Erasmus going digital

2018 October 18
University of Barcelona

Political successes

A European Area of Education should include:

•Making mobility a reality for all: by building on the positive experiences of the Erasmus+ programme and the European Solidarity Corps and expanding participation in them as well as by creating an **EU Student Card** to offer a new user-friendly way to store information on a person's academic records;

Ensure that all mobile students have an EU student eCard to facilitate their application to any school or university in the EU.   Double the number of young people in the EU participating in Erasmus+ (from 3.7% to 7.5%), which will require a budget of EUR 29.4 billion for the period 2021-2027.

Strengthening European Identity through Education and Culture The Commission's Contribution to the **Leaders' Working Lunch Gothenburg, 17 November 2017**
#FutureOfEurope #EURoad2Sibiu

MAKING MOBILITY A REALITY FOR ALL

Political successes

Paris Communiqué:
We also note with interest the current "European student card"
EU pilot project,
which could potentially be broadened

to support and facilitate student mobility throughout the entire EHEA.

Political successes

European Commission:

       Taking forward the European Student Card Initiative

- **March 14, 2018**
- **June 29, 2018**
- **October 10, 2018**

The European student card initiative =

The convergence between
- **3 Erasmus projects**
- **3 CEF projects**

Convergence, roadmap

Once only principle

ESC THE EUROPEAN STUDENT CARD

UNIVERSITÉ BOURGOGNE FRANCHE-COMTÉ

NOM
Prénom
Date de naissance
INE
N°étudiant

UNIVERSITÉ DE FRANCHE-COMTÉ

Cette carte est strictement personnelle et non cessible. Toute personne trouvant cette carte est priée de l'adresser sous pli non affranchi à l'émetteur : Université de Franche-Comté, 1 rue Claude Goudimel, F-25030 Besançon Cedex.
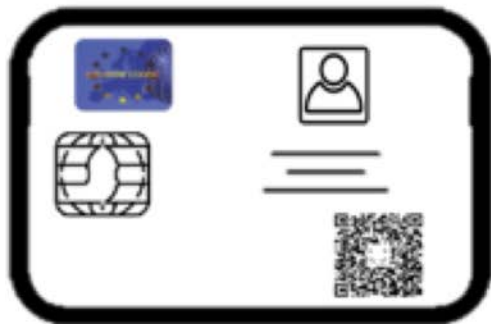
PASS'UBFC
MA CARTE MULTISERVICE
EN BOURGOGNE FRANCHE-COMTÉ

UBFC

ESC THE EUROPEAN STUDENT CARD

European student card fundamentals

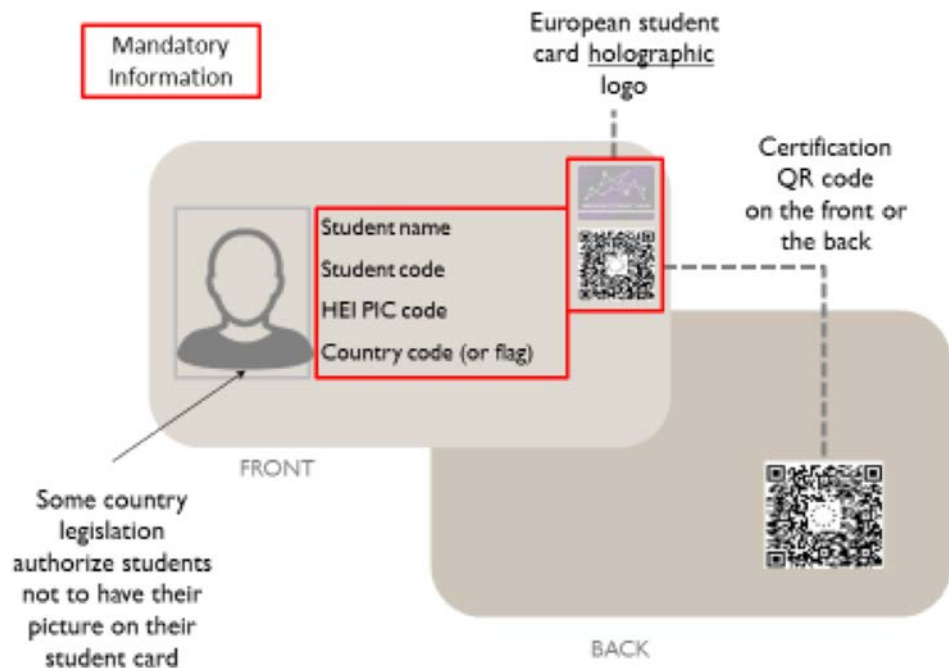- **A graphic « European Student » identity: Logo/hologram**

- **Interconnecting of European HEIs (data providers)**
  - For sharing the student status between HEIs: common e-ID
  - For exchanging data between HEIs in order to simplify procedures and ensure access to services provided by the HEIs
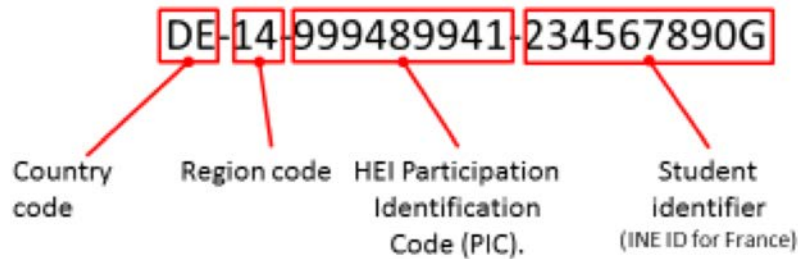
Description of the card : mandatory visual components

