European Campus Card Association

Student eID Framework

Work Package 2: Activity 2.3: **Establish Collaboration with existing eID Projects**
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ECCA
Student eID Framework

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

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I would also like to acknowledge and thank the stakeholders of the various projects for their collaboration to share their views and information and I look forward to continued engagement with them in our efforts to determine the needs 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.

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Disclaimer

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1. Introduction

1.1   ECCA Project Overview

The European Campus Card Association (ECCA)[1] is actively progressing with a "Consultation Process on the Development of a Proposal for a Trusted Student Identification Framework" (Student eID Project)[2] that will support the provision of secure identification and authentication of students on a cross-border basis in Europe. Since established in 2002, the main policies and strategies of ECCA are dedicated to promoting research for the development and implementation of student electronic identification (eID) credentials in Higher Education Institutions (HEI) that supports student mobility and the provision of trusted identification and secure access to services across European countries.

Achieving cross-border student mobility will enable students to complete transactions online, which requires secure identification and authentication. The absence of trusted interoperable and an easy-to-use form of eID and authentication can pose obstacles to students completing these transactions securely and efficiently between the relevant HEI.

The Student eID Framework will engage in a process of dialogue involving the relevant stakeholders and policy makers to facilitate the requirements of the EU policy on a student eID. Combining their knowledge, opinions and requirements will be an integral part of the Student eID Framework proposal to ensure it complements and supports the objectives of both the Educational and Service Providers requirements.
The project will deliver an impartial across-the-board consultation process throughout Europe, which will culminate with the dissemination of recommendations for a trusted student eID.

The main objectives of this project are;

(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.

(iv)   Promote innovation and networking, particularly in the education, business and technological sectors, associated with the use of a cross-border student eID that supports student mobility and access to student services across Europe together with supporting active European citizenship and intercultural exchange programmes.

1.2 Student eID Overview

The traditional student identification (ID) in HEIs across Europe generally consists of bespoke, stand-alone solutions that do not conform to any common standard. These solutions operate in isolation and therefore are incapable of facilitating mobility, interoperability or student authentication between HEIs. The current process of student identification is generally based on the student's unique ID number; however, the format and process used to issue the student ID number varies from country to country, and in many cases, this format varies within a country. Furthermore, in some countries, there is no formal process in place to issue student ID numbers. In recent years, through innovation in technology and the use of mobile devices, the requirements for secure

[1]   http://www.ecca.eu/
[2]   https://eidproject.eu/

electronic identification is now becoming an important mechanism in the evolution of student life on campus. However, the customary core function of the student ID usually remains restricted to facilitating local access to services for students, academics and visitors. This has resulted in a multiplicity of student identities in HEIs, which are required for the diverse range of academic and non-academic services both on and off campus. To overcome this problem, it is essential that there is effective collaboration, with past and on-going initiatives, to develop and integrate an infrastructure that supports the concept of a European Student eID for HEIs.

The European Commission, under the Connecting Europe Facility (CEF) in the field of trans-European Telecommunication network has prioritised its support for initiatives on cross-border student mobility.
This support focused on solutions that facilitate cross-border online access to academic and non-academic e-services for students, together with the trusted electronic transfer of student information between students and the relevant HEI.

1.3 EU Student eCard

The EU Student eCard [3] initiative will enable every student to easily register electronically at the host educational institutions and thus have access to cross-border online student services when moving abroad. This will eliminate the need for on-site procedures and paperwork. It will also allow secure and seamless communication between the information systems of the HEIs in Europe, ubiquitous automatic recognition of the student status and identity, electronic exchange of academic data, as well as access to online campus and other student services, with a high degree of security.

What is the EU Student eCard Initiative?

The Student eCard initiative is part of the vision of the European Education Area [4] aiming to improve the quality of student mobility in Europe. The goal is to make the eCard available to all students in Europe by 2025. The benefits go beyond students, as it will reduce administrative procedures for the HEIs and potential for errors (avoiding manual entry of data, duplications, etc). Fully compliant with EU personal data protection legislation, the card will guarantee a secure exchange of student information and allow for seamless transition between HEIs. Moreover, the card will give students the chance to access online courses and services provided at other HEIs. This will not only facilitate virtual mobility and blended learning, but the EU Student eCard initiative will also give students a greater choice in the programmes they can follow. Over time, it will allow students to enjoy cultural activities throughout Europe at discounted rates.

