



European Campus Card Association

Student eID Framework

Workshop Package 2: Activity 2.1: Workshop Report

Report Date: December 2020



ECCA
Student eID Framework



With the support of the
Erasmus+ Programme
of the European Union

www.eidproject.eu | www.ecca.eu | info@ecca.eu



Acknowledgement

I would like to extend my sincere appreciation to all those that have contributed to the development of this report on WP2, Activity 2.1. I would like to acknowledge the important role of our project management team for their efforts in arranging and facilitating this online workshop.

I would also like to acknowledge and thank the presenters and the stakeholders who participated in the workshops and their willingness to share their views and opinions. I look forward to their continued engagement with our efforts to determine the need and requirements for a European Student eID.

In conclusion, I thank the Erasmus+ Programme of the European Union for the funding support and assistance with this project.

Sinéad Nealon

Executive Director

DISCLAIMER

This Report is prepared by the European Campus Card Association (ECCA) as part of a Consultation Process on the Development of a Proposal for a Trusted Student Identification Framework (Student eID Project). The information, which is summarised herein is for general guidance only and is not professional advice and should not be considered such or relied or acted upon in this regard. Whilst the author(s) have tried to ensure the accuracy and completeness of the contents of this document, ECCA cannot offer any undertaking or guarantee, either expressly or implicitly, including liability towards third parties, regarding how correct, complete or up to date the contents of the information provided in this report. ECCA accepts no liability for any loss or damage either direct or indirect arising out of the use of this information.

Contents

1. Introduction	2
1.1. PROJECT OVERVIEW	2
1.2 WORKSHOP OBJECTIVES	2
2. Online Workshop	2
2.1 AGENDA	2
2.2 PRESENTATIONS & DISCUSSION	3
2.2.1 Welcome & Introduction	3
2.2.2 Project Overview, Objectives & Review of European eID projects	3
2.2.3 The European Student Card & eID - Legal and Technical considerations	4
2.2.4 The European Student Card extension and adoption (ESC-tension)	5
2.2.5 European Blockchain Service Infrastructure: a new Building block, but not just another Building block	5
2.2.6 Use of Mobile Devices in eID Credentials	6
2.2.7 Open discussion & recommendations for a European Student eID	7
3. Summary	10

1. Introduction

1.1. PROJECT OVERVIEW

The European Campus Card Association is progressing with a ‘Consultation Process on the Development of a Proposal for a Trusted Student Identification Framework’ (Student eID Project). The aim of this process is to support the provision of secure identification and authentication of students on a cross-border basis in Europe. An essential element in this consultation process is to engage in knowledge sharing with the stakeholders and other groups through workshops. The aim of the workshops is to obtain feedback from the stakeholders on the future needs and requirements of a trusted eID credential. The workshops were attended by Higher Education Institutions (HEIs), Service Providers, Students, State Entities and Research Centre’s.

1.2 WORKSHOP OBJECTIVES

- (i) Engage in a process of dialogue with the relevant stakeholders to seek out their views and opinions on the needs and requirements of a trusted Student eID Credential (eIDAS compliant) that supports cross-border services.
- (ii) Identify the barriers that excludes stakeholders from enjoying the full benefits of a trusted eID that will facilitate cross-border provision of student services (academic and non-academic) and enable access to these services using their mutually recognised national student eID.
- (iii) Establish recommendations for the development of a proposal for a trusted student eID framework that will support the provision of secure identification and authentication on a cross-border basis in Europe.

2. Online Workshop

Two regional workshops were originally planned to take place in Poland and Spain (Event No. 5 & No. 6) however, due to Covid-19 restrictions, an online workshop was held on November 3rd 2020. This online event involved 46 participants from 13 countries.

2.1 AGENDA

Workshop Facilitator: Mr. Rene de Koster (ECCA).

WORKSHOP AGENDA			
No.	Description	Speaker / Moderator	Time
1.	Welcome & Introduction	<i>Rene de Koster, President, ECCA</i>	15.00 – 15.05

2.	Project Overview, Objectives & Review of European eID projects	<i>Eugene McKenna, Director of Research & Innovation, ECCA</i>	15.05 – 15.15
3.	The European Student Card & eID - Legal and Technical considerations	<i>Alexander Loechel, Ludwig-Maximilians-Universität München, Germany</i>	15.15 – 15.30
4	The European Student Card extension and adoption	<i>Andrea Baldin, Fondazione ENDISU, Italy</i>	15.30 – 15.45
Break			15.45 – 15.50
5.	European Blockchain Service Infrastructure: a new Building block, but not just another Building block	<i>Lluís Alfons Ariño Martín, Rovira i Virgili University Spain & European Blockchain Services Infrastructure (EBSI)</i>	15.50 – 16.05
6.	Use of Mobile Devices in eID Credentials	<i>Morgan Persson, Lund University, Sweden</i>	16.05 – 16.20
7.	Open Discussion & Recommendations for a European Student eID	<i>ECCA</i>	16.20 – 16.50
8.	Summary & Action Items	<i>Rene de Koster, President, ECCA</i>	16.50 – 17.00