Mandatory Information

European student card holographic logo

Certification QR code on the front or the back

Student name
Student code
HEI PIC code
Country code (or flag)

FRONT

Some country legislation authorize students not to have their picture on their student card

BACK

THE EUROPEAN STUDENT CARD

Uniqueness of student identification number

Although the ESC-R handles student cards rather that student, having a universal student identifier is a necessity for all service providers, who need to be able to link a card to a specific person in order to process it in their own information system.
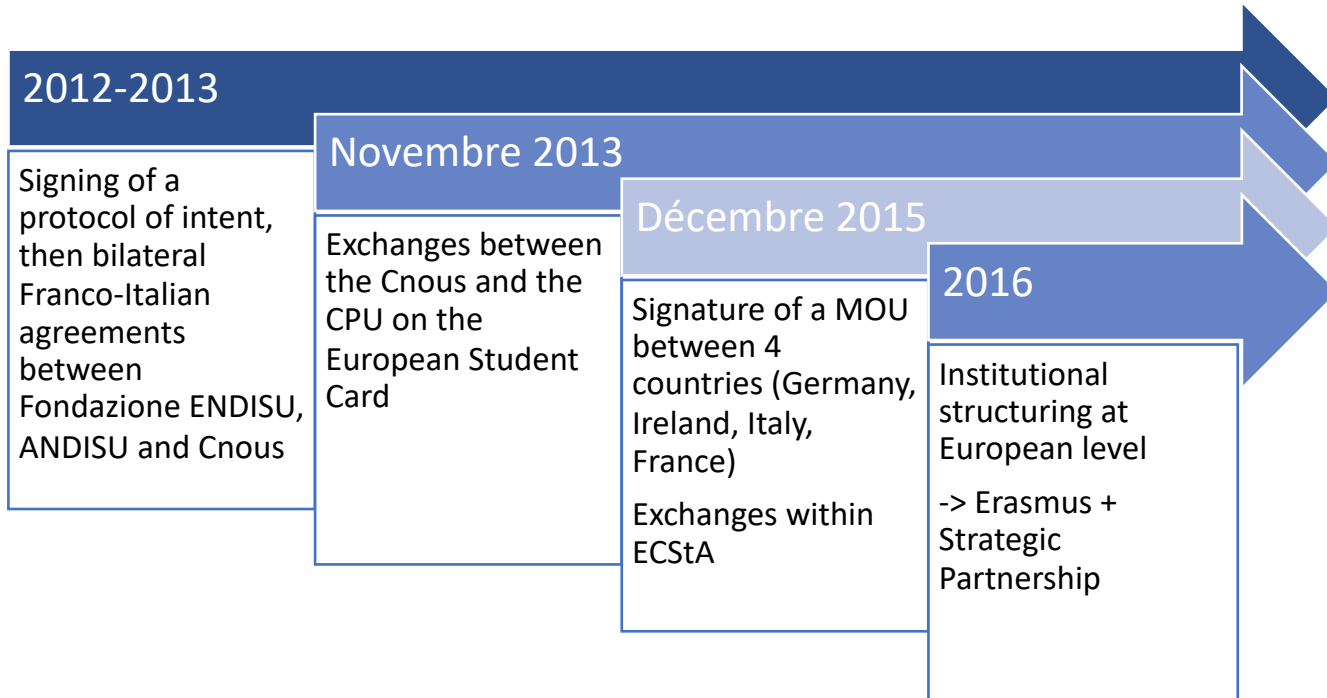The ESC student ID is build as follows :

DE-14-999489941-234567890G

DE	14	999489941	234567890G
Country code	Region code	HEI Participation Identification Code (PIC).	Student identifier (INE ID for France)

- By using this method, the uniqueness of this identifier is guaranteed. Two students will never have the same identifier.
- However, a student will have as many ESI that he is enrolled to different HEI. Thus, this identifier is not stable during his studies, even less his lifetime.
- Furthermore, a student may have two different ESI at the same time, and as many different student cards, when he has enrolled to a degree co-accredited by two institutions.

THE EUROPEAN STUDENT CARD

Historique

2012-2013

Signing of a protocol of intent, then bilateral Franco-Italian agreements between Fondazione ENDISU, ANDISU and Cnous

Novembre 2013

Exchanges between the Cnous and the CPU on the European Student Card

Décembre 2015

Signature of a MOU between 4 countries (Germany, Ireland, Italy, France)

Exchanges within ECStA

2016

Institutional structuring at European level

-> Erasmus + Strategic Partnership

CHRONOGRAM

Bilateral agreement between ANDISU, Fondazione ENDISU and Cnous

Launch of F. Endisu's project by Stefania Giannini, Minister of Education, Universities and Research in the presence of Cnous

Presentation of ESC project to European Commission

04.2013   **11.2013**   **05.2014**   **10.2014**   **07.2015**   **10.2015**

Discussions Cnous – CPU

International conference on European values, vision and mission in Student Affairs

Presentation of the National plan for Student life, measure n°9 / 60th anniversary celebrations of Cnous

05.2016   **03+07.2016**   **10+11+12.2015**

Meeting of French and Italian Ministers for Education in Florence → Implementation of the experimentation of the ESC project

Application for Erasmus+ funding, action key 2 Strategic partnership

Selection results – project approved / grant allocated

Technical meetings

Signing of a Memorandum of understanding

10.2016   **11.2016**   **06.2017**   **06.2018**

Creation of a national Steering committee involving all stakeholders of Higher Education in the ESC project

Erasmus+

ESC Kick-off meetings

Erasmus+

ESC Mid-conference in Germany

Final conference → Proposal to generalize ESC to the 47 countries of the EHEA as one of the priorities to be adopted at the next Ministerial Conference "Bologna" in 2018

