuing the DS by higher education institutions? 2. The DS digital template- feedback on requirements

15.25 Final words

Evaluation of the webinar

An evaluation form was circulated among webinar participants requesting not only feedback but asking which topics would be most interesting.

From the answers gathered by 3.6.2024 we can conclude that the webinar answered to a need and was well-received. For future topics:



Speakers and their presentations

European Digital Credentials for Learning and the Diploma Supplement, Ildiko Mazar and Koen Nomden

Please find the slides here [Microsoft PowerPoint - 20240528_Diploma-Supplement.pptx - Vain luku (oph.fi)]

European Digital Credentials for Learning and the Diploma Supplement

- Speaker: Ildiko Mazar With over 25 years of experience in open education and e-learning, Ildiko has significantly contributed to European Higher Education modernization. She discussed how traditional DS can be digitized using the European Learning Model (ELM) to create structured, transparent, and portable digital credentials.

Policy context: skills development in the EU Lifelong upskilling and reskilling need to become the norm, ensuring sustainable competitiveness social fairness strong resilience: European Skills Agenda, European Year of Skills. EU targets by 2030 related to skills 60% of the adult population to participate in training each year 80% of Europeans to have at least basic digital skills 20 million ICT specialists (+ gender convergence).

A pool of European key initiatives contributes: Digital Education Action, European Pillar of Social Rights, Europass Decision, European Skills Agenda, Micro-Credentials Recommendation, Individual Learning Account Recommendation, Achieving the European Education Area, European Qualifications Framework, European Skills, Competences, and Occupations (ESCO), European Degree.

Digital Credentials

A digital credential is a secure, digital representation of traditional learning credentials, which can be stored in a digital wallet. These credentials are issued directly to users and are designed to be verifiable and secure, addressing the needs of a digitalizing world where security and trust are paramount for recognition and showcasing of skills.

European Digital Credentials (EDC) Infrastructure

The EDC infrastructure offers a comprehensive system for managing digital credentials. Users can build credential templates using an online builder, issue and seal credentials, store them securely in a digital wallet, and share credential information with one click. Verification tools ensure the authenticity and validity of credentials, and the system is accessible through web-based free tools.

Digital credentials encompass qualifications (such as professional certificates and university diplomas), activities (like participation in classes), assessments (transcripts of records), and entitlements (rights to enroll in educational opportunities). These credentials are designed to be universal, verifiable, standardized, and portable. They support legal admissibility, are available in 29 languages, and are relevant across education and employment sectors.

Diploma Supplement

The Diploma Supplement aims to improve international transparency and the fair recognition of qualifications by providing detailed descriptions of the studies completed by an individual. It includes information on the nature, level, context, content, and status of the studies without making value judgments or equivalence statements.

European Learning Model (ELM)

The ELM framework has 487 properties to describe educational content and ensures quality through accreditation checks and connections with the DEQAR accreditation database. The EDC credentials are tamper-evident and securely sealed using an eIDAS compliant electronic seal.

Compliance and Guidelines

Institutions are encouraged to minimize forgery and misrepresentation of their supplements. Diploma Supplements should be issued automatically upon qualification completion, free of charge, and in a widely spoken language, though additional languages may be used as appropriate. The EDC infrastructure facilitates the quick and safe issuance of digital credentials, is freely available as a service, and allows for the creation of multilingual credentials in 29 languages.

Ladok and EMREX in Sweden

Please find the slides here [Microsoft PowerPoint - DS-network UHR 240528.pptx - Vain luku (oph.fi)]

- Speakers: Anna Sandberg Telléus and Tor Fridell Anna, a team product manager for the Ladok Consortium, discussed the digitization of degrees and DS in Sweden, emphasizing the shift from physical documents to digital decisions. Tor, the Head of Student Information System at Linkoping University, introduced Emrex, a system for transferring educational credits between institutions.

The document is a presentation about Ladok, a student information and management system used by higher education institutions in Sweden, and its integration with digital degrees and EMREX, a network for electronic transport of results. Summary of key-points:

Ladok System

- Purpose: Ladok is used for managing student information, including participation, results, and degree certificates. It serves as the production system for education at higher education institutions.
- Usage: It is used by approximately 27,000 teachers and administrators, 350,000 active students, and holds information on 3.2 million students.
- Integration: Ladok connects with many other systems within higher education institutions and with external parties.
- Installation: There is a single installation used by 40 higher education institutions.

Digital Degrees and Diploma Supplements

- Background: The ability to issue digital degrees started around 2017-2018. A standardized process was needed due to varying practices among institutions.
- Requirements:
    - Easy and secure access for students to their degrees.
    - Ability to share degrees with external parties.
    - Verification capability for external parties.
    - Professional appearance and accuracy of degree certificates.
- Process: The degree decision is made in Ladok, and the document is a representation of this decision. Verification is done directly in Ladok, and new documents can be generated as needed.
- Benefits: Reduced processing time, increased legal certainty, and potential for innovative future solutions like digital wallets.