2.2 PRESENTATIONS & DISCUSSION

The workshop focused on presentations on the agenda topics, together with discussions and feedback from the attendees. The following is a summary of each agenda topic:

2.2.1 Welcome & Introduction

Presented by Rene de Koster, (ECCA President)

Rene de Koster outlined the purpose of the workshop, which is part of the ECCA Student eID project. He stated it was our intention to host two regional workshops, but due to current travel restrictions an online workshop was the most suitable alternative at this time.

2.2.2 Project Overview, Objectives & Review of European eID projects

Presented by Mr Eugene McKenna, (ECCA)

This session provided an overview of the ECCA project “Consultation Process on the Development of a Proposal for a Trusted Student Identification Framework” (Student eID Framework) that will support the provision of secure identification and authentication on a cross-border basis in Europe. It provided an overview of the following:

- Project overview, aims and objectives
- An overview of the EU policies and strategy with regard to a European Student eID

- Review of past, present, and on-going projects that are aligned to the provision of a trusted eID and secure data transfer.
- It was outlined that ECCA's aim is to get all the relevant stakeholders working together as a team to achieve our common goal of a European Student eID. These stakeholders were outlined as Students, Educational Institutions, Service providers, and Research projects.

2.2.3 The European Student Card & eID - Legal and Technical considerations

Presented by Mr. Alexander Loechel, Ludwig-Maximilians-Universität, Munich, Germany

This session focused on the legal and technical issues that need to be considered, which included:

- The vision towards a 'European Education Area' e.g., where spending time to study abroad should become the norm, having a strong sense of our European identity and where our qualifications should be recognised across Europe.
- What problems the various programs (such as the European Student Card and MyAcademicID) are trying to solve e.g. strengthen the European identity, enable student and staff mobility, eID for secure and trusted data flow, electronic signature (eIDAS)?
- Visual data for a physical ID card and what should it contain
- The European Student Card (ESC) as an ID will need to consider the legal aspects of personal data and the GDPR regulation.
- The Ludwig-Maximilians-Universität Staff ID was presented as an example and how it is regulated by law.
- The core principles were reviewed in particular Article 6 & 7 of the GDPR legislation, which looked at the issues of data processing and consent. In addition, Article 24 & 25 relating to the general obligations on the data controller and processor were presented.
- The ESC verification process and the information in the ESC-router and how it connects the card to the HEI was outlined.
- The technological considerations were reviewed which included a router (both proxy and façade pattern) and the use of a centralized database and the consequences of this for GDPR to ensure appropriate technical and organisational measures are implemented.
- The verification process must include a framework of trust. It was recommended to have a dedicated and communicated website/app to check the status.

- In terms of technical considerations it was agreed that there was no need to reinvent the wheel as there are already established standards that we can build on. Examples of federated identity systems stated were eduroam, eduGAIN, InAcademia, eduPKI.
- Other legal and technical points mentioned included – eIDAS, EU competition law, issuing of qualified digital certificates, open source design and implementation of ESC-router, costs and subsidies, legal requirements for services i.e. library, public transport.

2.2.4 The European Student Card extension and adoption (ESC-tension)

Presented by Mr. Andrea Balbin, Fondazione ENDISU, Italy.

This session focused on the EU Student Card extension and adoption project, which is to commence in December 2020 for 24 months. The following was discussed:

- A background to the European Education Area by 2025 – high quality education, no barriers to learning and training abroad, automatic mutual recognition, speaking two languages to be the norm, and strong sense of a European student identity.
- European Student Card (ESC) initiative background – digitalising & standardising student mobility administration and rolling out the ESC & enabling online authentication of students’ identity across Europe.
- Important timescales were outlined – by 2021 inter-institutional agreements and online learning, by 2022 nominations, by 2023 transcript of records, by 2025 ESC available to all students in Europe
- ESC roll-out is increasing but is still slow due to operational, implementation and administrative challenges.
- Objective of ESC-tension project is to promote adoption of ESC, the card management systems harmonisation, and the local students service systems.
- This will be achieved by implementing an ESC-tension multilingual online platform, multidimensional matrix, card issuance and adoption toolbox, ESC compliant student services roadmap and then validating these tools.