The initiative is linked to the EU's electronic identification rules (eIDAS Regulation) [5] and aims at re-using several CEF Building Blocks to provide a seamless cross-border electronic exchange of student data and documents based on the Once Only Principle (OOP). As a first step, the electronic services of the HEIs will be connected with the Member States' eID Nodes implemented in the framework of the eIDAS Regulation. This would make it possible for students to authenticate themselves (or their other academic related data) and use the online services of the HEI in another Member State with the national eID means of their country of origin. The initiative is interlinked with several digital projects of the Erasmus+ programme aiming to simplify student mobility: Erasmus without Paper [6], EMREX [7] and the European Student Card [8]. It is a step forward in the transition towards a digital European society and a true European Education Area, in which spending time abroad to study and learn is the norm, and educational excellence is a reality for all.

[3] **https://ec.europa.eu/digital-single-market/en/eu-student-ecard**
[4] **https://ec.europa.eu/education/education-in-the-eu/european-education-area_en**
[5] **https://ec.europa.eu/digital-single-market/en/trust-services-and-eid**
[6] **https://www.erasmuswithoutpaper.eu/**
[7] **https://emrex.eu/**
[8] **https://europeanstudentcard.eu/**

1.4 Compliance with EU Regulations on eID

(i) **EU Policy on Trust Services and Electronic Identification (eID)**

One of the primary aims of this project is to assist in the process of generating knowledge and awareness of the benefits derived from a student eID credential, compliant to eIDAS, which supports the statutory activities of ECCA and EU policy. In particular, *Regulation (EU) N°910/2014 on electronic identification and trust services for electronic transactions in the internal market* (eIDAS Regulation) is to provide a predictable regulatory environment to enable secure and seamless electronic interactions between businesses, citizens and public authorities. The implementation of eIDAS provides the right foundations and a predictable legal framework for HEIs and students to have secure access to services and perform transactions on a cross border basis.

The eIDAS Regulation:

• ensures that citizens and businesses can use their own national electronic identification schemes (eIDs) to access public services in EU where eID is available

• creates a European internal market for electronic Trust Services (eTS) - namely electronic signatures, electronic seals, time stamp, electronic delivery service and website authentication - by ensuring that they will work across borders and have the same legal status as traditional paper-based processes. Only by providing certainty on the legal validity of all these services, businesses and citizens will use the digital interactions as their natural way of interaction.

(ii) **Digital Agenda for Europe**

The Digital Agenda for Europe (DAE)[9] is one of seven flagship initiatives under the Europe 2020 strategy. It focuses on modern technologies and online services that will allow Europe to create jobs and promote economic prosperity. It aims to improve the daily lives of EU citizens and businesses in a variety of ways. The overall aim of the DAE is "to deliver sustainable economic and social benefits from a digital single market based on fast and ultrafast internet and interoperable applications".

In January 2018, the EU adopted the Digital Education Action Plan[10] with the goal of making better use of digital technology for teaching and learning. The plan aims to:

• Enable students to identify in a trusted manner (Once Only Principle);
• Digitally connect HEI information systems.
• Facilitate secure exchange and verification of student data / academic records.
• Streamline administrative procedures.
• Enable international students to access campus services.

[9]https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52010DC0245R(01)&from=EN
[10]https://ec.europa.eu/education/education-in-the-eu/digital-education-action-plan_en

(iii)   **Once Only Principle**

The Once Only Principle (OOP) needs to be seen in the context of public sector digitalisation. It means that citizens and businesses provide diverse data only once in contact with public administrations, while public administration bodies take actions to internally share and reuse these data – even across borders – always in respect of data protection regulations and other constraints. When the OOP principle is widely applied, it significantly reduces the administrative burden on citizens. In addition, citizens gain better control over their information when it is provided to public administrations on a once only basis. Moreover, it helps public administrations work faster, more transparently and efficiently. There are two EU projects, SCOOP4C[11] and TOOP[12] that relate to the implementation of the OOP. SCOOP4C ended in April 2019 and its work is now taken over by the TOOP project until September 2020, after then there will be a handover of the TOOP project solutions to the CEF OOP Preparatory Action.