Validation du :

- d...vités

- Plan de communication / dissémination plan

- Plan d'évaluation

Expected results: conceptual phase

Rapport technique de mi-parcours

+

Rapport d'évaluation de mi-parcours

+

Rapport de communication & dissémination de mi-parcours

Création du logo projet

Rapport ... parcours à envoyer à l'agence Erasmus+

| Nov. 2016 | Nov. 2016 | Nov. 2016 | Jan. 2016 | Mars 2017 | Avr. 2017 | Mai 2017 | Juin 2017 | Août 2017 |

Mise en place des groupes de travail sur les usages et les services + communication/

Mise en place de la plate-forme collabo-rative

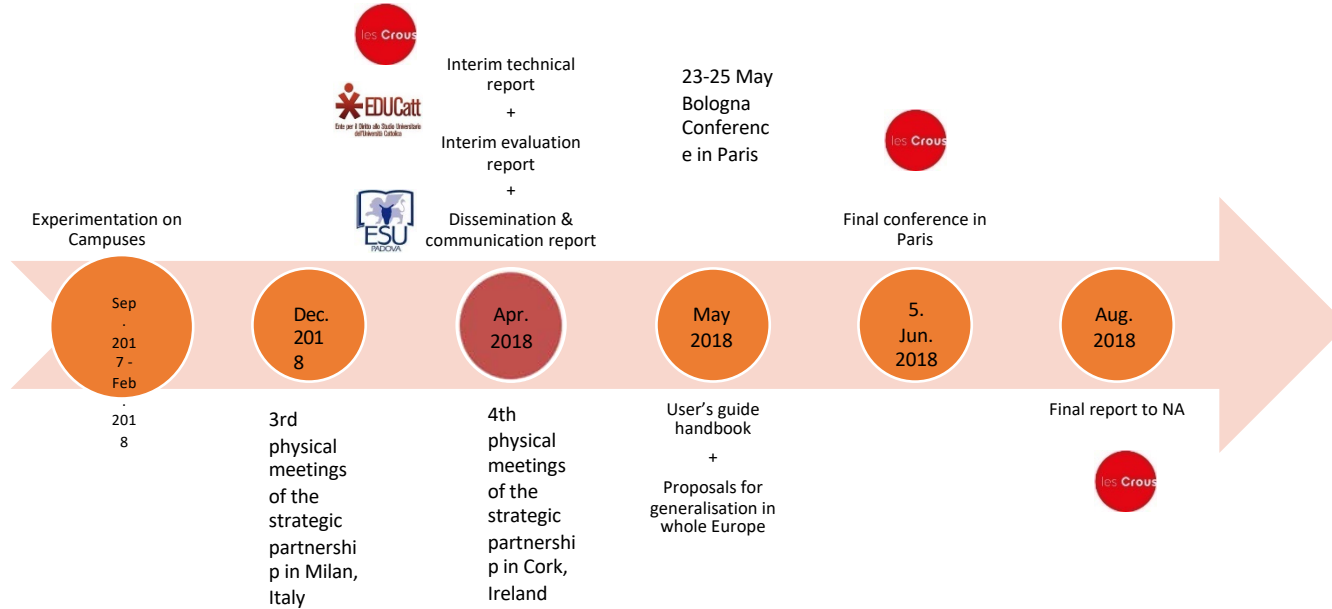Mise en ligne du site internet du projet

2ème réunions en présentiel

Berlin

Prototype de la plateforme d'échange

+

...uide ...

Spécificat... ...qu

Conférence de dissémina-tion de mi-...

Münster

Expected results Experimentation

Interim technical report

+

Interim evaluation report

+

Dissemination & communication report

23-25 May Bologna Conference in Paris

Final conference in Paris

Experimentation on Campuses

| Sep. 2017 - Feb. 2018 | Dec. 2018 | Apr. 2018 | May 2018 | 5. Jun. 2018 | Aug. 2018 |

3rd physical meetings of the strategic partnership in Milan, Italy

4th physical meetings of the strategic partnership in Cork, Ireland

User's guide handbook

+

Proposals for generalisation in whole Europe

Final report to NA

the deliverables:
ESC- Router

Why

?

- Create a "trusted third party" that certifies the student status of the bearer of a card
- Facilitate access to services for mobile students
- Facilitate the exchange of information/Data between institutions

How ?

Creating a platform: The « ESC – Router »