2.2.5 European Blockchain Service Infrastructure: a new Building block, but not just another Building block

Presented by Mr. Lluís Alfons Ariño Martín, Rovira i Virgili University Spain & European Blockchain Services Infrastructure (EBSI)

This session focused on Blockchain and in particular the following;

- A background to the European Blockchain Services Infrastructure (EBSI) was outlined and how the European Blockchain Partnership (EBP) will operate EBSI nodes at national level. The architecture of these nodes was explained including four use cases which will enable you to simplify the administration process, increase efficiency and instil trust in citizens.
- These current use cases are Notarisation of documents, European Self-Sovereign Identify, Diplomas management and Trusted data sharing.
- The EBSI network and roadmap was outlined with the deployment of EBSI V2.0 set for early 2021.
- The scope of the European Self-Sovereign Identify Framework (ESSIF) includes empowering citizens in the management of their identity/ies and data via SSI; stimulate the SSI-transformation of public services; facilitate cross border interaction with SSI; make/keep national SSI projects interoperable; integrate/align existing building blocks such as eIDAS, e-delivery, once-only with SSI; conceptualize and build an identity layer in the new EBSI supporting the use cases; preserve European/democratic values in the implementation of SSI; stimulate SSI development and standardisation on a global level.
- EBSI Diploma use case is moving from a siloed education ecosystem. The new paradigm is, focusing on citizen, breaking educational SILOs, enabling lifelong learning (LLP), personal learning pathways (PLP) and stacking credentials. This will be aligned to EU digital strategy, EU data strategy, EU digital action plan (including digital credentials), European education area, Europass decision and the European skills agenda. It was outlined that Student mobility for both identity and records will be a reality (on student's mobile wallet), Long-life learning will be a reality (credentials are owned, managed and controlled by the citizen), and personal learning pathways will be easier due to the stacking credentials.
- The different dimensions of interoperability were stated as organizational, legal, technical and semantics and it was outlined we will need both EU and member state compliance.

2.2.6 Use of Mobile Devices in eID Credentials

Presented by Mr. Morgan Persson, Lund University, Sweden

This session focused on eID in Mobile Devices and in particular the following;

- It looked at campus cards today where many universities have physical cards, the identity of the user is verified manually, many different systems uses the card, and in practice the card is an ID both within and outside the university.

- Lund University campus card, which was implemented in 2005 was presented as a typical example. It was stated that most students would prefer a mobile solution however there will still be a need for a physical card. Also, there is a need to consider the overall benefits in terms of the work/cost involved in a mobile solution.
- The Future of mobile credentials was then reviewed and it was stated that the issuing of credentials is the 'easy' part. There are security benefits where it is possible to update/revoke a mobile credential and people do not share their phone. However, there is a need to assess issues with regard to compatibility with existing systems – NFC/Host card emulation in mobile devices could be an option, readers could support other technologies (i.e. Bluetooth) but replacing everything is probably not an option. Also, how do you verify the identity. Verification and trust are two important factors.
- Card Technology and Compatibility – it was stated that there is a need to decide what do we want, what can suppliers provide, do we need one app or many, should the app be vendor specific or integrated into a university app, should it be only the phone or should other devices be supported (e.g. smart watch). It was outlined the transition will take some time so we should start planning.
- Electronic Identities – we could start using these now. But we need to decide is it fully automated card issuing and what do we want to check even if we trust the identity? Examples of electronic identities in use in Sweden was presented.
- Microsoft verifiable credentials was also provided as an example using decentralized PKI (blockchain).
- Finally, the issue of trust, verification of credentials and GDPR were outlined as other important factors in the use of mobile devices in eID credentials.

2.2.7 Open discussion & recommendations for a European Student eID

Facilitated by Mr. Eugene McKenna (ECCA)

The session focused on an open discussion and recommendations on an eID credential, with the participation of attendees. The main items of discussion included:

- The issue of GDPR and the barriers it could present for a European eID was discussed. It was agreed that GDPR is not a major barrier, however the declaration on how the data is processed could be a barrier. It was stated we need to determine if we can get a European wide law for the issuing of a European eID in the academic sector or if there are applicable national laws similar to EU law that allows universities to issue identity documents with data. Most universities in Europe are linked to the government (i.e.

public institutions) and so already have a public duty to issue a certificate for study. Therefore, overall GDPR is not considered a barrier but more work is required to determine the applicable way to ensure legal compliance with data processing and consent. Finding the right legal definition for public administration is the important factor.

