



The european student card

User guide

2021, September



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Introduction

Abstract

This document is recommended to any Higher Education Institution personnel who wish to learn about the European Student Card System and how it can be implemented in the home organization.

It gives, from a functional perspective, all the fundamental aspects related to the card and the system that needs to be built around it.

The main ideas developed in this document are as follows:

- The European Card System allows creates a framework of trust between students, High Education Institutions and services providers by creating standard card components that can be recognized throughout Europe.
- Having a trusted third-party connecting all European HEIs allows:
 - from a short term perspective, to authenticate any cardholder as a student in any country
 - from a long term perspective, to facilitate exchange of data among HEIs and to create a standardized physical support to aggregate digital services for students.
- The technical cornerstone of this framework of trust is the ESC-R, a centralized database where HEIs load information about their student cards. The ESC-R can then be interrogated automatically when a student presents his or her card to validate its authenticity.
 - For HEIs who doesn't want to spread their data elsewhere than home Information System; they can build a API according to a certain standart to allow the ESC-R to read the same data (update delivery schedule at the end of 2021)
- ESC is designed to adapt to all local specificities, which provide great flexibility but also requires HEIs:
 - to decide upon and clearly define what they wish to implement,
 - to anticipate some impact on their internal procedures.
- HEI administrators may access the ESC-R using a designated online user interface, to provide full transparency about the system.

The document is divided in 4 parts:

- The first part relates to the European Student Card System itself, the scope of the project and its main components
- The second part relates to the detailed working principles of the card, with a focus on personal data protection issues
- The third part relates to the concrete implementation aspects of the project from an HEI perspective, with a description of the main issues to be addressed.
- The fourth part relates to operational processes of the detailed walkthrough registration process and keeping the system going.

Glossary

CMS: Card Management system issuing the student cards, usually connected to the HEI information system.

EHEA: European higher education area.

ESC: European student card.

ESI: European student identifier.

ESCN : European Student Card Number

HEI: Higher education institution.

IS: Information system.

PIC: Participant identification code. 9 digit code given by the Erasmus+ programme for participating in an EU project

API : is the acronym for Application Programming Interface, which is a software intermediary that allows two applications to talk to each other

DEUInfo : Data European University Info is the name of a standardized, readable data area to reinforce the security of the European student Card. This zone contains the ESCN, a digital signature and a certificate that allows to prove the authenticity and the integrity of the European student card.

Log update

Revision	Date	Author(s)	Version description
V1.0	04/27/2017	Cabinet Infhotep, on behalf of CNOUS	First draft
V2.0	05/04/2017	Cabinet Infhotep, on behalf of CNOUS	Correction following meeting with the CNOUS on 05/03/2017
V2.0	05/05/2017	Cabinet Infhotep, on behalf of CNOUS	Correction following meeting with the CNOUS on 05/09/2017
V3.0	26/5/2017	CNOUS	MRAPS addons
V4.0	28/04/2021	CNOUS	MAID
V5.0	09/2021	CNOUS	EDSSI

2. What is the European Student Card (ESC)?

Basic concepts

The European Student Card (ESC) is a new standard created by European Higher Education Institution (HEI) to promote student mobility within Europe (EHEA zone). The long term objective is to give all European Students the same rights as a local student when travelling abroad.

So the idea is to create a card that can be accepted anywhere within Europe. This card gives access to an unlimited number of services that students use in their daily life, such as borrowing book from university library, accessing student cafeteria with discounted prices, accessing university premises, using public transportation etc.

Short and long term perspectives

To establish such an important standard on the European level requires both a long term vision, defining what we want to achieve in the future, but also deliver concrete short term objectives, on a more limited basis, but one from which we can expect positive results – thus setting a strong foundation from which the ESC can get going and growing. Now the project is on track since 3 years, more and more institutions joined the project. Many student cards can be recognized with ESC markers. The big challenge is now to think how offer services of their institution to student on mobility.

The first basic service to be set up is student status authentication. This service offers the possibility for any organization (private business, public administration, association, HEI...) to confirm whether a card holder is a student or not. This service is a necessity because student status authentication is usually a prerequisite to give access to other services that are restricted to students.

Others services will become available afterward according to each HEIs implication to do so, such as:

- The possibility to use the card as an electronic wallet for day-to-day expenses
- The possibility to write new information on the card after it has been delivered, granting access to a wide range of new services for the student
- The possibility of using the card as a key to allow exchange of data between HEIs, in order to facilitate administrative procedures during student mobility-(no implementation known to do that for now)
- Dematerialisation of the card itself, using a smartphone. HEI can already create an basic eCard integrated to their own mobile App iby adding ID, ESCN, QRCode directly (technical development needed). This card could have extended access to physical services but only with a future implementation of NFC transaction.

See : [ESC Improvement to come](#)

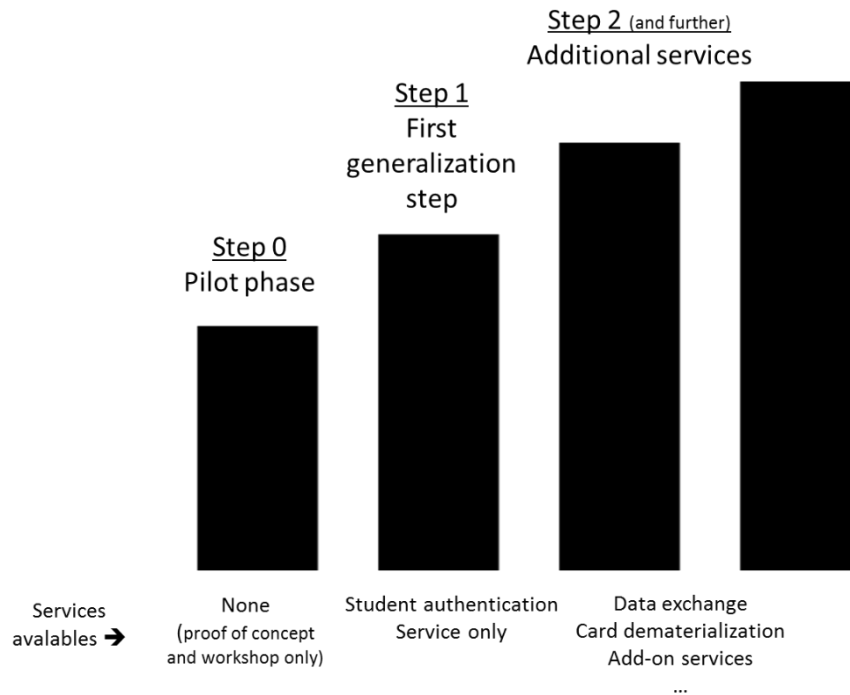


Fig1. Progressivity in project's scope

Additional functionalities associated with the card still have to be defined at this stage of the project.

Therefore, this document main focus is on Step 1 implementation. In 2021, We're still in step 1, but step 2 has just begun with [DEUInfo](#) implementation in a few solutions (in France, SELP, CapMonetique, Horoquartz, Esup-SGC) and HEIs

Main rules and principles (MRAP)

#MRAP.1

Each HEI keeps the full control over the card production for its students.