The platform

Institution

ESCR

other Institutions

Other services providers
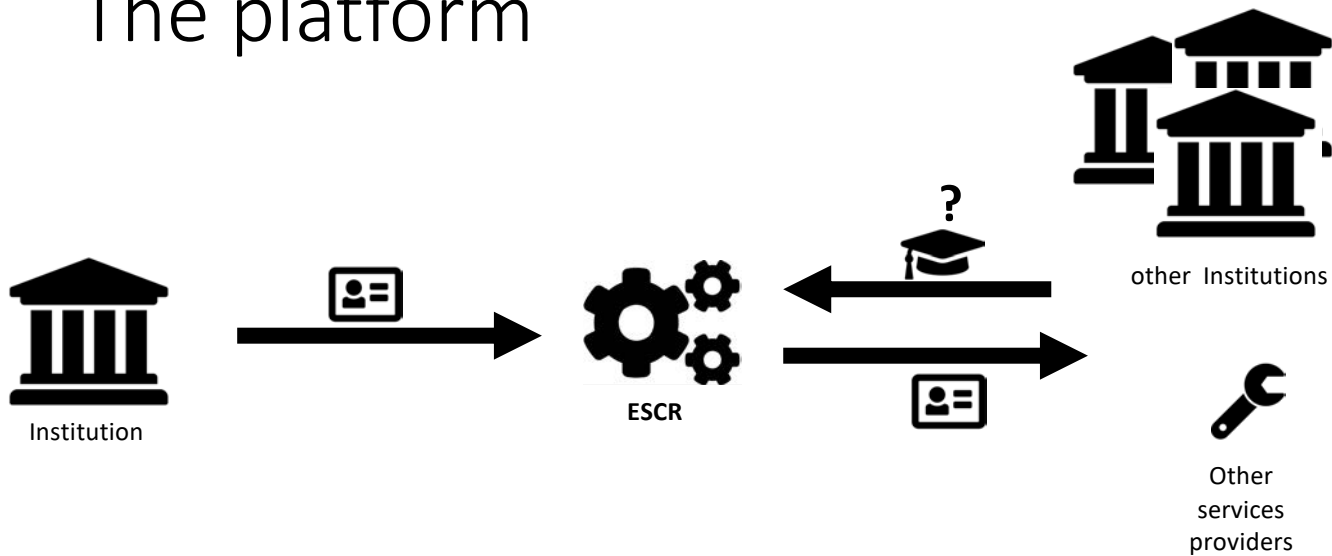
Supervisors

- Supervises 1 ou several countries :
  - registers the institutions
  - Validates the connection requests

Administrators

- Administers his institution
  - Consult the documentation
  - Look at the cards created
  - Generate the API access key

The identifiers

- ESI - European Student Identifier
  - Country Code (ISO3166-1)
  - Region Code (NUTS level 1,2 or 3) - optional
  - PIC: Participant Identification Code (Horizon 2020)
  - Local student number at the institution
  - Separator: - (Standard hyphen: U + 002D)
  - Example: FR-999859608-1234567890GESCN

- European Student Card Number ESCN
  - Local generation without connection required
  - Uniqueness of algorithm guaranteed number (RFC-4122)
  - Library available for .NET and Java
  - Example: 6a01dfc0-cb98-1035-a19b-001999859608

THE EUROPEAN STUDENT CARD

Erasmus+

QRCode

http://esc.gg/00841d99-2c2b-48c9-bb3a-c6ab7e6335e4

To Do List for the institutions
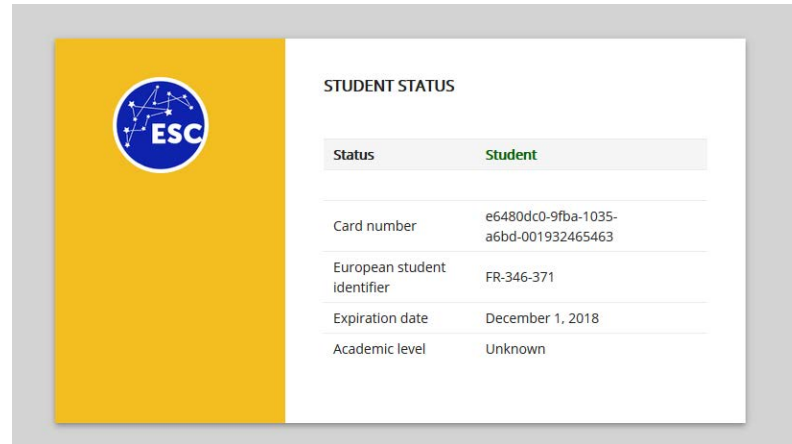
- Put a hologram on his cards

- Request the creation of an account on the ESCR

https://router.europeanstudentcard.eu/register

- Integrate libraries for the generation of the ESCN

- Print the QRCode

- Send student data and maps to ESCR via API

Documents available on

https://router.europeanstudentcard.eu

ESC THE EUROPEAN STUDENT CARD

Erasmus+

Use case 1/2
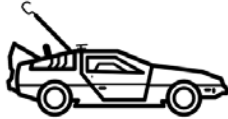
Testify of the status of the student

Use case 2/2

Student Portal

- Students can access a catalog of accessible services in partner institutions
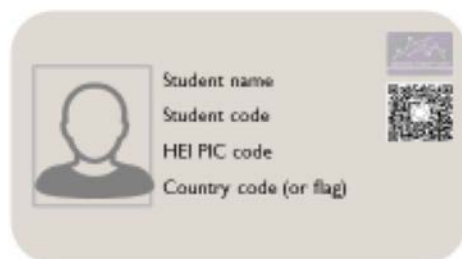
- Some services can be activated from the portal

To be deployed

- Store the ESCN in the chip of the card

- Authentication by eduGain identity federation

Card physical medium : active or passive

Passive

Student name
Student code
HEI PIC code
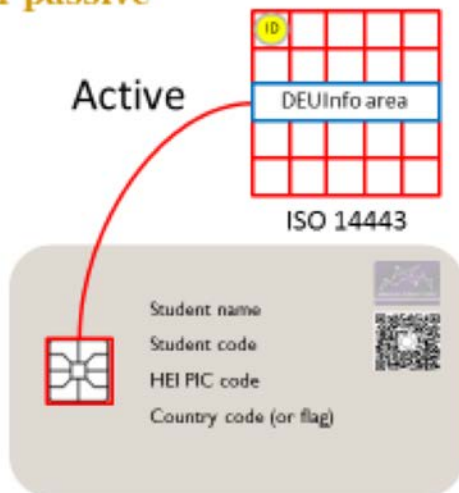Country code (or flag)

Card embedding no electronical device

All the information can be accessed from the card surface

The extent of functions associated to the card is restricted to visual check and QR code reading