(iv)   **Data Protection Policy**

The EU implemented a legal framework (REGULATION (EU) 2018/1725[13] OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 October 2018) for the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data. The main aim of the Regulation is to adapt its rules to comply with General Data Protection Regulation (Regulation (EU) 2016/679), which has been fully applicable since May 2018. Regulation 2018/1725 establishes a coherent framework, while guaranteeing the free flow of personal data within the Union.

[11]**https://www.scoop4c.eu/**
[12]**www.toop.eu**
[13]**https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32018R1725**

2. Collaboration with existing eID Projects

2.1   Description of Projects Reviewed

This section provides a narrative on 13 past and on-going initiatives that provide a diverse range of reports, projects and studies, all of which are relevant to the delivery of a European eID credential that supports student mobility and the provision of trusted identification and secure access to services across borders. A summary of the projects is presented in Appendix 1.

2.1.1   e-Signature and Erasmus Student eCard in Greece

Start Date: **September 2018**
End Date: **March 2021**
EU Funding: **CEF Telecom € 270,400**
Project Website: **https://grnet.gr/en/grnet_projects/cef-eid/**

The Action aims at promoting the uptake and use of eSignature in the Greek Public Administration and the use of cross-border eIDs among Erasmus students.
It will develop a central service for remote eSignature for the Greek Public Administration to enable the creation of legally binding electronic signatures for the needs of the Greek Public Administration and the cross-border validation of the e-signature. The system will be built on top of 2 components: the existing eIDAS infrastructure and a Qualified Trust Service Provider (QTSP). The remote e-signature solution will be based on eSignature DSI (DSS) and will be deployed in 2 services.

The Action will also connect AcademicID service to the eIDAS node in Greece in order to allow Erasmus exchange students from EU universities outside Greece to use their eID when applying for this service. This will allow the Erasmus exchange students from EU universities to gain access to several student discounts and benefits provided by the Greek Universities, the State or even private entities.

2.1.2.   Erasmus without Paper (EWP 1.0 & EWP 2.0)

Start Date: **EWP 1.0: November 2015**
End Date: **October 2017**
EU Funding: **Erasmus+ € 499,982**
Start Date: **EWP 2.0: January 2018**
End Date: **December 2019**
EU Funding: **Erasmus+ € 499,613**
Project Website: **https://www.erasmuswithoutpaper.eu/**

The Erasmus Without Paper (EWP)[14] project, co-funded by the Erasmus+ Programme of the EU, aims to bring Erasmus administration into the 21st century by going digital. The EWP initiative uses the latest digital technology to pave the way for Erasmus coordinators to manage mobility's more efficiently. This allows students and staff members to communicate and exchange all necessary information swiftly and securely.
EWP is a project and a Network funded through Erasmus+ KA3 from 2015 to 2017 (EWP1.0) and again from 2018 to December 2019 (EWP 2.0)[15]. Its chief goal is to digitalise the administrative framework that underpins student mobility in Europe, enabling electronic data exchange and interoperability among diverse information systems. In March 2019, the European Commission announced that the usage of EWP will be made mandatory from 2021 as part of the next multi-annual financial framework (MFF) i.e. the next Erasmus programme.

EWP consists of two chief components:

(i)   A **network** that interconnects a multitude of student information systems (whether individual universities or third party providers which represent multiple institutions) through the use of APIs.

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[14] **https://www.erasmuswithoutpaper.eu/**
[15] **https://www.erasmuswithoutpaper.eu/news/ewp-kicks-2nd-project-phase**

(ii)   A **dashboard**[16] that provides a web solution for exchanging student data electronically for HEIs that currently are not using any digital solution to manage their Erasmus mobility management.

In addition, the Erasmus+ Mobile App[17] is a students' single point of entry into the Erasmus+ programme. The App will provide a broad range of information, tools and services to help students plan and carry out their exchange, supporting a first rate mobility experience. The Erasmus+ Dashboard will be integrated with other tools in EWP into what will ultimately become the EWP Dashboard.