#MRAP.2

In the context of the implementation of the ESC project, each HEI is responsible for ensuring full conformity to all aspects of GDPR (General Data Protection Regulation)

#MRAP.3

The implementation of the ESC-R router enhances the efficiency of the system and reinforces trust in the ESC. HEIs have to provide ESC-R with data (ESI, ESCN, validity) or allow ESC-R to read data to allow the reading of the QR-Code generated by them and printed on cards.

#MRAP.4

In addition to the items mentioned below, the HEI keeps the control over the design of the card and decides what information is written on it.

On the card medium, the HEI joining the ESC system must put on the front of the card:

- the holographic logo of ESC (preferably next to a corner of the card, can be also on the back)
- the ESI composed with :

- *the country code (e.g. FR for France)*
- *the schachHomeOrganization code (domain name of HEI) => previously PIC Code**
- *the local student ID*

Or just

- *the country code*
- *the national student ID*

For country with a national registry of students.

(see <https://wiki.geant.org/display/SM/European+Student+Identifier>)

*However the previous ESI is still support by ESC-R for transition purpose until 2022.

- **the student's first name and surname**

On the card medium, the joining HEI should put the ESC QR Code.

#MRAP.5

Every European student card must have an unique identifier based on the suggested formula which involves the HEI PIC code(PIC is not print on cards). It is called ESCN.

#MRAP.6

If the card has a chip, the HEI can write on this chip a data zone including ESI and ESCN : the DEUInfo.

#MRAP.7

In order for the European student card to be valid, once the student has given explicit agreement to register his card on the ESC-R, the HEI must write the following data on the router :

- HEI PIC code
- ESI
- ESCN
- Validity Date
- Academic level (not required)
- Student E-mail (required)

Data treatment is based on public interest mission. HEI has to inform students on the goal of the treatment (cf Basic Concept). Students can apply their right to oppose on this treatment and HEI must offer a way (digital or not) to do so. A ESC student platform exists on this purpose but it force student to create new account with personal data, we recommend HEI to manage treatment opposition only with ESC-R API.

If the student opposed the treatment, he can keep the card with the ESC logo but he will not have access to the advantages provided by the ESC system when he is moving through Europe and the QR-Code will not give any information.

#MRAP.8 The student keeps permanent control on his card: the verification of the card and his status is possible only if he presents the card at a desk, either automatic or not.

All MRAP are available and detailed in this document

3. European Student Card (ESC) specific features

The very challenge of this project is to create a framework of trust between all the stakeholders involved in student mobility in other countries:

- Students, who are the actual users of the card. They need to be able to use it when moving between institutions, and to be sure it will be recognized and accepted in most places.
- High Education Institutions (HEI), who need to be able to issue the card with minimum technical, organizational and financial impact. They also need to be sure foreign cards will be compatible with their own local processes and equipment. In 2021 ; the technologoly mostly used is MIFARE Desfire Classic, EV1 and 2 .EV2 is recommended because allow exchange of card services.
- Service providers, who get to accept this card as a valid proof of student status. To achieve this, ESC must be recognized as a standard, secure enough to prevent fraud and abuse.

So here are the main components of the framework of trust:

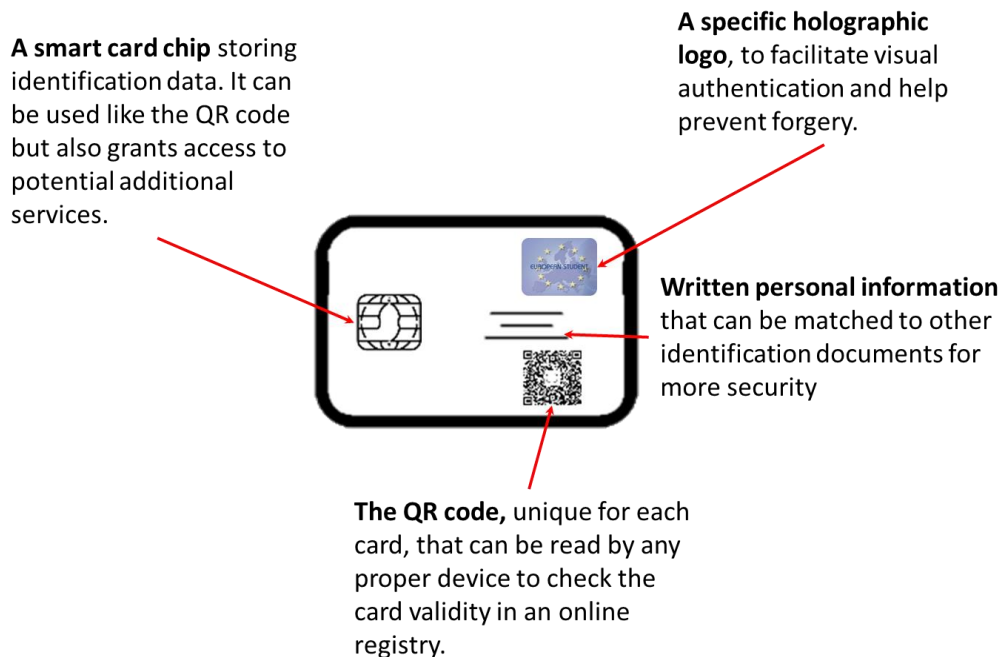


Fig2. Framework of trust components

There can be some variation in the implementation of these different components, depending on local specificities.

However, put together, all these components strengthen the framework of trust we wish to create around the ESC, offering a high level of technical compatibility with local processes as well as a high level of security to prevent fraud and abuse.