Active

DEUInfo area

ISO 14443

Student name
Student code
HEI PIC code
Country code (or flag)
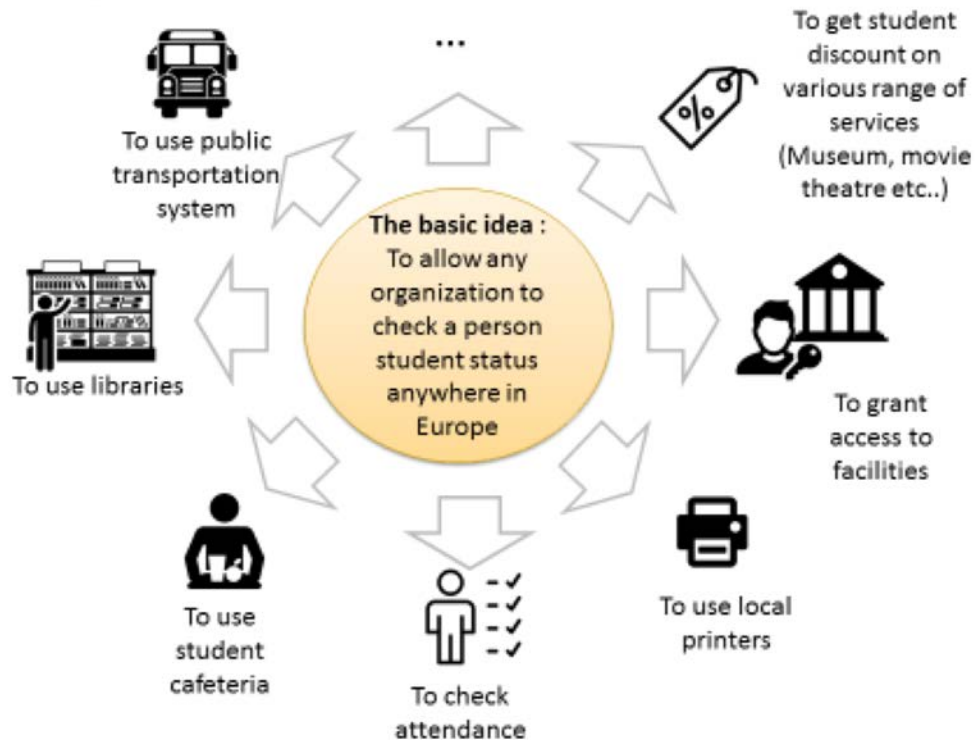
Card embedding micro-chip

Some of the card information is stored on the chip itself.

This information can be used to grant services without connection to the ESC-R.

A specific data zone will be normalized to store the ESC data (DEUInfo)

THE EUROPEAN STUDENT CARD
ESC

The long-term objectives

To use public transportation system

...

To get student discount on various range of services (Museum, movie theatre etc..)

The basic idea : To allow any organization to check a person student status anywhere in Europe

To use libraries

To grant access to facilities

To use student cafeteria

To check attendance

To use local printers

THE EUROPEAN STUDENT CARD

Current focus

There are currently 3 axes on which the ESC must demonstrate its usefulness :

⌃ Use of merchant services :
- The idea is to allow service providers to check student status of a customer to make sure he or she is eligible to use the service
- This can potentially be completed with the use of electronic wallets (like Izly in France)

⌃ Use of service in university libraries, to make it possible for any student
- To access libraries, with potential restriction based on their field and/or level of study
- To potentially borrow books from the library using his card.

⌃ Mobility of students from one institution to another within Erasmus;
- To facilitate student enrolment
- To facilitate access to local services and facilities

The deliverables

The territories of experimentation

- EUCOR – The European Campus
- University College Cork
- EDUCatt Università catolica
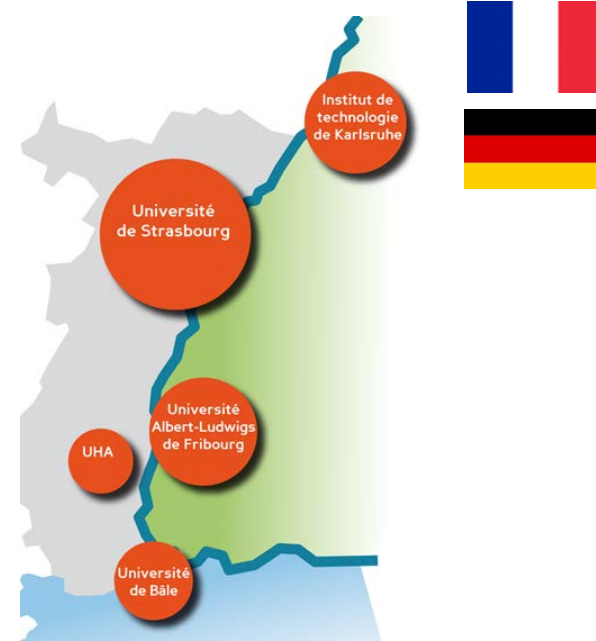- UBFC

Les territoires d'expérimentation :

CSSI / **University college Cork**

Institut de technologie de Karlsruhe

Université de Strasbourg

UHA

Université Albert-Ludwigs de Fribourg

Université de Bâle

Suisse · Aoste · Bergame · Milan · Brescia · Turin · Piacenze-Cremone · Gênes · Imperia · La Spezia · Florence · Livourne · Pérouse · Terni · ROME · Sassari · SARDAIGNE · Cagliari · Palerme · SICILE · Catane · Autriche · Trente · Verone · Venise · Bologne · Ancône · Pescara · Foggia · Bari · Naples · Tarente · Catanzaro · Reggio de Calabra

Eucor – le campus européen

EDUCatt

A venir: davantage de campus en France
→ signature de protocoles formels entre le COPIL et les campus qui souhaitent participer à l'expérimentation (COPIL + CNCE)

