

European Student Card Extension and Adoption (ESC-tension)

IO2 A2/A3

Multidimensional Matrix &

Profiling Tool

Erasmus+ 2020 Call Round 1

KA203 - Cooperation for innovation and the exchange of good practices

Strategic Partnerships for Higher Education Cooperation for Innovation and the Exchange of Good Practices

Project number: 2020-1-IT02-KA203-079313

Duration: 01/11/2020 to 31/10/2022





Document title	IO2 Activity 2 & 3 – Multidimensional Matrix & Profiling Tool
Version	1.1
Status	Final
Distribution Level:	Public
Author	ENDISU

Amendment history:

Version	Date	Author	Description
1.0	18/06/2021	ENDISU	Final version revised for the online publication and the technical implementation of the profiling tool.
1.1	05/10/2021	ENDISU	Update of the final version revised in light of the development of the online profiling tool.
1.2	22/10/2021	ENDISU	Update of the final version finetuned after TPM in Malaga



Contents

Activity 2 – Multidimensional Matrix			
	Description of Multidimensional Matrix		
Acti	vity 3 – Profiling Tool	5	
1.	Services (Organisation & Administration)	5	
2.	Services (Technical & Technological aspects)	6	
3.	Cards (Organisation & Administration)	7	
4.	Cards (Technical & Technological aspects)	10	
Α. ι	Jniversity context	12	
B. N	National context	13	

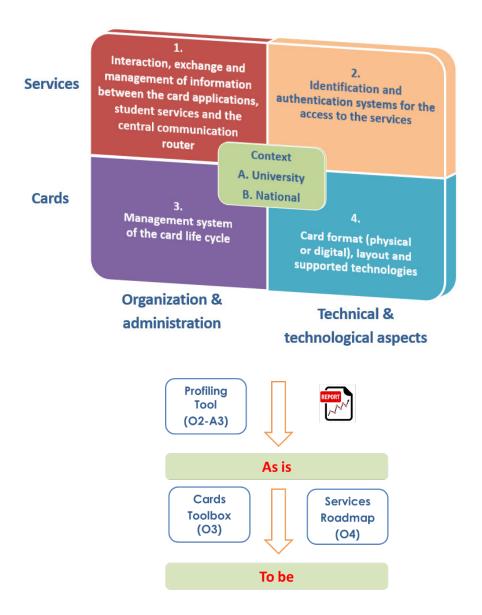


Activity 2 – Multidimensional Matrix

Description of Multidimensional Matrix

The matrix is multidimensional and intersects the 4 dimensions of the ESC on two axes. These include Cards & Services, and each of these includes organisational / administration and technical / technological aspects. In addition, it further considers the University and national context within these 4 dimensions of the two axes.

This matrix is illustrated below.





Activity 3 – Profiling Tool

1. Services (Organisation & Administration)

Interaction, exchange, and management of information between the card applications, student services, and the central communication router.

- 1. Please select all the applicable services, both on-campus and off-campus, that require students' recognition through the use of the campus card
 - Physical identity for security purposes and/or access to campus (e.g., classrooms/labs/housing...)
 - Campus residency
 - Canteen & Food Outlets
 - Library services (both physical and online)
 - o Exam authentication
 - Virtual learning
 - Printing services
 - Banking
 - Transportation
 - Parking
 - Self Service Terminals (vending)
 - Shops
 - Travel
 - Discounts
 - Medical & Health services
 - E-payments
 - o Government / National services
 - Digital signature
 - Other (please specify)
 - o None

NB Campus Card: the means of identification, either physical or digital, that students need to use in order to access on-campus, off-campus or online services.

- 2. (Question that will be replicated for each of the selected service in Q1.1) In terms of enabling the campus card to access service "XXX", who is responsible for the activation process?
 - o HEI
 - o The department/faculty/unit offering the service
 - o The Service Provider
 - Other (please specify)





- 3. (Question that will be replicated for each of the selected service in Q1.1) Please indicate the period in which access to service "XXX" is normally granted
 - o Every year
 - o Every semester
 - o Indefinitely, for a degree programme duration
 - Other (e.g., from July to August)
- 4. (Question that will be replicated for each of the selected service in Q1.1) Does the student identification process for "XXXX" require the supervision of a staff member?
 - o Yes
 - o No
- 5. (Question available in case of answer 'yes' in Q1.4) Is this staff for "XXXX" employed by a third party?
 - Yes
 - o No