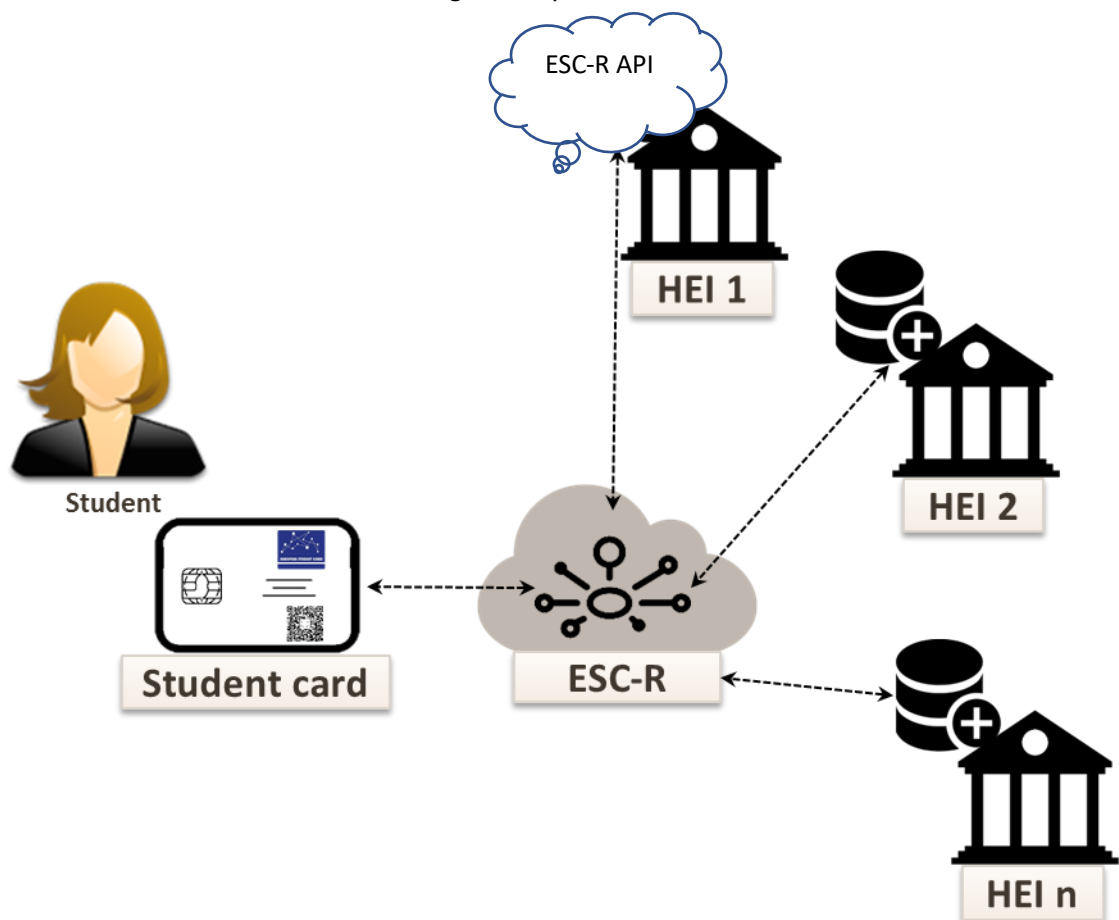
Description of the ESC system

The system we are using to enforce the framework of trust around the ESC revolves around 3 items:

- The card itself. Each card can be identified using unique card ID (ESCN). The ESCN is generated by the HEI himself or in market CMS solution, using a specific algorithm that guarantees its uniqueness, even with others cards that could be produced elsewhere using the same process, it is different from the UUID which is the producer ID Card.
- HEI's Card Management System (CMS) already exists in most HEI and the idea is to get these CMS to share part of the information they hold. Its role is to provide information student needs when they are using their card. In 2021, some CMS provider have implemented or are about to implement the interaction with ESC-R, the ESCN Generator and DEUInfo.
- The European Student Card Router (ESC-R), a centralized online database holding information about all the cards issued and connecting all HEI's local system for the exchange of data. Each HEI is identified by its PIC code, a normalized codification system already used in Europe. The ESC-R uses

ESCN-and PIC code to link a specific card to the specific HEI who produced it. When HEI or groups of HEIs prefer to host all their data and does not want to send it to the router, they may build their own API based on a specific model. Then when third party scan Qr-Code or chip App, ESC-R will respond with data read in HEI's API. (update delivery to come at the end of 2021)

Fig3. ESC System



How is it used ?

The basic process can be broken down in 3 parts:

- The first part of the process is about how the card is being issued and activated.
- The second part of the process is about how a student with an activated card can use it to authenticate his status, including in a foreign country.
- The third part of the process is to ask how HEI can offer service to foreign students and cards

Part 1: Delivery and activation process

1. First step is to inform student about ESC concept and allow him to express his rights on his personal data.
2. HEI can create a record in its CMS system, which associates a card unique number (~~ESC-ID~~ ESCN) with the student identity (ESI).
3. HEI or his provider generated and printed card with QRCode, DEUInfo.
4. The HEI delivers the card to the student, either directly, by mail or even using dedicated automated teller machine
5. The HEI transfers all relevant data to the ESC-R, using proper channels secured with an API key. Therefore, only registered HEIs can update the ESC-R.
6. Once the record is created. DEUInfo and/or QR-Code are readable. If the student oppose his right to share data, HEI update ESC-R who delete or anonymize and inform student that he cannot value his student status in another HEI or country.
7. HEI update ESC-R of card updating or deleting according to his CMS workflow.

Part 2: Status authentication process

1. The student presents his card to a service provider who needs to authenticate his student status.
2. The service provider checks the card. This can be either a simple visual check or, with the proper device, an automatic, reading of the chip, scan of the code. In such case, the reading terminal automatically interrogates the ESC-R, which checks its database (or interrogate HEI's API for those who develop their own) looking for the card ESCN and then sends feedback to the service provider with the information about card information and its validity. He is also able to compare information written on the ecard with information sent by the system and check it is consistent.
3. Once he gets positive feedback, the service provider is able to deliver its service to the student.

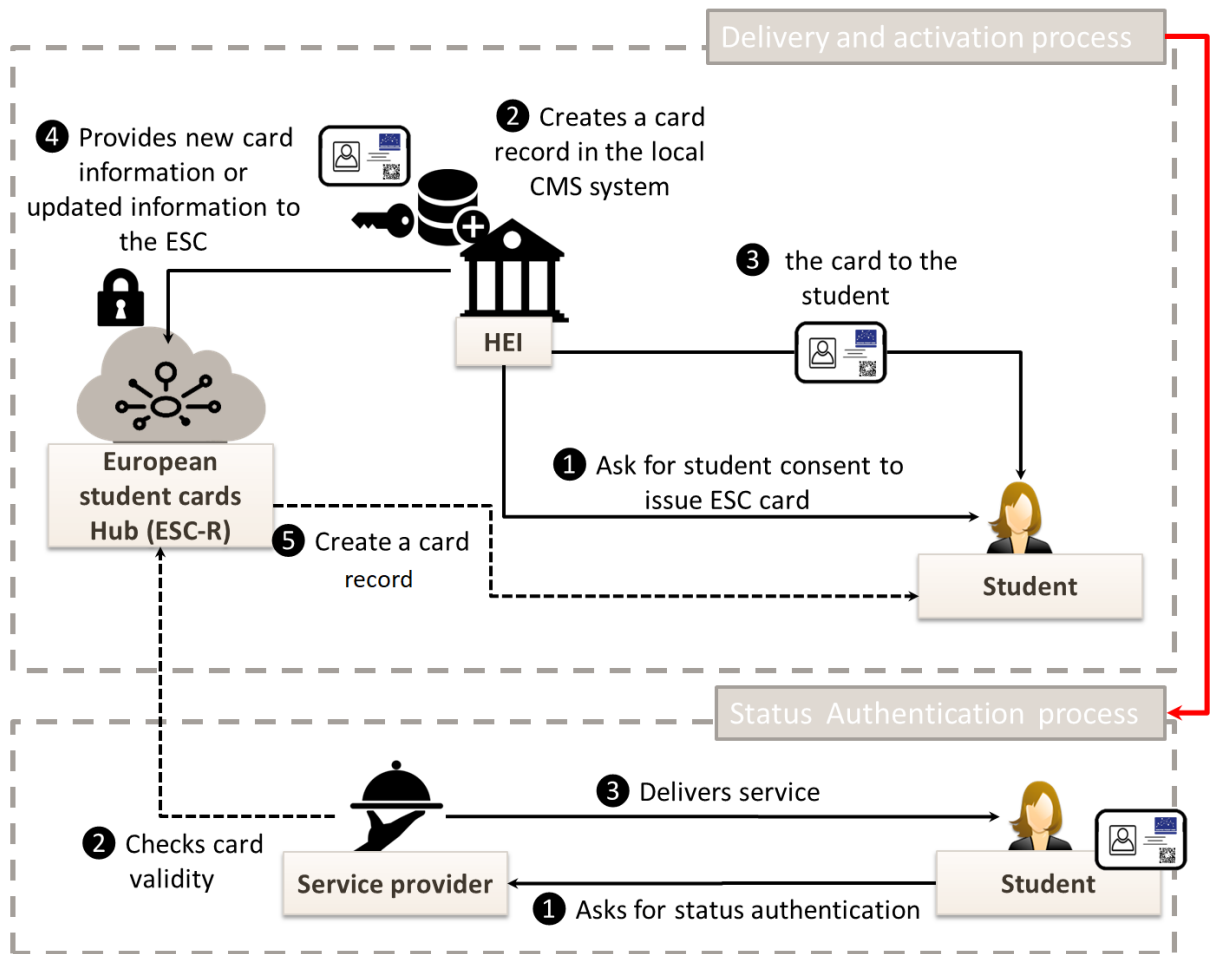


Fig4. Process overview

Please note that in this representation, the HEI can take the role of service provider, when this HEI is in a position of welcoming a foreign student.