2.1.3. EMREX Project

Start Date: **January 2015**
End Date: **January 2018**
EU Funding: **Erasmus+ €1,425,000**
Project Website: **http://www.EMREX.eu**

The EMREX[18] network, initially co-funded by Erasmus+, addresses the EU 2020 target that 20% of higher education students should be mobile during their studies. The network focuses on the electronic exchange of student achievement records between higher education institutions and together with other initiatives, like Erasmus Without Paper, ESC, ESMO, SEAL, MyAcademicID, is part of a wider set of activities supporting digitalization of student mobility.

In 2016-2017, the project ran a field trial in Finland, Norway, Sweden, Denmark, Italy and Poland, testing new ways to make the administration of student mobility easier by sending data digitally. Since then, the network has been converted into a working production environment.

The EMREX solution is a decentralized network consisting of several components. For consumers of the result data the network is open and the students themselves are in control of the data exchange. The decentralized model also makes it easier to add new providers of student result data to the network. Each Student Information System (SIS) or institution that wishes to retrieve results from the EMREX network can connect using a standard Student Mobility plug-in (SMP). This then becomes an EMREX client, and enables the student to retrieve their result data from the EMREX network. Each country that seeks to provide results to the EMREX network must implement one or more National Contact Points (NCP). The NCP provides the students with a secure login, and enables them to select the results they want to share with the EMREX client. The only common component is the NCP registry (EMREG).

EMREX has now developed into an established service enabling digital information flows between countries. It is spreading out to new countries and expanding its network in addition to providing more value to users by augmenting the service catalogue. It is available for use by students in countries that are connected to the Network. Since the trial, the EMREX network has grown and there are now 17 full members, 8 NCPs in production, and about 1500 students have used the system. More NCPs are in the process of commencing production.

EMREX can also be used in other user scenarios. One example is the Norwegian Diploma Portal, which allows students and former students, who have studied in Norway, to retrieve their educational results and share them with a desired recipient for recruitment and other scenarios. In the long term, it can help the consumers of these data to automate their processes and give better services to the owner of the data. The first steps towards this are already in development.

EMREX is based on open source code and is freely available to all HEIs in Europe as well as the rest of the world. New countries can join the EMREX network by creating their own EMREX clients, and contribute to the network by providing their own NCPs.

[16] **https://www.erasmuswithoutpaper.eu/dashboard**
[17] **https://www.erasmusapp.eu/**
[18] **https://emrex.eu/**

2.1.4. European Student Card

Start Date: **September 2016**
End Date: **August 2018**
EU Funding: **Erasmus+ € 292,223**
Project Website: **https://www.europeanstudentcard.eu**

The European Student Card (ESC) Project[19] commenced in September 2016 and ended in August 2018. The vision underlying the ESC project is that of enabling students to assert their rights by connecting existing student cards to a digital system. The project partners worked on enabling students to seamlessly request accommodation, gain access to university canteens at student rates and access other services (e.g. library systems) beyond their own HEI. By doing so, the project partners aimed at encouraging stronger cooperation between institutions and increasing visiting, exchange or international students.

The consortium looked into establishing non-intrusive mechanisms that respect the procedures and systems specific to each country and institution and did not intend to replace existing student cards. It involved partners from France, Germany, Italy and Ireland. The ESC was lead by the Centre national des œuvres universitaires et scolaires (CNOUS) and the EUF was an associate partner and a member of the project's Advisory Board.

The project outcomes were incorporated into the MyAcademicID Project to create bridges between existing eID and the eIDAS directive.

2.1.5. MyAcademicID

Start Date: **January 2019**
End Date: **December 2020**
EU Funding: **CEF Telecom € 1,039,639**
Project Website: **http://www.myacademic-id.eu/**

MyAcademicID[20] is a project funded under the CEF and is an important part of the EU Student eCard initiative, spearheaded by the European Commission. The project runs from January 2019 until December 2020, and it has 13 partners coordinated by the European University Foundation (EUF). MyAcademicID aims to support a digital infrastructure for secure and seamless exchange of data between higher education institutions in Europe and to allow students to authenticate online and access e-services through a single sign-on when they go abroad on mobility.