EMREX Network

- Purpose: EMREX allows students and former students to access and share their assessment data (Transcript of Records, Degree Certificate, Diploma Supplement) with third parties such as other universities or potential employers.
- History: Originated as an EU-funded project (2015-2017) to improve the credit transfer process post-student exchange.
- Functionality:
    - Transfers data internationally in a machine-processable way.
    - User-driven, adheres to Digital Data Sovereignty, and is useful for various purposes beyond student exchanges.
- Current Connections: Includes several European countries like Croatia, Finland, Germany, Greece, Italy, the Netherlands, Norway, Poland, Sweden, and also Chile. Prospects include China, Japan, the USA, Australia, and Denmark.

Question for Ladok 1: Is this process always initiated by the student? And how does he/she authenticate him/herself in the system? As an active student or alumna of a university (e.g. Blue University)?

Yes, always initiated by student which is the key to evade GDPR. The student can use many forms of login; university account, “BankID” which the prevailing eID-solution in Sweden but also other eid-schemes like Freja eid and also a solution called eduID where anyone can create an account and therefore access Ladok as an alumni.

Question to Ladok 2: The electronic stamp/seal, is it based on a qualified certificate, listed on the EUTL (European Union Trusted List)?

It is not based on EUTL yet but of course we are working on that. Many initiatives going on now…

Question to Ladok 3: Tor Fridell (Unverified), can you please tell us what the Dates and Results on your last slides represent? It seems like every course has 1+ associated classes but grades are associated with both courses and classes- are they linked to the same assessment, or just coincidentally the same grade?

The Transcript shown was where I had selected to show also modules within courses. One of the modules usually also sets the grade for the full course. In my case the grades are numeric 3-5 or letters G, VG (Pass, pass with disnction). One can decide what to get in EMREX usually (depends on local client), some only degree, some with degree and selected courses and some with also ECTS grading table showing the grade distribution.

Digital Transformation in Ukraine - Diia: Digital Breakthrough with Public Services

Please find the slides here [Презентация PowerPoint (oph.fi)]

- Speakers: Kateryna Suprun and Andrii Piskun Kateryna, an Education Consultant for World Bank projects, and Andrii, a Senior Expert in the EU4DigitalUA project, shared insights on Ukraine's digital transformation of educational credentials. They highlighted the launch of digital education documents through the Diia digital wallet and ongoing efforts to digitize DS.

1. 2023 Success Highlights
   - Over 11 million documents shared.
   - 7+ million uses of Diia.Signature.
   - 2.5+ million military bonds purchased, totaling 2.6+ billion UAH.
   - Significant usage by internally displaced persons and private entrepreneurs.
2. Focus on Data Ownership
   - Personal IDs, including passports, driving licenses, and educational documents, are easily accessible.
3. Diia Platform Overview
   - Mobile app and web portal offering 15 e-documents and 30+ e-services.
   - Utilizes state registers, interoperability systems (Trembita), and e-identification systems (IDGOVUA).
4. Diia.Signature Compliance
   - Meets eIDAS standards, ensuring advanced electronic signature validation against EU and third-country trusted lists.
5. Complex e-Services on Diia
   - E-baby: 9 childbirth-related services.
   - E-entrepreneur and U-resident: Services for business openings, currently in beta testing.
   - Educational documents: Diploma Supplements and other educational credentials.
6. Inter-Agency Cooperation for Educational Documents
   - Collaborative efforts from Spring 2022 to March 2024 led to the digitalization of educational credentials.
   - Full-scale launch with 20.5 million+ educational credentials available in Diia digital wallet.
7. Digital Architecture for Qualifications
   - EDEBO register for educational documents and services for partial qualifications.
   - Plans to issue digital diploma supplements starting 2025 and digitalize existing ones.

A question to Diia:

The various attestations/certificates in the Дія/Dia wallet, which format are they in? XML/ASiC-E/? or something else? Do they bear an e-seal? Can they be shared outside the context of the wallet, and validated independently, e.g. in the EU DSS validation service?

Answer:

1. From Diia APP docs are shared in 2 formats: PDF visualization and XML containing needed data. Both can be signed by e-seal.
2. ASic-E container is also available in id.gov.ua for handy signing the users' documents uploaded to the system
3. For interaction between registers SOAP or REST API are in use, every request is automatically signed by

Trembita tools
4. All docs can be shared outside DIIA, both to other systems as mentioned in 1 point, or to e-mail with possibility to validate by QR code
5. Now e-documents on education can be shared to users e-mail also, but without e-seal, but I think it will be with e-signature, which also can be validated in EU DSS validation service

Discussion groups

Summary of discussion Group 1- On digitalisation of the Diploma Supplement: solution and different approaches

The group discussion began with Koen Nomden and Ildiko Mazar (European Commission) presenting two questions and then asking participants to describe the situation in their country.