Part 3 Service building which can be offer to foreign students with external card

As future service provider to more and more student in mobility, HEI have to build a reflection on how give student access to their service.

If an external card is presented to :

- A security guard or access control
- The HEI library
- And so on

How HEI Information System will be able to deliver their service :

- Check QR-Code ?
- Check DEUInfo .?
- Create temporary HEI account ? Card could also be used to check ESI according to previous exchange through EWP network.
- Adding external card to CMS ?

How to propose/register card services ?

<https://router.europeanstudentcard.eu/remote-service>

Proposing card services online is possible in ESC-R platform, for now very few services have been declared by HEI.

Card services are already offered by HEIs to students on mobility, and it is not mandatory for a service to be registered to be delivered. When the scenario of real card service exchange will be available between HEI, it could be helpful to register by distance to accept privacy policy for exemple.

This unexploited part of ESC project will improve in the context of [EDSSI](#) , [Esc Tension](#) and future projects.

What information is stored and where?

The strength of the framework of trust mainly lies in the correlation between information stored in the different components of the system (Card/Router/Local CMS). This correlation also enforces protection of personal data.

ESC Project want to offer the possibility to HEI to host all their data. Thereupon they have to build their own API based on a specific model. Then when third party scan Qr-Code or chip App, ESC-R will respond with data read in HEI's API. (update delivery and documentation to come at the end of 2021)

However building API design for ESC-R could be a heavy time investment that are only available to some HEI according to their wishes and height. With this API is directly in HEI IS, managing student personal data are entirely matter of the HEI.

The figure below describes minimal information stored in each of these components.

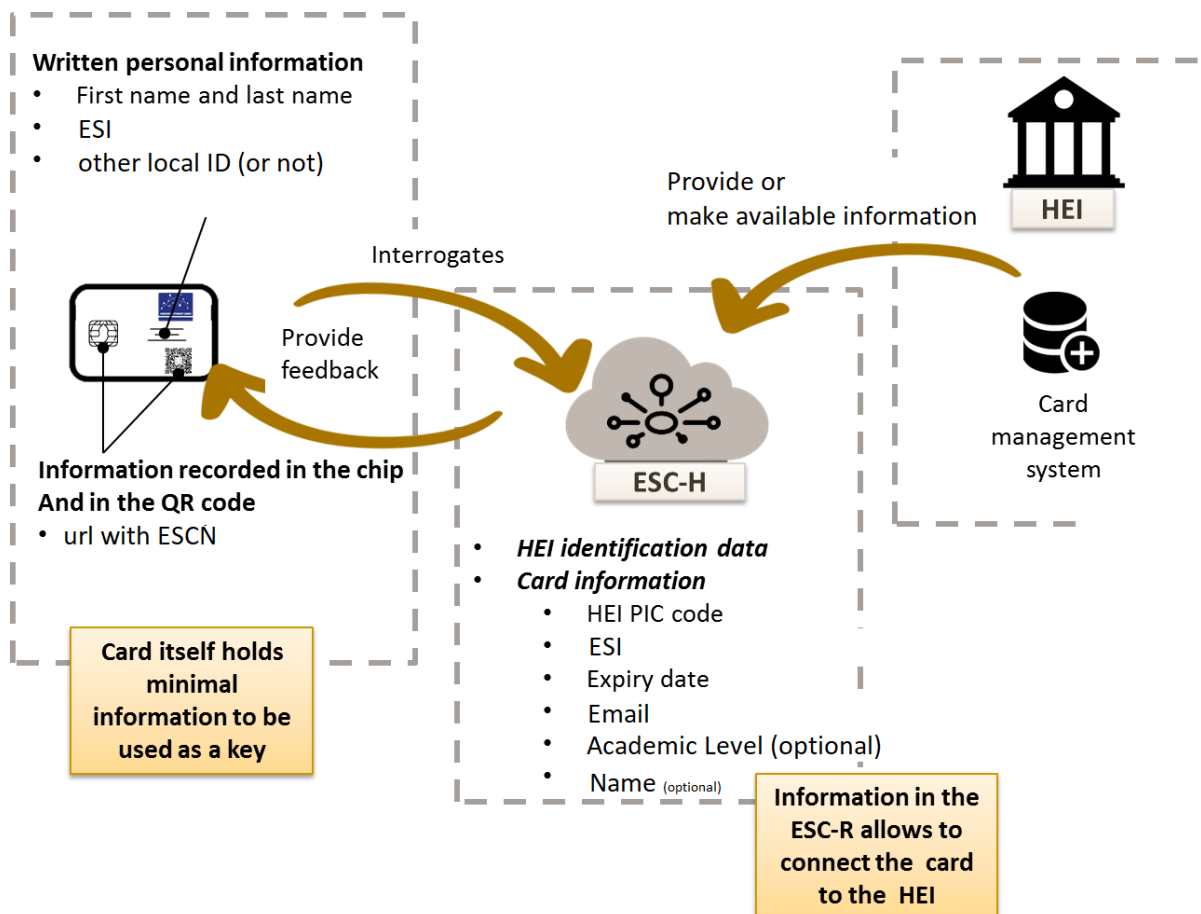


Fig5. Information stored in the ESC system components

Information Stored through API :

Student

- ESI (required)
- PIC (required)
- Email address (required)
- expiryDate (required)
- name (optional)
- academic level (optional)

Card:

- ESCN (required)
- cardType optional Type of cards. Possibles values are :
 - 1 - passive card, with no electronic
 - 2 - Smartcard without European common data zone
 - 3 - Smartcard with European common data zone
 - 4 - Smartcard on which application may be installed by service providers
- cardUid optional Card Serial Number. MUST be constant.

Information stored through router user Interface :

- HEI's name
- First name, last name
- Email
- Eppn
- ShacCode
- PIC

What information expose and how ?

In case HEI choose not to push data in ESC-R, he has to register on ESC-R and build and expose an API giving those data in response : (ESC-R update delivery scheduled at the end of 2021)

Link format to give to register HEI's ESC API : [https://HEIdomain/path/\[hashedESCN\]](https://HEIdomain/path/[hashedESCN])

Authentication according to documentation to come and Request/Response in a JSON format :

- ESCN (required)
- ESI (required)
- expiryDate (required)
- Academic Level (optional)

ESC-R restitute this data when QRCode is requested.