This eID scheme will be the result of the integration of eIDAS, eduGAIN and the European Student Identifier. The establishment of bridges between existing identification and authentication federations and the eIDAS interoperability framework will result in a faster rollout of the services and the definition of new use cases.

Additionally, four e-services will integrate the resulting European Student eID scheme to test its functioning: the Online Learning Agreement, the Erasmus Dashboard, the Erasmus+ Mobile App and the PhD Hub Platform. Additionally, the Portuguese national student ID (Estudante ID) will be made interoperable with the European Student eID, highlighting how national identity providers can join this digital scheme. Future integration with Erasmus Without Paper is also foreseen.

MyAcademicID state that the scalability of the project and the potential for integration of the European Student eID with a myriad of other student services not only pave the way for seamless student mobility and a stronger, reinforced European student status throughout Europe, but make MyAcademicID a key component of the European Student Card Initiative spearheaded by the European Commission.

[19] **https://europeanstudentcard.eu/project/**
[20] **https://www.myacademic-id.eu/**

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2.1.6. SEAL (Student and Citizen Identities Linked)

Start Date: **April 2019**
End Date: **March 2021**
EU Funding: **CEF Telecom € 1,188,121**
Project Website: **https://project-seal.eu/**

The SEAL project[21] aims at combining the benefits of Member-State backed citizen (natural person identification and authentication through eIDAS) and student and researchers identities (eduGAIN from GÉANT and European Student Identifier from European Student Card) to enable a cross-sector interoperability between eIDAS and Higher Education/Research domains. This will be achieved through the deployment of the SEAL linking service platform, which will establish inter-linking mechanisms between different identities in order to support authentication mechanisms for multiple identities. SEAL identity linking service will centralise the checks of the identities on a trusted third party and provide common query interfaces so the burden of having to compare/validate the match between two identities is taken out of the services to a dedicated platform.

The SEAL platform will include the following modules/interfaces:

- Identity Provider Interface and Modules. Linking modules will be established for identities such as eIDAS eID, eduGAIN, and ePassport. The linking of other identities (such as ESC and OrcID) will be also considered;

- Identity bootstrapping: the user will be able to bootstrap unique and persistent or temporary identifier by authenticating through eIDAS (other bootstrapping methods may be considered). This will enable linking eIDAS identities to any other integrated identities establishing a persistent link between both identifiers while the user wishes to keep it;

- Identity Management Interface through which the user of the platform will be able to manage his/her wallet of links and identities (perform the identity linking procedures, as well as to manage the linking information stored in the service) through a web and a mobile interface. Mobile application will build on and reuse existing functionalities of the Erasmus+ APP (preferred option) or on UMA app;

- Service Provider Interface and Modules will allow the connection of academic institutions as consumers of the linking service (to indirectly support establishing trusted links between the datasets transferred between institutions);

- Validation Interface and Modules: Validation methods will be established based on the assurance level of the identities and validation guarantees of each validation mechanism (it can include local, remote, automated, semi-automated or third party validation).

Existing software solutions will be taken into account when implementing the modules to avoid double coding and to reduce maintenance costs. A blockchain implementation will be integrated to reinforce integrity and accountability of the interlinked information and to provide a higher degree of trust. The action will also leverage the results from ESMO Action 2017-EU-IA-0032 (mainly ESMO Gateway) which as a multi-protocol proxy solution will facilitate implementing authentication and linking modules supporting several protocols on the SEAL identity linking service.

[21] **https://project-seal.eu/**

2.1.7. StudIES+

Start Date: March 2018
End Date: **December 2019**
EU Funding: **CEF Telecom € 1,421,253**
Project Website: **https://studies-plus.eu/**

StudIES+[22] is developing a solution for digital student identities, the mobile student card, as well as secure and certified document exchange based on the European eIDAS Regulations. They have identified three key aspects that they are taking to the next level: known as the Three Pillars:

1.   Higher Education Institution processes - facilitating and digitalizing workflows and processes;
2.   Student identity - Keeping track of academic and national IDs across borders, institutions and devices;
3.   Document signatures - Taking documents, signatures and security to the digital age.