- In terms of European regulation and the requirements for each country to implement their own law, this could result with the implementation been specific to each country. It was recommended that the university sector needs to engage more with the European Parliament in delivering a recommendation or guideline for a common/global law for the issuing of such European eIDs for the academic sector.
- There is already an acceptance at EU level that eIDAS is based on a country issuing the credential. The lack of a European issuer was identified. However, in addition not all countries see it as a benefit as having a European credential provider. Nevertheless, there is work ongoing in this area.
- In Germany, a new identity card has the capability to carry an eIDAS qualified signature cert, however Germany is not allowed to issue this cert. The user must purchase it through one of several identity providers. GEANT with eduPKI can issue such certificates but this can present other issues within the market and competition law. There could be legal issues in providing such credentials to users in this way. It was outlined that the university must verify the user and therefore trust between universities is an important factor to ensuring the documents are correct in the data set provided.
- It was acknowledged that EBSI is working on this trust framework, that there are different levels of trust for identity (low, substantial, high), and a high level of assurance is required for certain services, but low to substantial will work for most cases. In terms of the technology it can provide a high level of assurance even though the eIDAS trust framework is not only about technology. It was agreed that despite this lack of new technology it is something EBSI are working together with the Directorate-General for Communications Networks, Content and Technology (DG-Connect). They are also moving to production next year and with a substantial level of assurance this will be possible because of the eIDAS trust framework. (It is also possible to communicate other schemas and agreements between member states for that substantial level of assurance that is required). Related to the data for formal education, national legislations must also be taken into account. There will also be the opportunity to standardise the special verifiable credentials for describing the identity of the student and the data related specifically to the

student. Furthermore, EBSI is empowering citizens to have control and management over one's own identity with a high level of data assurance provided.

- It was agreed that the student as the end user is a very important stakeholder. Therefore there is a need to determine what is the priority of a student for a European Student eID. Is it to provide secure identification and/or access to services? It was stated the types of services we refer to, need to be considered separately e.g. dining at another campus what will apply? Do you have a cash element within your card for payments and will any discounts apply to you as a student within the same country or elsewhere? The subsidies by local governments need to be considered. Also, the library is another service with additional requirements e.g. to enter a library or borrow a book you will need a verified address. In addition, Public transport is another important student service along with other services on and off campus that are connected. Acceptance of the card, to get discounts and access services are all important to the student.
- In relation to services on campus it was agreed that a network between universities could be arranged, however for off campus services there are different requirements to authenticate to these services. The issue of creating an identifier and authentication process was discussed in order to make it generic for any service provider. It was suggested an online system or API will simplify it and every service provider will include access to this API in their service development. It was stated that access to online services will be less difficult compared to offline services as the information to be stored and the procedure to authenticate this data is valid for any institution.
- The impact of Covid-19 on a European Student eID was discussed, there was general consensus that this is a temporary situation and should not influence the implementation of the European Student eID. There will continue to be a mix of blended learning both online and physical but the direct face-to-face communication with the student was outlined as being important.
- Technology – it was stated by a service provider from their research in Austria that the physical card is still very important. This is particularly important to the university from an optics perspective and they can trust it. As a result, service providers will continue to issue eID credentials both on the card and also on mobile devices. The choice is therefore for the HEI or student to decide which option is most suitable for the particular use application.

3. Summary

The aim of the workshop was to consult with and obtain feedback from the stakeholders throughout Europe and beyond on the future needs and requirements of a European Student eID. The 46 participants that attended the workshop comprised of personnel who collectively possessed an extensive and diverse range of knowledge and expertise regarding the requirements of a trusted eID credential from each of the stakeholder's perspective. This provided an effective process for discussions and collaboration on a diverse range of important issues to gaining acceptance among the stakeholders on the concept of a European Student eID.

The main outcomes from the workshop included the importance of complying with GDPR, together with determining an applicable approach to ensure legal compliance with data processing and consent. In addition, it identified that a recommendation or guideline from the EU for a common/global law for the issuing of European Student eIDs for the academic sector, would be beneficial to its overall acceptance and use throughout Europe.

The issuing of the eID credentials in terms of authentication and trust is of paramount importance and the process for certifying and issuing needs careful consideration. The different laws and regulations in each of the member states is an important factor and needs to be addressed to establish a mutual solution. Although the creation of a physical identifier is important, the process of validation and authentication of the relevant data must provide a high level of trust.. Therefore, a good trust framework that uses existing standards and infrastructure is desirable in this process. The issue of Self Sovereign Identity as an achievable solution was discussed and the current work of EBSI should be considered as it is empowering citizens to have control and management over one's own identity (and data). It is also important to remark that EBSI - ESSIF and Diploma - is GDRP compliant by design.

The needs of students as the end user is fundamental to the overall acceptance and use of a European Student eID. This includes both access to services on and off campus and as a physical identity for cross border use. Access to such services will also need to be carefully considered as they will include a mix of both academic and non-academic services in both online and offline modes, which will result in different levels of authentication requirements. It was noted that in terms of eID types and technologies there are diverse views in this area, however there is still a clear demand for a physical student card along with hybrid mobile device solutions.

In summary, these discussions and outcomes will be important in our efforts to develop a proposal for a 'Trusted Student Identification Framework'.



European Campus Card Association



ECCA
Student eID Framework



With the support of the
Erasmus+ Programme
of the European Union

www.eidproject.eu | www.ecca.eu | info@ecca.eu