Make ESC smart card with Data European University Info (DEUInfo)

The Data European University Info (DEUInfo) is the name of a standardized, readable data area to reinforce the security of the European student Card. This zone contains the ESCN, a digital signature and a certificate that allows to prove the authenticity and the integrity of the European student card. With this zone, we can expect the development of new services that require a high level of security like payment or access control.

Writing DEUInfo is a prerequisite to develop Delegated Application Management (Multi-Application). Indeed DEUInfo app on card is the first step to make card service exchange between HEI a reality. Thanks to Mifare Desfire technology MIsmartApp which delegates application management to third parties without sharing the master key since EV2. Only limit on the number of applications is the chip memory.

Currently, the DEUInfo is designed to DESFIRE (EV1 and EV2) chips by NXP, but the specification aims to ensure a future portability to any other ISO 7816-4 compliant IC or mobile phone chips.

The key features are the following:

- Data should be accessible in the clear, without prior authentication
- Data integrity could be validated thanks to a digital signature and a certificate
- The size of the data should remain as small as possible, to save storage for the universities or partners
- The system should be based on open and standard features, OpenSSL being the underlying tool for all examples.

First implementation just begun in France on this year 2021. More experimentation and information to come.

For more details go to the [ESC router](#). Or mail to [ESC Support](#)

4. How do I get in?

Description of the Area supervisor's role

In the ESC system, HEIs take on the role of trusted third-party providing information about student's identity. As a consequence, it is essential to make sure institutions who wish to register in the system are genuine HEIs who have legitimate authority to grant student status. This role can be assumed either by a central authority on European level, designated by project steering committee OR, by delegation, to a national or regional authority that may support HEI implementation of the system. The Area Supervisor prerogatives can be listed as follows:

- to check HEI legitimacy to register in the system;
- to provide or remove access to the ESC-R to the HEIs;
- to provide functional and technical documentation to HEI who get in the system;
- to make the connection between HEIs and the centralized European administration of the ESC.

Area supervisor can supervise one or several countries according to partnership in higher education.

Known supervisors :

Country	Supervisor institution	Supervisor name
France	CNOUS	JP Roumegas
Italy	ENDISU Fondazione	Andrea Baldin
Spain	SEPIE	

[Esc Tension](#) is an on going European project who result work will helps HEI to find focal point of entry in the process and the right way to adapt internal process in order to adopt ESC.

What are the implementation choices to be made?

ESC implementation is open to any legitimate HEI in countries integrated in [Bologna Process](#) (48 countries in Europe). It is based on a voluntary approach for each HEI wishing to join the system. However EU's European Student Card Initiative encourage [EICHE charter signers](#) to implemented it.

The system can be implemented differently, depending on local specifics such as:

- Current card manufacturing and delivery processes
- Country legislation
- CMS adaptability
- HEI ecosystem with service providers
- Equipment and scanning devices already available
- Budget constraints
- Etc.

So each HEI may implement all or only parts of the components associated with the ESC. **However, an ESC with limited components will only grant limited access to card services in other countries**, since each service may require specific components to work. So it is important to keep in mind that the more components are implemented, the better compatibility the card will offer.

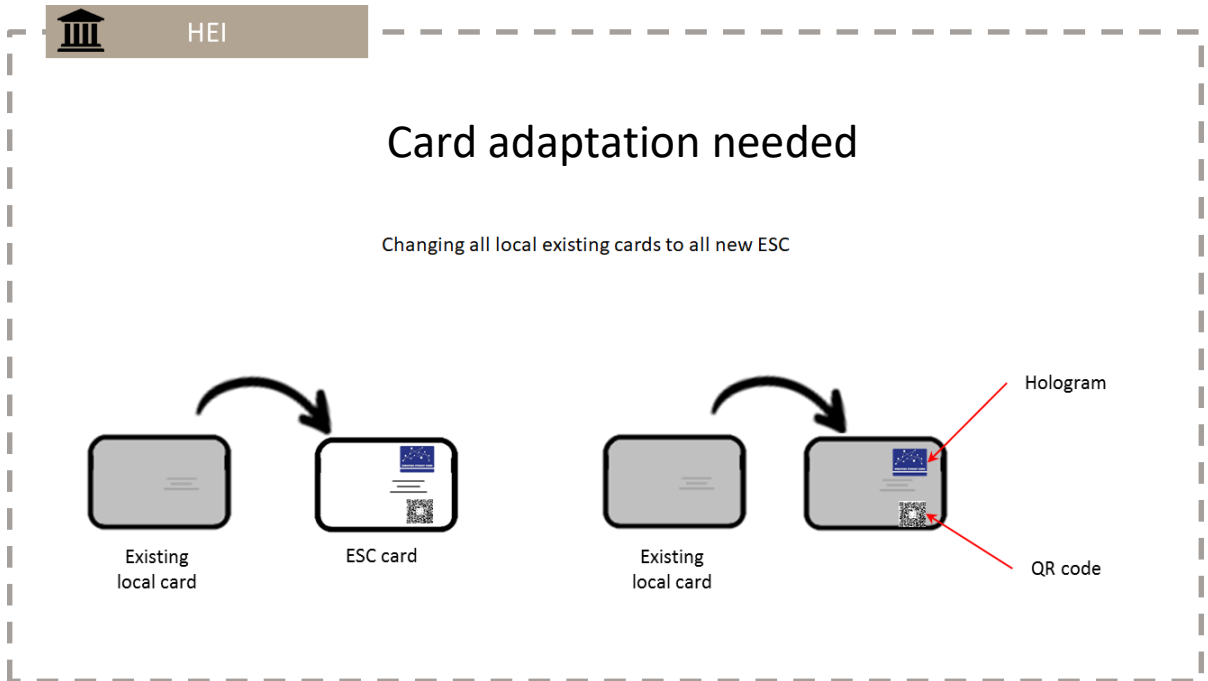
Here is a list of the choices that need to be made before implementing the ESC system:

- Options for interoperability
- Card production process adaptation
- Services offered to cardholders from other countries
- People in charge
 - of system implementation
 - of system administration

Based on data, HEI received by [Erasmus without Paper](#), [Online Learning Agreement](#), HEI will know to which student give what services, because all these European projects uses the same ID : ESI.

HEI		Available options for interoperability			
Potential impact on card production process					
Reading device available					
Possibility to add new services on demand					
Level of interoperability					

Legend	
	Visual check Manual ESC-R search
	QR Code reader
	Contactless chip reader



Hologram sticker is no longer an option as hologram has to be hot stamping on card.

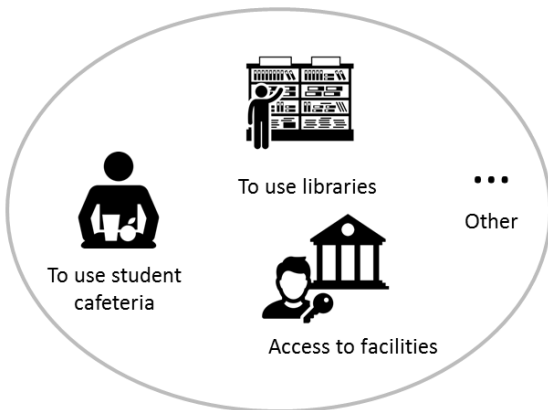


HEI

Services opened to foreign students carrying a European Student Card



Define what are the services that are available to any student carrying an ESC.