StudIES+ facilitates the mobility of students in the European Union and builds trust for secure e-services among students by deploying and operating apps across the distributed platform StudIES+. The StudIES+ platform will incorporate digital services for Higher Education Institutions (HEIs)-students. Services will be accessible via:

•   eID (including eIDAS eID) and
•   derived eIDs (Student eCard) as well as provide
•   eSignature/eSeal/time stamp services that rely on DSS for eSignature generation and verification.

To provide a modern document and signature solution, a Digital Transaction Management (DTM) platform is connected to the StudIES+ platform. This enables eSigned document exchange between students, HEI, HEI services organisations on the one hand and businesses on the other hand. Secure exchange of the documents will also be ensured by deploying secure document exchange (ePROSECAL) and notarization platform/services (eNOTAR).

2.1.8. Olympus Project

Start Date: September 2018
End Date: **August 2021**
EU Funding: **Horizon 2020 € 2,564,480**
Project Website: **https://olympus-project.eu/**

OLYMPUS[23] will address the challenges associated to the use of privacy-preserving identity management solutions by establishing an interoperable European Identity Management Framework based on novel cryptographic approaches applied to currently deployed identity management technologies. In particular, OLYMPUS will employ distributed cryptographic techniques to split up the role of the online IDP over multiple authorities, so that no single authority can impersonate or track its users. By not requiring users to store any long-lived credentials, the OLYMPUS framework will not rely on any protected hardware or software environments on user devices and will be able to offer a much better streamlined user experience.
Rather, users will obtain short-lived access tokens after authenticating to the system using readily available and platform-independent mechanisms such as passwords or biometrics.
The oblivious identity management scheme that OLYMPUS will design will be integrated into popular existing identity solutions such as SAML, Identity Mixer, or OpenID Connect in order to minimize the changes required for service providers. OLYMPUS will also address the security problems of virtual identities by linking citizens' physical identities to their digital identities, but in in such a way that new digital identities can be derived to preserve citizens' privacy when accessing different online and offline services.

[22] **https://studies-plus.eu/**
[23] **https://olympus-project.eu/wp-content/uploads/2019/07/Flyer.pdf**

Finally, the project will produce a GDPR-compliant procedural and legal standard to make use of the obliviously identity management scheme in real business processes, maximising user privacy while maintaining or even increasing the security levels required by service providers. The application of GDRP recognized security measures such as data minimisation and separation, pseudonyms and cryptographic techniques will also reduce legal risk to service providers, especially in respect to explicit consent management.

2.1.9. EUROLogin (Cross-border authentication in European cloud platforms according to the eIDAS Regulations)

Start Date: **October 2018**
End Date: **September 2020**
EU Funding: **CEF Telecom € 598,952**
Project Website: **https://lmtgroup.eu/projects/eurologin/**

The EUROLogin project, was prepared and submitted by LMT Group, in collaboration with Universitat Politècnica de València (UPV). This Action will integrate the eID DSI (Digital Service Infrastructure) into the systems of three EDI providers and one public university that will be connected to four different eIDAS nodes (Belgium Cyprus, Italy and UK) This will enable the different services to be available for cross-border authentication. BILLIT will connect to the Belgian eIDAS node, University of Cyprus to the Cypriot eIDAS node with the support of its EDI Provider "Goldman", SATA to the Italian eIDAS node, and ELCOM to the British one.

As a result, the four implementing participants will be able to request, receive and process the new set of identification data received from its national eIDAS node under the eIDAS Regulation. It will promote the uptake and use of the eID DSI and will facilitate access to the services provided by these four entities (BILLIT, University of Cyprus, SATA, and ELCOM) to all EU citizens and businesses using their national eID, and thus ensuring cross-border mobility and supporting the Digital Single Market.