2. Services (Technical & Technological aspects)

Identification and authentication systems to access the services

- 1. Do you provide services that require identification or authentication?
 - Yes
 - o No
- 2. (Question available in case of answer 'yes' to Q2.1) What services require the use of the card?
 - Same answers list from Q1.1
- 3. (Question available in case of answer 'yes' to Q2.1 and for each service selected in Q2.2) Please specify which kind of identification system you use for "XXXX".
 - Voucher (e.g., meal voucher)
 - o Visual identification of physical ID card
 - o Digital identification of physical ID card (e.g., QR code, pin, electronic chip, other...)
 - Digital identification through mobile app
 - o Biometric identification
 - Other (please specify)
- 4. (Question that will be replicated for each of the selected service in Q2.2) Does your service "XXX" need to be integrated with third-party service providers?
 - Yes
 - o No





- 5. What services require a payment function?
 - Same answers list from Q1.1
- 6. (Question that will be replicated for each of the selected service in Q2.5) What method of payment is accepted for the use of "XXXX"?
 - o Cash
 - Campus card (electronic wallet no banking transactions)
 - o Bank card
 - Apple Pay, Google Wallet or other similar electronic payments
 - o Mobile App
 - Other (please specify)
- 7. Is the ESC currently used as a method of identification for services?
 - Yes
 - o No
- 8. (Question available in case of answer 'yes' to Q2.7) Please select the services using the visual identification of the ESC
 - Same answers list from Q1.1
- 9. (Question available in case of answer 'yes' to Q2.7) Please select the services using the QR code identification of the ESC
 - Same answers list from Q1.1
- 10. (Question available in case of answer 'yes' to Q2.7) Please select the services using the electronic (chip) identification of the ESC
 - o Same answers list from Q1.1

3. Cards (Organisation & Administration)

Management system of the card life cycle

- 1. (Question available only in case of answer 'yes' to Q3.1) Are all students required to have a campus card?
 - o Yes
 - o No
- 2. (Question available only in case of answer 'yes' to Q3.1) Are students required to pay for their campus card?
 - o Yes
 - o No





- 3. (Question available only in case of answer 'yes' to Q3.1) Have you more than one campus card in use for student services?
 - Yes
 - o No
- **For the following questions (3.6 3.19) in case of more than one campus card in use for student services, please refer to the main student card.
- 4. (Question available only in case of answer 'yes' to Q3.4) In addition to your campus card, please select the services that require the use of a separate specific card.
 - Same answers list from Q1.1
- 5. (Question available only in case of answer 'yes' to Q3.1) Whom is the campus card issued to?
 - o All registered students
 - Only students who physically attend
 - o Incoming Erasmus students (if not registered)
 - Other (please specify)
- 6. (Question available only in case of answer 'yes' to Q3.1) Who is responsible for the campus card issuing process?
 - The University
 - External supplier to the university
- 7. (Question available only in case of answer 'yes' to Q3.1) Who is responsible for the campus card cancellation process?
 - The University
 - o External supplier to the university
 - Combination of University and external supplier
- 8. (Question available only in case of answer 'yes' to Q3.1) Who is responsible for the campus card renewal process?
 - The University
 - External supplier to the University
- 9. (Question available only in case of answer 'yes' to Q3.1) Who is responsible for the campus card technical support and card services?
 - The University
 - External supplier to the university
 - Combination of University and external supplier
- 10. (Question available only in case of answer 'yes' to Q3.1) In what form is the card management system provided?
 - On-premises proprietary system (possibility to customize the software)
 - o On-premises commercial system (limited possibility of customization)
 - o Software as a service SaaS (no customization possibility)





- 11. (Question available only in case of answer 'yes' to Q3.1) How often is the card issued?
 - Only once (academic course duration)
 - Every academic year
 - o Each semester
 - Other (please specify)
- 12. (Question available only in case of answer 'yes' to Q3.1) How is the student ID number generated?
 - Nationally generated numbering system
 - HEI own numbering system
 - o European Student Identifier (ESI) compliant system
 - Other (please specify)
- 13. (Question available only in case of answer 'yes' to Q3.1) What department in the HEI has ultimate responsibility for the Campus card?
 - IT Department
 - Card Office
 - Security / Estates
 - Admissions/ Registrar
 - Other (please specify)
- 14. (Question available only in case of answer 'yes' to Q3.1) Does your HEI provide a single card for all requirements, or do faculties/departments provide their own card?
 - o One card
 - o More than one card
- 15. (Question available only in case of answer 'yes' to Q3.1) What is the level of integration between your student management system and the European Student Card ESC?
 - o Fully integrated
 - Partially integrated
 - Not integrated
- 16. (Question available only in case of answer 'yes' to Q3.1) How are the campus cards produced?
 - o Internally by HEI as part of registration process
 - Produced by Service Provider
 - o Produced by Bank
 - Other (please specify)
- 17. (Question available only in case of answer 'yes' to Q3.1) How is a request for a campus card processed by the student?
 - o Onsite
 - o Online
 - A combination of both onsite and online