Then, for each service:

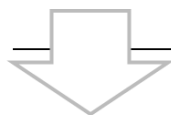
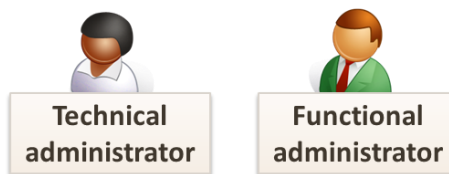
- define requirements regarding the card (ESC components, photo ...)
- Define additional documents that may be required to deliver the service (additional piece of ID, contribution etc.)



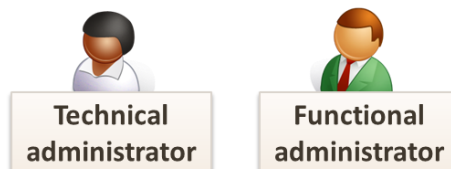
HEI

Definition of roles and responsibilities

During implementation phase



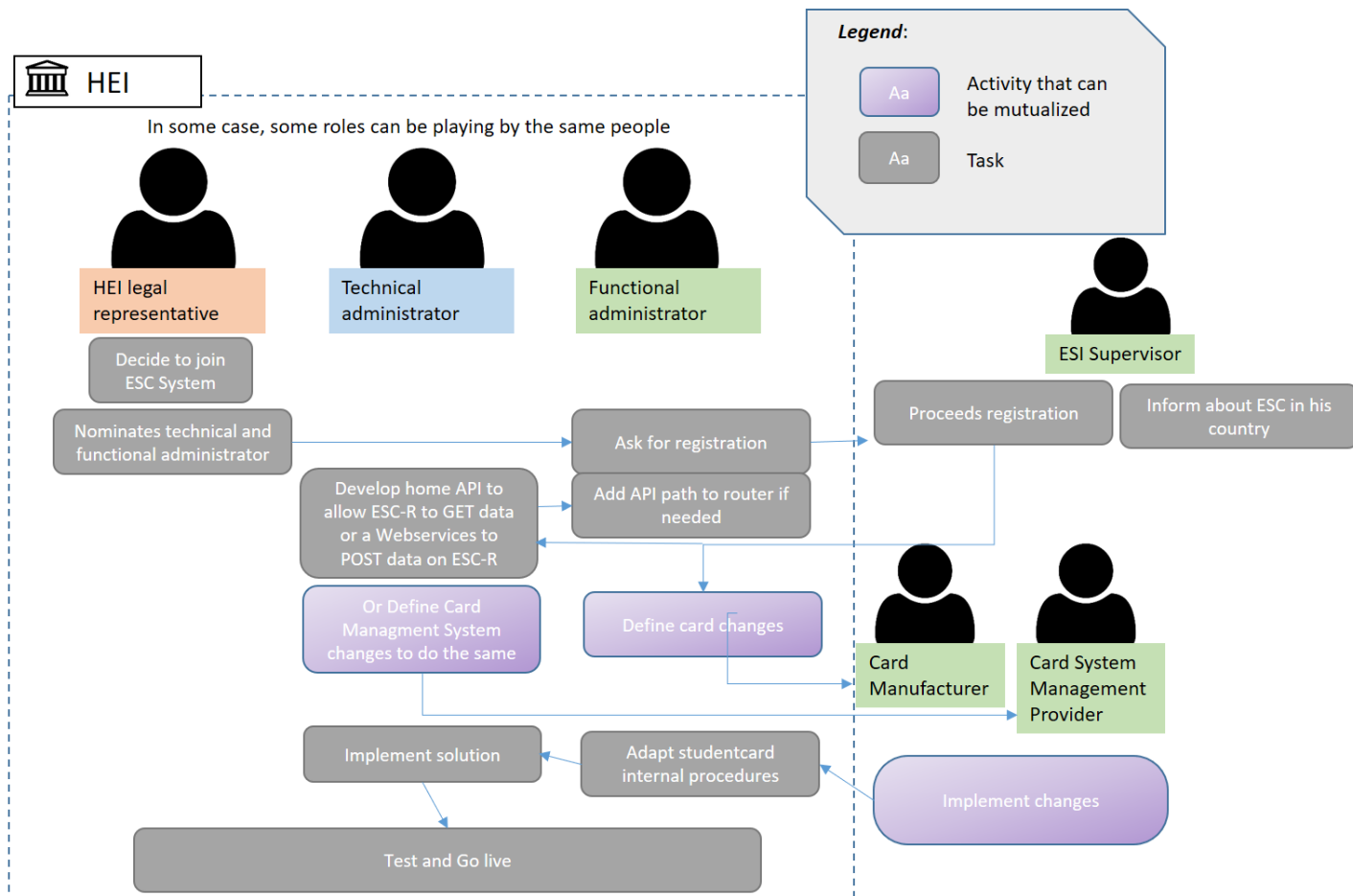
In operation



What do I need to do to get in the ESC system?

Card production process greatly differs from country to country and even among HEIs within the same country. Therefore, ESC means to have as little impact as possible on existing local processes.

However, several steps must be followed to implement it correctly. These steps are represented in the figure below:



Implementation process

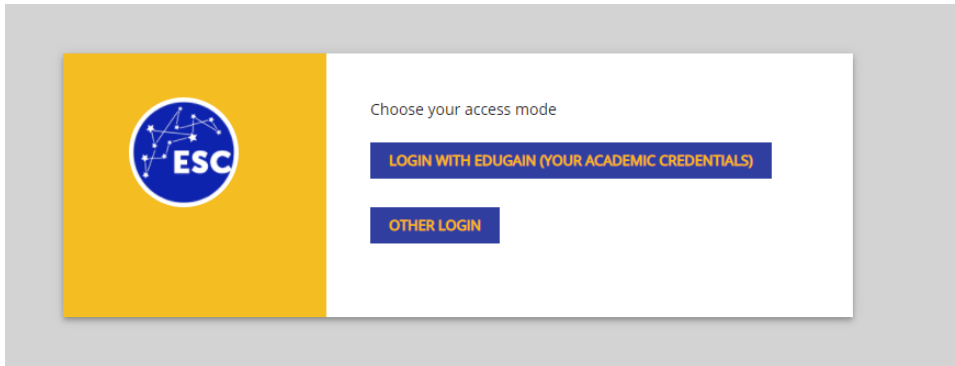
What is the impact on HEI internal procedures?

The ESC implementation is an organizational challenge rather than a technical one. Using new standards for student's card may cause several issues that need to be addressed before going live.