Objectives;
- Integration of European platforms in the cloud according to the Regulation (EU) No 910/2014
- Secure and reliable connection to several public and private electronic services
- Cross-border interaction between public administrations, businesses and citizens

2.1.10. eID4U

Start Date: **February 2018**
End Date: **October 2019**
EU Funding: **CEF Telecom € 584,314**
Project Website: **https://security.polito.it/eid4u/**

The eID4U project aim was to use the eIDAS electronic identities to provide advanced cross-border services to the European academic environment. This required the definition of new personal attributes related to the academic life of citizens and to augment the standard eIDAS network with the ability to transport such attributes. The standard eIDAS identities and these academic attributes were to be exploited to simplify three electronic services: application to academic programs, access to electronic resources, and generalized WiFi access. The project was completed in October 2019 and this Action demonstrated how academic institutions can make use of eIDAS Network. It defined the academic attributes needed to be transferred in the eIDAS infrastructure in order to enable student mobility scenarios. It further enabled the exchange and processing of the academic attributes by the eIDAS nodes in the countries of the consortium (with the use of the pre-production nodes or nodes set up specifically for this Action). It finally extended the e-services of academic service providers with support for the eID4U academic attributes demonstrating how academic services can benefit from cross-border eIDAS authentication and the transfer of academic attributes defined by the Action. The results of this Action will contribute to the development of the core service platform for the EU Student eCard DSI.

2.1.11. European Digital University Card Student

Start Date: **September 2019**
End Date: **August 2022**
EU Funding: **Erasmus+ € 183,896**
Project Website: **https://www.univ-rennes1.fr/**

The EDUcards strategic partnership in higher education is presented by the EDUC alliance, which was founded by five Higher Education Institutions (HEIs) from four countries: The Czech Republic, France, Germany and Italy. The objective is to set up, in the mobility space that the EDUC alliance offers, the European Student Card (ESC) and to test a methodological framework for its deployment during an experimental phase, to identify any potential difficulty and to come up with solutions to overcome potential problems. Beyond its implementation in an alliance with a total of 160,000 students, the use of the ESC will be evaluated, experienced and will encompass the provision of several related services such as access to libraries, restaurants, housing and public transport provided by university cities. At the end of this project, four intellectual outputs will be delivered, one inventory, two guidebooks and one report will be made available to all HEIs throughout the EU, whether they are partners or not. Training activities will take place so that staff members from partner HEIs can trade best practices, feed their own reflection, and therefore find innovative solutions. A dissemination event will be organised to give a multiplier effect to the EDUcards project. These deliverables will contribute to the implementation of the ESC and support the EDUC alliance's use of the Erasmus Without Paper (EWP) project.

2.1.12. European Digital Student Service Infrastructure (EDSSI)

Start Date: **Autumn 2020**
End Date: **Autumn 2022**
EU Funding: **CEF Telecom € 2,499,308**
Project Website: **In development**

In July 2019 the CEF Telecom call was announced (CEF-TC-2019-4: EU Student eCard Core Service Platform) and the grant of €2,499,308 was awarded in May 2020 to the European University Foundation-Campus Europae (the coordinator of MyAcademicID project). The title of their proposal is European Digital Student Service Infrastructure (EDSSI). The call objective states it is to design, develop, and roll-out a solid technical infrastructure to support European higher education institutions in offering to students a secure cross-border electronic identification and authentication as well as cross-border electronic exchange of data required by online student services. It states that the future solution should integrate the eIDAS eID framework with various existing projects and infrastructure.

EDSSI aims at implementing a comprehensive technical infrastructure to support European Higher Education Institutions (HEIs) and Student Service Providers to implement secure electronic identification/authentication for students across borders to seamless access online services and enable the exchange/verification of relevant academic and non-academic data between HEIs and beyond. EUF network universities involved in the project include: Aristotle University of Thessaloniki (coordinating institution), Ghent University, University of Warsaw, University of Porto, Humboldt University of Berlin, Jaume I University.

2.1.13. EU Student Card Extension and Adoption (ESC-tension)

Start Date: **November 2020**
End Date: **October 2022**
EU Funding: **Erasmus+ € 299,138**
Project Website: **In development**

The ESC-tension project is to commence in November 2020 and is for a period of 24 months. There are seven partners in the project and the coordinator is Fondazione ENDISU. The purpose of the project is based on to date there is no "focal point" at national level of Member States or at European level to facilitate the adoption of the European Student Card by the HEIs and by the students. What is available to date are the "technological" guidelines to enable HEIs to harmonise their IT systems to the requirements necessary for the ESC's issuance. However, there is a lack of administrative, management, operational and technical tools and resources to enable the adoption of the ESC and, above all, to adapt the systems for managing services on and off campus to ESC standards. This is particularly important, taking into account the administrative and cultural specificities of the national context, as well as the strategic development lines of each HEI. The ESC-tension project, therefore fills this gap, and meets this need by developing resources and tools to adapt the local student charter and student services to ESC standards.