The questions were:

1. What is your current process of DS production like?
   - Is the data entry fully automated, semi-automated or manual?
   - In what format (digital, paper) are you issuing your Diploma supplements?
2. What are your design choices and expectations from a DS template?
   - Is your document structure flexible (as long as compliant with the guidelines)?
   - Are there any (procedural and/or format) restrictions?

Below are responses from participants:

<u>The Netherlands:</u> Semi-automated process with manual check, because for every student there are custom fields that may be different. Every design is different, except for the system description. I.e. the structure and design are flexible, but need to comply with the Bologna model. Institutions will use their own design (logo, layout, font, etc), but will use a standardized inlay of Nuffic about the Dutch education system. The DS is currently not available in digital format.

<u>Latvia:</u> Semi-automated process and electronically signed, but signature would not be recognized abroad. The structure is very strict, depending on national requirements.

<u>Sweden:</u> Semi-automated process. The structure follows the Bologna model and is nationally regulated; however, some text/information can be added or amended, so there is some flexibility. Standardized sentences and the description of the Swedish higher education sector are pre-loaded in the Ladok system.

One participant reflected on the Swedish higher vocational education sector (230 different providers) and the fact that it is not included in the Ladok system, but they are currently working on new system solutions.

<u>Finland:</u> Semi-automated process. Information can be retrieved automatically at university level, but then a ("dumb") PDF is produced that can be printed. Degrees can be electronically signed. Structured data is, unfortunately, lost in the conversion into PDF.

<u>Ukraine:</u> Semi-automated process, since data can be amended and issued in paper. DS template is structured according to the Bologna model and then additional data is possible. Structured data exists only on personal and organization level.

Summary of discussion Group 2- Establishing of a DS network: what it should and could be about, how could it cater to our needs

Main points

Agreed Approach:

The DS network should be developed gradually and organically to avoid complexity and excessive time investment. A step-by-step approach will be used, starting with a "loose" and "freeform" network structure.

Inmediate Actions:

Establish an email list to facilitate ongoing communication and collaboration among network members.

Goals and Benefits Identified:

The network aims to provide a platform for sharing information, asking questions, and learning from peers. It will evolve and develop gradually as members see fit.

Discussion

Before the discussions began there was opportunity for a brief introduction of all participants through the Padlet link. The same Padlet link was then used to guide discussion on four topics regarding the establishing of a Diploma Supplement (DS) network. The discussed topics were as follows:

(1) Anchors: what holds us back

Time was highlighted as the main "anchor" in the development of an international DS network. A discussion participant pointed out the fact that even though there will be a certain time investment, we will reap many benefits for the network that will save us time in the future.

The participants agreed that the creation of the network does not have to be inherently complicated as we can strive to create it in a time-efficient and "simple" way. A step-by-step approach was agreed upon.

Another "anchor" is the fact that there are many questions that need answering and resolving before the network is created. This workshop was a way to flesh out the possibilities and limitations of an international DS network while also answering some of the aforementioned questions. Creating a "loose" and "freeform" network can be a great first step as we gradually figure out the structure. This was greatly agreed upon from a participant that had been wondering about the recourses needed to create such a network.

A speaker acknowledged that it is crucial to have a clear goal when creating the network. What problems are we trying to solve?

The heterogeneity of diplomas around Europe and abroad should also be considered as it adds to the complexity of a network..

(2) Winds: what pushes us forward

We found that the development of a DS network would not only be beneficial to us by aiding in asking questions and sharing DS related experiences, but will also facilitate in the development of the DS in the future.

(3) Paradise island: what would be the perfect network and what would it give us?

The perfect network would give all of us a way to share information and learn from our DS peers. The perfect network would also be developed in an organic and step-by-step manner as this will reduce the time invested in creating the network structure.

The national context of the DS varies throughout Europe, which could be a challenge to unanimously develop the network. Keeping everyone "in the loop" and informed on the developments of the network will lead the network to function as intended.

(4) What needs to happen next to start us off to the island?
Discussing the future of the DS/EDC was one of the necessary steps highlighted by a discussion participant.

We should organise a yearly DS workshop. Whoever is interested in "hosting" a workshop can reach out to other interested parties through the mailing list discussed earlier. These workshops can be centered around a specific and relevant topic/question the organiser is interested in, or it could simply serve as a forum for general discussion. The arrangements should be kept simple to ensure frequent "events" within the network.

It was pointed out that there will be a Webropol questionnaire available to all participants with some questions regarding the DS network and today's workshop. In this questionnaire there is an opportunity to write down your e-mail address.

Conclusions

- The time needed to establish and develop an international DS network is the main limitation. However, the benefits of a network outweigh the time invested.
- The network should be developed step-by-step, in an organic way.
- An e-mailing list allows contact between members and facilitates information sharing.
- (At least) one annual workshop would be a great opportunity for peer-learning and approaching relevant topics.
- Keeping everyone included/in the loop about network developments is crucial for fruitful collaboration.