Status report
Experimentation on real student mobilities

- **Definition of cohorts and diverse typology of mobilities**

- **Coordination within the HEI (CDO and other departments)**

- **Partnerships/matching of HEI exchanging students**

- **Surveys on students and HEIs involved in the experimentation**

Student cohorts: experimentation

- **University Bourgogne Franche-Comté: Erasmus mobilities**

- **Unistra: exchanges with Karlsruhe, Freiburg and Cork**

- **EDUCatt: Universitat Rovira i Virgili + other HEI**

- **University college Cork: exchanges with Unistra**

Presentation - Surveys on students and HEI's involved in the experimentation

2 sets of questions regarding:

- Experimentation on campus (implementation by HEIs)
- Student cohorts testing the solution

Student cohorts and services for the experimentation

Territories / campus	Types of mobility	Library	E-payment	Erasmus without paper tools	Other services (optional)
Eucor, the European campus **University Strasbourg-KIT**	PHD student Co-diplomas	Yes	Yes	No	?
UCC	Erasmus student using home HEI card (Casual mobility)	Yes	No	Yes	?
EDUCatt	Erasmus student using home HEI card (Casual mobility)	Yes	No	?	Health Access to University catering
University Bourgogne Franche-Comté	Erasmus mobility	Yes	Yes	Yes	?
Campus Card Berlin	Erasmus mobility	Yes	Yes	Yes	?

Working group on uses & services
WG MEMBERS

3 key services:

- **E-payment**
  → Eucor, the European campus, DSW, Instituto Politecnico do Porto, STW Freiburg and STW Karlsruhe, Fondazione ENDISU, Crous de Strasbourg, Cnous, HRK, EDUCatt, UNISTRA

- **Libraries**
  → Universität Jena, Université de Tours, ADBU, University College Cork, Universita Tor Vergata, Campus card Berlin, UBFC, EDUCatt, Crous BFC, EDUCatt, UNISTRA, HTW Dresden, HRK

- **Erasmus mobilities**
  → EWP, UBFC, Crous BFC, ESN, ESU, EDUCatt, University College Cork, HRK, DSW

WG – E-payment

- **In France : offer access Izly services to any student holder of an ESC**
  → Student interface has been developed / linked with Izly platform
  Accessible to any international student with ESC (from ESC Student interface or at restaurant cashier) (even free movers)

- **In Germany: integration of Izly system in Karlsruhe in progress** (KIT and StW Karlsruhe)
  Izly as second e payment system on Karlsruhe Student cards ? Or selling point linked to Strasbourg center ? or issue local card after checking student status with ESC ?
  ❏ Aim to a national e payment system for Germany (one cashier solution provider for 52 StW)

- **In Italy: access to university restaurants granted by reading the QR Code on the Esc allowing the recognition of student status and identity** (issuing at front desk a local card to pay the meal at restaurants and web access to set up e payment system)

Recommandations/upcoming:

→ Reflect on how to ease access to services through the ESC-R thanks to the reading of the QR code (i.e. library, Karlsruhe wallet…)

→ Gather documentation of each experimentation territory of what kind of software and hardware is used and what is the technical issues to integrate Izly

Link the web accessible application to the ESC-R to allow stduents to activate their service on their interface

WG – E-payment

Recommandations/upcoming:

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WG - Libraries

- **In France: free access to libraries**
  - → Reflections in progress to clarify the process for borrowing books
  - → ADBU : reflection at national level (LIBER : European level ?)
  - → UBFC makes available a QR Code reader tool
  - → UNISTRA : pass campus

- **In Germany: interconnection of library information systems belonging to Campus Card Berlin network**
  - → Access + borrowing book (terminal), by registering at front desk
  - → self service borrowing of books (RFID on books)
  - → Home Univ. library ID accepted, current barcode
  - → Use of an RFID reader (100 €)
  - → User ID hold on the chip of the student card : if ESC technologlogu allows it : library ID written on chip

- **In Italy: access to library + digital resources** (only by WIFI on campus) by presenting the QR Code enabling the recognition of the student status, and ESC with hologram
      borrowing possible if student stay long enough

- **In Ireland: access to libraries** by presenting the QR Code enabling the recognition of the student status (restricted access)

WG - Libraries

<u>Upcoming</u>

→ two ways for activating rights :
- at front desk with ESC
- from the student interface on ESC-R

→ distance access to digital services and distance borrowing not a matter for ESC
→ student interface
- technical sheet for services providers
- informations (attributes) : name/first
name/civility/birth/address/e   mail/phone