- *How do I collect student consent ?*
 - Legal base of the treatment is general interest. Information about ESC-R data treatment has to be added to the other HEI data treatment the student has to consent to when starting his academic cycle in HEI. Information about how and where data is stored is given and option of opposing treatment has to be proposed with explanation of consequences like for any digital services according to GDPR. Please refer to the General Condition of Service provided.
- *How do I input ESCN in my CMS ?*
 - The CMS must be adapted so that it can integrate the ESCN and ESI as a foreign keys. Depending on how the HEI currently manages its card, the incurred amount of work to make the change can go from nothing to very significant. If the HEI want a third party deal with this implementation, they have to make a demand by mailing the supervisor to add them as technical administrator on ESC-R platform. Indeed all the technical specification are on the platform. Several CMS have already implemented ESC-R data transfers.
- *How to update information to ESC-R ?*
 - By pushing data to ESC-R API
 - Or by giving access to a dedicate API (update delivery near end of 2021)
- *On what frequency do I send updated information to the ESC-R?*
 - Normally, we can assume updates will follow the academic cycle which is set in the HEI. However, there may be a need for more frequent updates to deal with delayed enrollment, cancellation, loss (see below) etc.
 - It is also important to be reminded that a card not being activated would have limited functionalities.
- *What procedure do I set up to deal with lost or stolen cards?*
 - The procedure may be similar to the one currently set up. However, since cards are registered online in the ESC-R, there are additional actions to be taken since the card must be inactivated and a new card must be registered.
- *How do I communicate with the students on the project ?*
 - By explaining [basic concept](#) and by telling it adds more influence to the student status because it gives security to the card.

HEI functional administrator access to the system

ESC Router



On first connection, either the applicant uses his institutional account if his HEI is registered in Edugain (new functionality 2021). Then he fills the form below which is prefilled with account information. Then when supervisor validates his registration, he access directly with his institutional account to the platform.

Federation information required :

- eduPersonPrincipalName (Eppn),
- givenName,
- surname,
- mail,
- shacHomeOrganization.



Complete your Request access to ESC-R

*First Name

Emilie

*Last Name

*Email

*Eppn (EduPersonPrincipalName)

*Institution Name

PIC European Commission Identifier

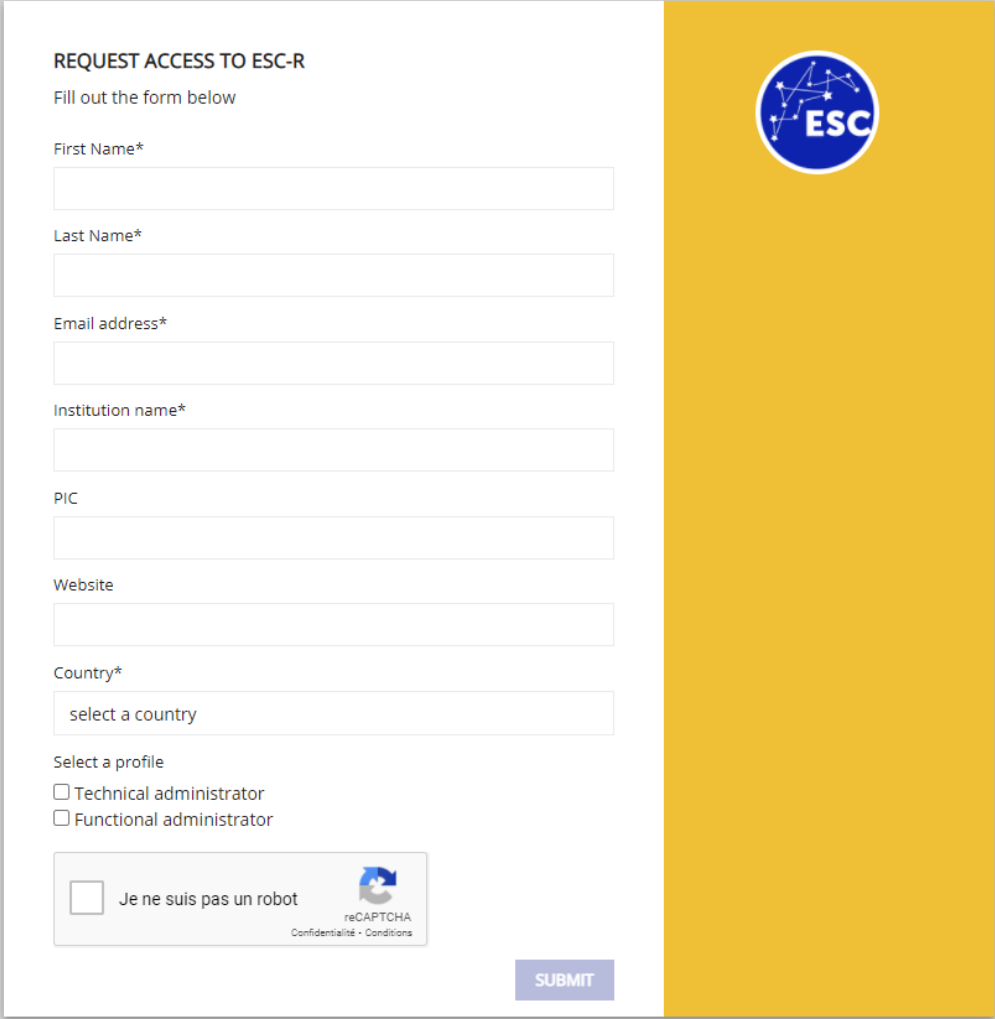
SHAC Code

Institutional website

*Country

select your Country

Either he asks for a local account if not registered in Edugain yet by filling the form below



REQUEST ACCESS TO ESC-R

Fill out the form below

First Name*

Last Name*

Email address*

Institution name*

PIC

Website

Country*

select a country

Select a profile

Technical administrator

Functional administrator

Je ne suis pas un robot

reCAPTCHA
Confidentialité - Conditions

SUBMIT

Then, again after supervisor approval, he access the platform.

Once registered, HEI functional administrator is able to:

- Update information about their HEI:
 - Official full-name
 - E-mail address for technical administrator
 - E-mail address for functional administrator
- Add institutional web page of HEI
- Add link to HEI webpage with information regarding offered services
- View HEI issued cards
- Add a cluster PIC for HEI groups in order to create ESCN based on it for all HEI of the group

You will find below look of the webpages giving access to these functions:

Institution
Créer ou modifier une institution pour ESC-R

Nom de l'institution *
CNOUS

PIC de l'institution * [Cliquer ici pour rechercher un PIC](#)
932465463

PIC de la comue *

Ville *
Vanves

Pays *
France

Email de l'administrateur fonctionnel

Email de l'administrateur technique
admin@cnous.fr

Update HEI information

Liste des cartes

Show 10 entries

Numéro de carte d'étudiant européenne	Date d'expiration	Numéro européen d'étudiant	Adresse email de l'étudiant
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HEI cards

Service list

Show 10 entries

NAME	PIC_INSTITUTION	City	DETAIL
11111111111	Université de Poitiers	Poitiers	
222222222	CNOUS	Vanves	DETAIL
33333333	CNOUS	Vanves	DETAIL
333333333333	CNOUS	Vanves	DETAIL
aaaaaaaaaaaaa1111111111	CNOUS	Vanves	DETAIL
aaaaaaaaaaaaaaaaaaaaa	Université de Poitiers	Poitiers	
dfsdf	CNOUS	Vanves	DETAIL

HEI services

HEI technical administrator access to the system

Same access of functional administrator.