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3. Summary

3. Summary

This report aims to provide collaboration with existing eID projects. It includes a high-level description of a diverse range of reports, projects and studies, all of which are relevant to the delivery of a European eID credential that supports student mobility and the provision of trusted identification and secure access to services across borders.

These initiatives have resulted in a lot of valuable research and knowledge of the current technological landscape of eID, which if utilised effectively can provide an important resource in the successful outcome for a European student eID. Many of these projects focused on the use of digital technology for connecting HEIs and facilitating secure exchange and verification of student data, interoperable with eIDAS. Compliance with EU policies and regulations in relation to eID and trust services is demonstrated in many of these projects.

The outcome of this collaboration has resulted in the review, and collation of the most recent and relevant student eID projects. Over the past 5 years, these projects have resulted in successful outcomes individually, but many are done in isolation from each other with inadequate collaboration between projects. There is a need to achieve better cooperation between the various project stakeholders to enable the exchange of information and the sharing of best practices in the process of establishing a student eID. It is important for the stakeholders to be aware and understand the evolution of the eID landscape in order to support the needs and requirements of students and HEIs. This cannot be analysed or achieved in isolation.

The EDSSI – European Digital Student Service Infrastructure project, to commence this Autumn, is focused on designing, developing, and roll-out a solid technical infrastructure that supports European HEIs. This infrastructure will offer students a secure cross-border electronic identification and authentication as well as cross-border electronic exchange of data required by online student services. It states that the future solution should integrate the eIDAS eID framework with various existing projects and infrastructure. This will inevitably include much of the good work achieved from many of the projects contained within this report. The goal of this future solution is to enable European students in a cross-border mobility context to use the different academic online services as well as non- academic services.

4. Appendix 1
List of Projects Reviewed

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No.	List of Projects / Reports Reviewed	Project Start/ End Date	Funding Programme/EU Contribution	Project Website
2.1.1	e-Signature and Erasmus Student eCard in Greece	September 2018 to March 2021	CEF Telecom €270,400	https://grnet.gr/en/grnet_projects/cef-eid/
2.1.2	Erasmus without Paper (EWP1.0 & EWP2.0)	EWP1.0; November 2015 to October 2017 EWP2.0; January 2018 to December 2019	Erasmus+ EWP1.0 €499,982 EWP2.0 €499,613	https://www.erasmuswithoutpaper.eu/
2.1.3	EMREX Project	January 2015 to January 2018	Erasmus+ €1,425,000	http://www.EMREX.eu
2.1.4	European Student Card	September 2016 to August 2018	Erasmus+ €292,223	https://www.europeanstudentcard.eu
2.1.5	MyAcademicID	January 2019 to December 2020	CEF Telecom €1,039,639	http://www.myacademic-id.eu/
2.1.6	SEAL (Student and Citizen Identities Linked)	April 2019 to March 2021	CEF Telecom €1,188,121	https://project-seal.eu/
2.1.7	StudIES+	March 2018 to December 2019	CEF Telecom €1,421,253	https://studies-plus.eu/
2.1.8	Olympus Project	September 2018 to August 2021	Horizon 2020 €2,564,480	https://olympus-project.eu/
2.1.9	Cross-border authentication in European cloud platforms according to the eIDAS Regulation (EUROLogin)	October 2018 to September 2020	CEF Telecom €598,952	https://lmtgroup.eu/projects/eurologin/
2.1.10	eID4U	February 2018 to October 2019	CEF Telecom €584,314	https://security.polito.it/eid4u/
2.1.11	European Digital University Card Student	September 2019 to August 2022	Erasmus+ €183,896	https://www.univ-rennes1.fr/
2.1.12	European Digital Student Service Infrastructure (EDSSI)	Autumn 2020 to Autumn 2022	CEF Telecom €2,499,308	In development
2.1.13	EU Student Card Extension and Adoption (ESC-tension)	November 2020 to October 2022	Erasmus+ €299,138	In development

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European Campus Card Association