→ Set up an agreement between the HEI involved in the experimentation
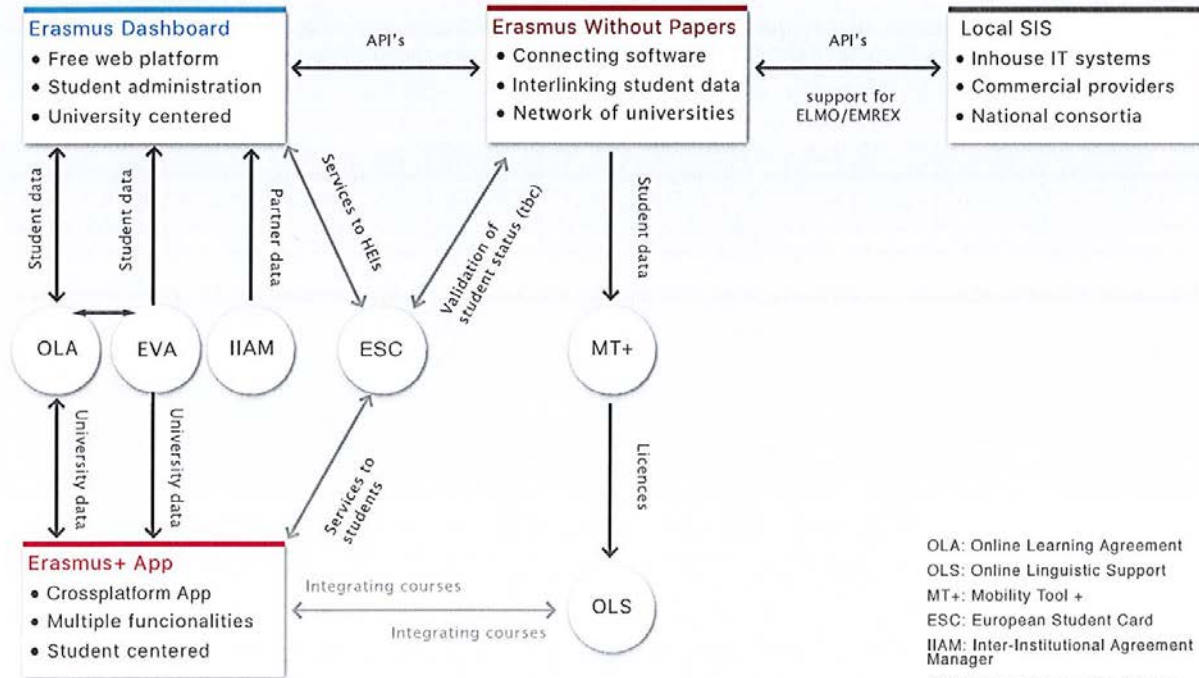   home institution commitment with the host institution
<u>Fines</u> : but avoid the use of financial penalties to avoid to manage money /
complicated in some countries and complicate on international level
<u>Cutting rights</u>

→ Support service helpdesk ? Where ?

Erasmus++ Digital Ecosystem

Activate remote services
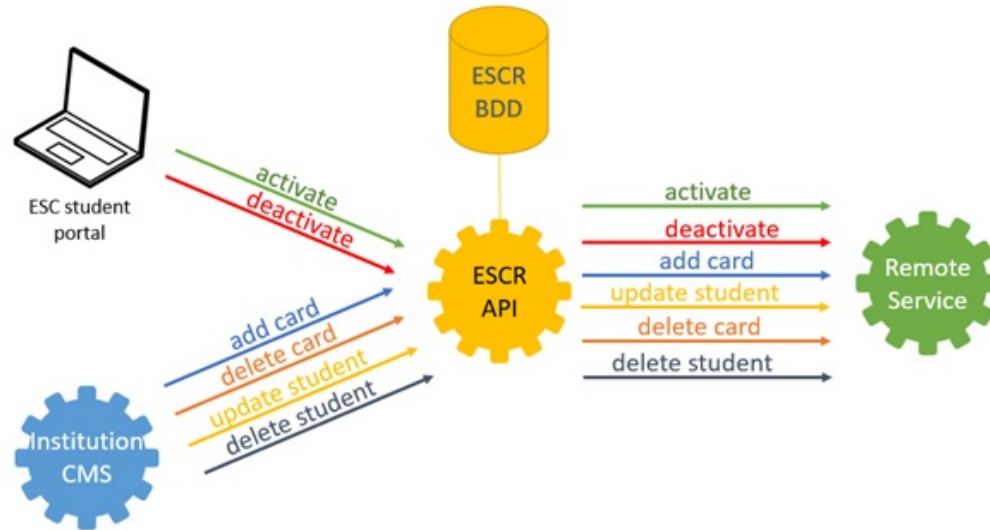
Connected universities : Germany

- Beuth Hochschule für Technik Berlin, 968706312, Germany
- Charité – Universitätsmedizin Berlin, 999992692, Germany
- Deutsches Studentenwerk, 939061657, Germany
- Freie Universität Berlin,   999994826, Germany
- Hochschule fuer Technik und Wirtschaft Dresden, 999651543, Germany
- Hochschule für Gestaltung Offenbach, 946324629, Germany
- Hochschule für Technik und Wirtschaft Berlin, 997713289, Germany
- Humboldt-Universität zu Berlin   999850781, Germany
- Universität Heidelberg,   999987648, Germany
- Karlsruher Institut für Technologie, KIT,   990797674, Germany

ESC THE EUROPEAN STUDENT CARD

Connected universities : Italy

- Conservatorio Statale di Musica 'E. F. dall'Abaco' di Verona, 949040435 ,Italy
- EDUCatt, 942199122,   Italy
- Fondazione ENDISU, 941044434, Italy
- Universita degli studi di Parma, 999846028, Italy
- Università degli Studi di Roma "Tor Vergata", 999844864, Italy

Connected universities : Ireland

- University College Cork, 999975717,Ireland
- Limerick Institute of Technology, 990287939, Ireland

Connected universities : Portugal

- Universidade de Evora, 998269196, Portugal
- Instituto Politecnico de Viana de Castelo, 998454563,   Portugal
- Instituto Politecnico do Porto, 991473861, Portugal

Connected universities : Catalonia Spain

Universitat Rovira i Virgili, 999880560,

- Connected universities :

- Aristotle university of Thessaloniki, 999895692, Greece
- European University Foundation, 948229418, Luxembourg