HEI technical administrator is able to:

- Access technical documentation
- Access API keys (sandbox and production)
- *Choose his data transmission mode :*
 - *Regular use : Using ESC-R API*
 - *Special use ; Open API endpoint with required data to be read*
- *Add link to his API in case of special use*

(in italic next functionalities ; delivery planned end of 2021)

The screenshot shows the ESC-ROUTER interface. On the left is a navigation menu with categories: API, API Key, Documentations, ESCN Generator, QRCode specifications, Holograms, Services, Write DELINFO, and Services. The main content area is titled "European Student Card API - V. 1.0" and includes the following sections:

- URI**: European Student Card comes with a RESTful API to create cards.
 - Sandbox : <https://api-sandbox.europeanstudentcard.eu/v1> for integrations and qualifications tests.
 - Production : <https://api.europeanstudentcard.eu/v1> for real data only.
- Requests Headers**: To interact with the API, you MUST add 2 headers to your requests :
 - **Content-Type** : application/json
 - **key** : < your production or sandbox key >
- Requests Body**: Body MUST be a JSON representation of the data you want to send. Example to create a card :

On the right side, there is a "Routes" section with a list of API endpoints: Add student, List students, Retrieve student, Update student, Delete student, Add card, List cards, Retrieve card, Delete card, Get student status from escn, and Get institution certificat chain from escn.

Technical documentation

The screenshot shows the "API Keys" page in the ESC-ROUTER interface. The main content area is titled "API Keys" and includes the following sections:

- API Keys**: To send cards to the platform, generate an API Key
- Sandbox Key**: A text input field containing "no key".
- REGENERATE**: A yellow button to regenerate the API key.

API key

Student access to the system

HEI who already sent student data and cards can communicate the link below to students :

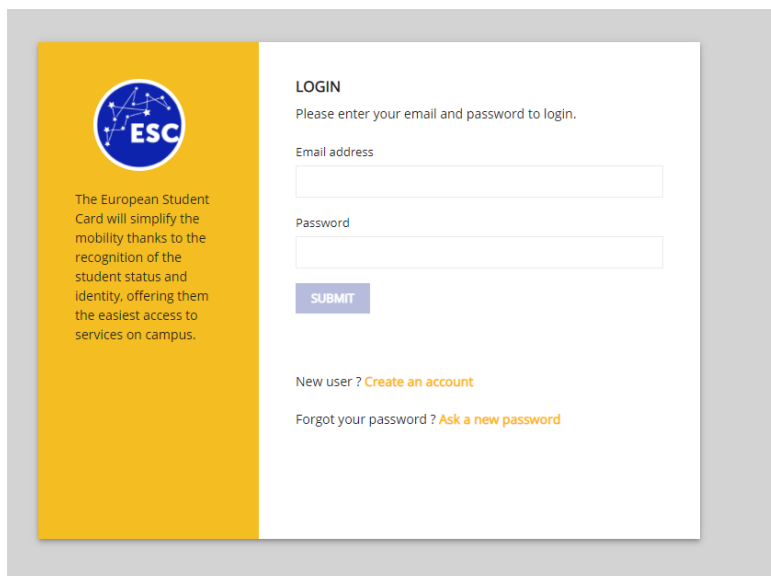
<https://student.europeanstudentcard.eu>

Once a student registered himself in the ESC student portal, he receives a confirmation email with credentials:

On his or her personal space, the student can:

- Check all functional information regarding his or her card
- Get contact information about his HEI functional administrator
- See services available
- Delete all his data recorded on the router

You will find below look the webpages giving access to these functions:

The image shows a screenshot of the ESC student portal login page. On the left, there is a yellow vertical banner with the ESC logo (a blue circle with a white globe and the letters 'ESC') and text: "The European Student Card will simplify the mobility thanks to the recognition of the student status and identity, offering them the easiest access to services on campus." On the right, there is a white login form with the heading "LOGIN" and the instruction "Please enter your email and password to login." Below this are two input fields: "Email address" and "Password". A blue "SUBMIT" button is positioned below the password field. At the bottom of the form, there are two links: "New user ? Create an account" and "Forgot your password ? Ask a new password".

Student personal space

However HEI can manage student data directly with him and in his HEI's digital environment thanks to ESC-R API without communicate this portal url at all. It saves student to create another account.

How do I keep it running?

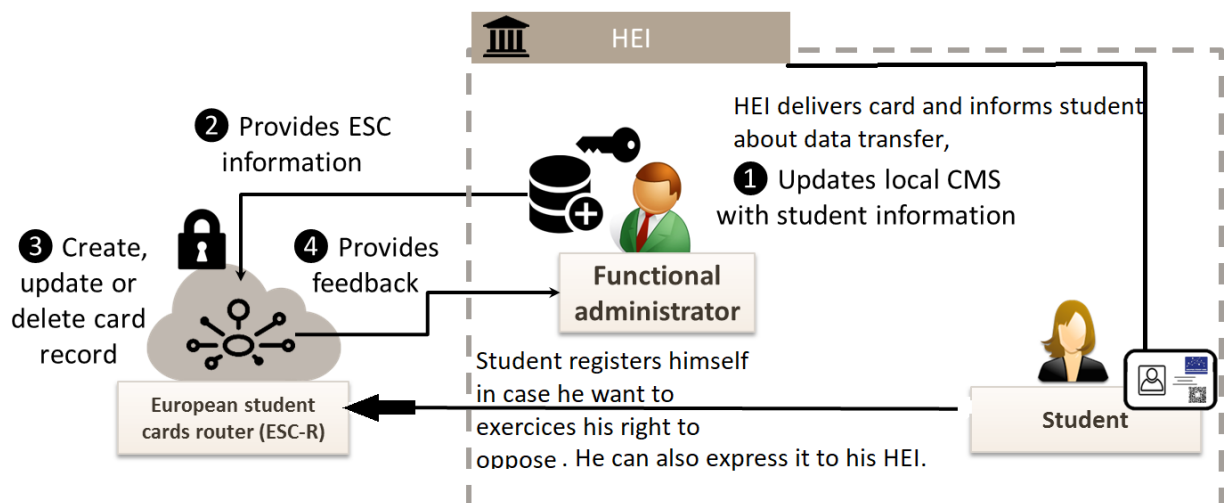
Maintaining data in the ESC-R or maintaining ESC dedicated API

ESC-R is mainly about HEIs sharing information about the student card they are issuing. Therefore, almost all of the data it contains must be updated by HEIs themselves. So they basically need to be able to send or give access to information to the platform for each card, on which each card is associated with a record.

Each record can either be:

- **Created**,
 - when a new student enrolls in the HEI
 - when a new card needs to be created for a student who lost it.
- **Updated**, when a student renews his or her enrolment (changing expiry date and also academic level if applicable)
- **Deleted**
 - when a student terminates his enrolment in the HEI
 - when student reports his or her card to be stolen or lost

The figure below illustrates the process allowing creation, update and deletion.



ESC life cycle process

For deletion, it is important to note that any deleted record will be deleted permanently.

CONTACT

Contact :

[Contact Form](#)

[ESC-R Tech Support](#)

ESC-R registration :

[Register With Edugain](#)

[Register without Edugain](#)

5. ESC Improvement to come

Esc Router next release will bring new functionalities such as :

- Enable external ESC API hosted in HEI or national instance to avoid spreading personal data out of HEI Information System. (as already mentioned)
- Adjust administration rights of router to allow European Universities consortium and HEIs groups to manage their connection and data
- Enable access to smaller HEI by allowing upload of student and auto-generation of ESCN
- Enabling recognition of the status of university staff on card

In the context of EDSSI level 2, Humboldt University of Berlin and partners will work of the deployment of a student eCard and eCard app, to give a new powerful tool to European HEIs.

New tools will also be available helps to [Esc Tension](#).