- 18. (Question available only in case of answer 'yes' to Q3.1) How is ID photo validation processed?
 - The photo is collected from the National ID Card, which is already validated
 - o Students uploads the photo online, and the validation is also done online
 - Students uploads the photo online, and the validation only occurs when the student goes to the requesting validation
 - o Student must go to the HEI to complete the entire photo process (capture/validation)
 - Other (please specify)

4. Cards (Technical & Technological aspects)

Card format (physical or digital), layout (graphics, information), and technologies supported (chip/magstripe/applied standards)

- 1. Please state the type of card / eID in use at your campus.
 - Paper card
 - Plastic card (without integrated chip)
 - Smartcard (plastic card with integrated chip)
 - Mobile device (e.g., smartphone app)
 - Combination of some of the above or other (please specify)
- 2. If you have a physical campus card, please select all the card technology it includes.
 - Bar code
 - o QR code
 - Magnetic stripe
 - Mifare Classic chip
 - Mifare Desfire chip
 - Legic chip
 - o Contactless enabled chip
 - Other (please specify)
 - Not applicable
- 3. If you are using a Mobile device as a campus card at your HEI, which technologies are used?
 - Near Field Communication (NFC)
 - Bluetooth Low Energy (BLE)
 - o QR code
 - One-time password (OTP)
 - Other (please specify)
 - Not applicable





- 4. Is your campus card used for e-payments (electronic purse no banking transactions)?
 - Yes
 - o No
- 5. Is your campus card also a bankcard?
 - Yes
 - o No
- 6. Has the Service Provider access to the security keys on the chip?
 - o Yes
 - o No
 - Not applicable
- 7. Where is the necessary data stored for the card production process?
 - Career Management System / Student Information System
 - o Card Management System
 - o Identity Management System
 - o Some specific software for card production process
 - Other (please specify)
- 8. What information is displayed on the campus card?
 - Name, surname
 - o University name
 - o Photo
 - Student ID number
 - o Date of birth
 - Expiry date
 - Student nationality
 - Other (please specify)
- 9. What information is stored on the campus card chip (if present)?
 - Name, surname
 - o University name
 - Photo
 - o Student ID number
 - o Date of birth
 - Expiry date
 - Student nationality
 - Other (please specify)
- 10. Do your existing campus cards already have a minimum level of integration with European Student Card ESC standards?
 - Yes
 - o No





- 11. (Question available only in case of answer 'yes' to Q4.9) What level of integration is already in place?
 - o ESC logo placed on card
 - o PIC number & country code printed on card
 - o Generation of ESC number
 - o QR Code based on ESC number printed on card
 - o Registration on the ESC central router
 - Other (please specify)

A. University context

Student and University Profile, Data Security and management of ESC process

- 1. How many students do you have?
 - o Less than 1,000
 - 0 1,000-10,000
 - 0 10,000-50,000
 - o More than 50,000
- 2. What is the breakdown of these students?
 - o Full-time only
 - Majority of full-time students
 - o Part-time only
 - Majority of part-time students
- 3. How many of these students are taking part in the Erasmus Program?
 - o Less than 1,000
 - 0 1,000-10,000
 - 0 10,000-50,000
 - o More than 50,000
- 4. What type of course delivery methods do you offer?
 - o Traditional onsite learning
 - o Virtual learning
 - Mix of both
- 5. Which entities need to access user's data for the card production process?
 - o HEI
 - Service Providers
 - o Bank
 - Other (please specify)





6.	Does your HEI have agreements in place with third parties that involve data sharing in order to provide
	additional services to students (e.g., student discounts)?
	O Vas

- No 0
- 7. If you issue cards compliant with the European Student Card, do you have a specific information point where you describe the benefits of the ESC to your students?
 - 0 Yes
 - No 0

B. National context

National regulations and existing identification requirements

- 1. Is there a National Entity responsible for issuing campus cards?
 - Yes
 - Nο \cap
- 2. Is there a National Entity responsible for campus card regulations and/or recommendations?
 - Yes
 - No 0
- 3. Is your campus card required to comply with national regulations?
 - 0 Yes
 - No 0
 - Not applicable
- 4. Do national regulations make it mandatory to use a particular technology/design on the campus card?
 - 0 Yes
 - No 0
- 5. Are there specific national regulations pertaining to cards and identification for Erasmus Students?
 - Yes
 - No 0
- 6. Is your campus card integrated into your National ID?
 - Yes 0
 - 0 No

Please add here further information that you consider relevant for the topic discussed in this section. The added information will be included in your Profiling Tool