Connected universities : Finland

- CSC-TIETEEN TIETOTEKNIIKAN KESKUS OY, 999645820,

- Aalto University, 939575951,

Connected universities : Catalonia Spain

Universitat Rovira i Virgili, 999880560,

Connected universities : France

- Université de Caen Normandie,   998737124, France
- Université de Franche-Comté, 999863100, France
- Université de Pau et des Pays de l'Adour, 999849811, France
- Université de Rouen Normandie, 999465982,France
- Université de Strasbourg, 996569950,   France
- Université de Toulon, 996758324,France
- Université Grenobles Alpes, 924833212   ,France
- Université Le Havre Normandie, 989746000, France
- Université Paris Sud, 999907235,France
- Comue Lille Nord de France, 929324506, France
- COMUE Université de Lyon, 998097312   , France
- Ecole centrale de Marseille, 996648132   , France
- Esigelec, 949054306;, France
- Comue Université Loire Bretagne, 919419545, France
- Crous de Strasbourg, 920057611, France
- INP Grenoble, 999875225, France
- INSA Rouen, 999465788, France

The European student card strategic partnership project website

www.europeanstudentcard.eu

The European student card current website

www.europeanstudentcard.eu

Key Features of The European Student Card (ESC)

An innovative framework of trust for student identification in Europe

- Long term objectives & current focus
- Actors involved
- Process overview
- Description of the card
- Card's benefits

A flexible solution able to adapt local needs and specificities

- Range of technologies for card physical medium
- Use case illustration
- Implementation steps
- Card manufacturing process
- Opt in /Opt out for HEI
- Mandatory and non mandatory personal data

An application architecture designed to enforce trust and protect personal data

- Student identifier uniqueness
- Student card uniqueness
- ESC lifecycle
- Security principles enforced

THE EUROPEAN STUDENT CARD

Convergence with Other services – student portal

Eunis Student card and student mobility task force

ERASMUS WITHOUT PAPER (EWP) - aims to create an electronic and digital support network of exchangeable data and academic information from all students that take part in exchange programs.

EMREX is a proven method for electronic transfer of achievement records between higher education institutions in Europe and beyond.

EUROPEAN STUDENT CARD (ESC) - is a management of a unique european Student e-ID and status recognition system which aims a thinning of administrative procedures and the easy access to services for Students and staff on mobility.

OLA (On-line Learning Agreement) is an on-line platform to digitalize the Learning Agreement

EGRACONS (European Grade Conversion System) is a grade conversion tool to convert the academic results when these are transferred.
And
e-IDAS projects of services for students

ESMO / eID4U / Studies+

And others

Context

EU Student Card is high on the EU Agenda involving key digitization initiatives

'Once only principle'

———

- For students
- For universities and their staff
- For public institutions

Les services numériques

Next steps

- Single authentication

- eIDAS enabled eID

- Alignment of key digitisation initiatives
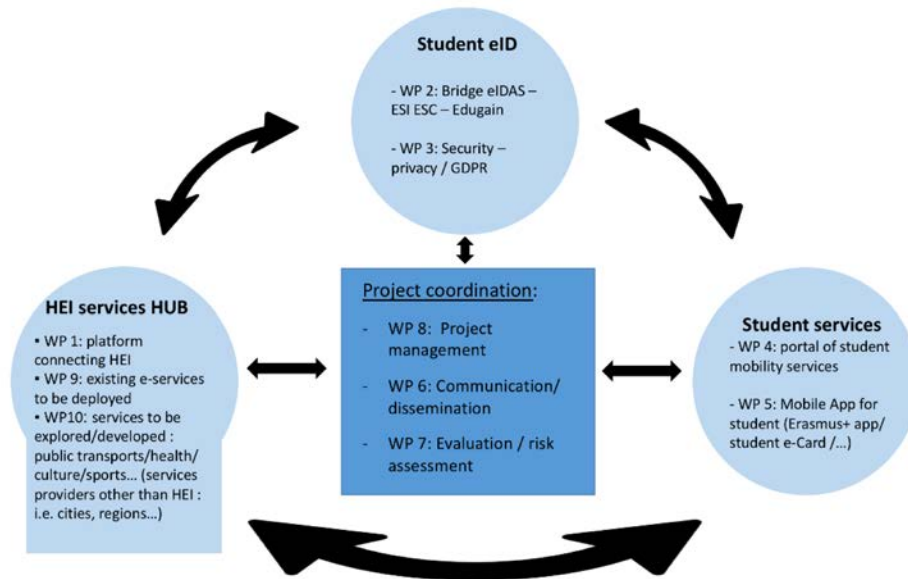

>> Connecting Europe Facility

MyAcademicID outcomes

- Connecting eduGAIN and eIDAS

- Connecting ESC and eduGAIN

- Connecting national eID and eduGAIN

- Connecting e-services with eduGAIN

- Sustainability and upscaling planning

TO THE OPTIMIST, THE GLASS IS HALF FULL.

TO THE PESSIMIST, THE GLASS IS HALF EMPTY.

TO THE PROJECT MANAGER, THE GLASS IS TWICE AS BIG AS IT NEEDS TO BE.

The big project

Student eID

- WP 2: Bridge eIDAS –
ESI ESC – Edugain

- WP 3: Security –
privacy / GDPR

HEI services HUB

• WP 1: platform
connecting HEI
• WP 9: existing e-services
to be deployed
• WP10: services to be
explored/developed :
public transports/health/
culture/sports... (services
providers other than HEI :
i.e. cities, regions...)

Project coordination:

- WP 8: Project
management

- WP 6: Communication/
dissemination

- WP 7: Evaluation / risk
assessment

Student services

- WP 4: portal of student
mobility services

- WP 5: Mobile App for
student (Erasmus+ app/
student e-Card /...)

Jean-Paul Roumegas (ESC)

Counsellor for international relations and partnerships

Centre national des oeuvres universitaires et scolaires

Email: Jean-Paul.Roumegas@cnous.fr