

EUROPEAN STUDENT CARD INITIATIVE

# Mandatory business requirements and semantic interoperability specification for nominations

Written by the Erasmus Without Paper+ consortium



Vocational education and training Adult education



Erasmus+ Enriching lives, opening minds **Higher education** 

#### EUROPEAN COMMISSION

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## 1. Purpose of the document

This document maps and describes the business requirements and business processes for digital nominations of Erasmus+ students exchanged through the Erasmus Without Paper (EWP) network. It clarifies the requirements for the technical solutions developed for the EWP Network and systems connected to the Network that are meant to adequately support the business processes to digitally exchange and manage digital Erasmus+ student nominations between higher education institutions.

This document is written by people who have experience with the nominations business process and is meant to increase the understanding of the process for IT colleagues implementing both the local implementation supporting the nomination process and the EWP connections and functionalities. As part of the development of this document, business requirements and processes in higher education institutions were mapped through a dedicated survey and consultation. Around 200 colleagues provided information which underpins its content. Next to that, feedback from the Business Process Owners – Standing Expert Group, its taskforce established on the topic as well as user groups (see more in the EWP governance here) and EWP Champions was taken into account.

## 2. What is an Erasmus+ student nomination?

Erasmus+ funded student exchanges between higher education institutions are carried out based on Erasmus+ inter-institutional agreements. The inter-institutional agreement stipulates the agreed number of "mobility spots" and student exchange requirements between both institutions. Before any student exchange occurs, both institutions will organise an internal selection procedure to find student candidates to go to the partner institution. A nomination is the process where the sending higher education institution informs the receiving partner institution about the selected student(s) they would like to send or "nominate" for available "mobility spots" at the receiving institution in accordance with the inter-institutional agreement. The purpose of the nomination is to confirm that the selection of students at the sending higher education institution is acceptable to the receiving higher education institution. Nominations do not (in most cases) contain sufficient information to formally enrol students into the receiving higher education institution and do not replace formal enrolment applications of nominated students (if required). This process is described in more detail in the next section.

Nominating more students than the available spots should be concluded only after explicit consent between the partners, as this might cause confusion and additional workload to the receiving institution.

## 3. Description of the current process

The nomination of students is a crucial part of a more extensive process that takes place before any Erasmus+ student mobility starts. Nominations can be managed centrally (one IRO sending and/or receiving all student nominations) or at the level of individual academic faculties or departments. The current business process presented below is split into five steps (there could be slight differences in these steps across higher education institutions for the aspects that are not defined by the Erasmus+ programme rules). The five steps cover the prerequisites for the actual nomination, managed by the sending higher education institution (step one), and the follow-up after the nomination, managed by the receiving higher education institution (step four, step five), for context and to highlight the connections of the nomination itself with other relevant business processes.

One should acknowledge that at various stages/steps in the process the students can withdraw their application for mobility or want to change the host higher education institution. It is also worth noting that preceding these steps, the partners exchange information about deadlines and the requirements for nominations. Oftentimes, a specific website or factsheet provides an overview of the deadlines and information about the nominations.

Step 1: preceding the nominations: Round of internal applications and selection at the sending higher education institution

Before the "nomination" process takes place, prospective exchange students first need to apply internally at the sending institution. Students apply for one or more of the available study destinations established by approved and active inter-institutional agreements with partner institutions. Most often, prospective exchange students are given the opportunity to prioritise the destinations they apply for. The sending institution is responsible for selecting the student for specific study destinations, based on internal criteria (that should follow the <u>ECHE charter</u> values) and in accordance with the formal requirements of the inter-institutional agreement the student must fulfil (e.g. language proficiency level). The selection procedure at the sending institution has to be carefully scheduled to meet the nomination deadlines of partner higher education institutions.

Step 2: sending higher education institution nominates students to receiving higher education institution

It is critical to have the most up to date information of the nomination requirements and deadlines for each receiving higher education institution. For some higher education institutions, deadlines and procedures can even vary between faculties. Many institutions have an online system where the partner needs to nominate, while others require receiving nominations via a specific Excel template or via email, etc. The data points required by the receiving higher education institution can vary from institution to institution.

Most common ways of nominating students:

- Email with details that the sending higher education institution finds relevant (if no clear guidelines/requirements from the partner are available)
- Email with details about students as requested by the receiving higher education institution
- Email with data attached (via excel, pdf, word...) in a format requested by the partner
- Via a tool by clicking a link
- Via a tool where the person nominating needs credentials to login
- Via online forms
- The sending institution needs to keep track of all information regarding the subject, making sure the students are nominated via the correct channel in a timely manner. Missing a deadline or sending nominations via the wrong channel, might compromise mobilities. Sending sensitive students' personal data involves special care from the IRO officers (and very often a prior student consent to provide requested data).

Step 3: the receiving higher education institution accepts or rejects the nomination

Depending on the procedure of nomination, receiving higher education institution may confirm receipt of nomination, e.g. if nominations are handled via digital tools. In other cases, the sending institution may not have any automatic confirmation from partner higher education institution that the nomination was successfully delivered.

The receiving higher education institution verifies the nominated students against the existing interinstitutional agreements (and possible additional arrangements made). The decision is communicated via email or via the digital nominations tool.

In some cases, the nomination is rejected because of missing information, or because the sending higher education institution is not following the right procedure. In this case, we go back to step 3 and the student is again nominated, with all required information included.

In other cases, a rejection can be final, e.g., because there are no mobility spots left on the agreement or deadlines have passed or there is no active agreement between the two partner institutions or the agreement's receiving school/faculty does not match with the student's home school/faculty. In that

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case, we go back to step 2 (or step 1 if the student has not applied for alternative partner institutions) and the sending higher education institution can find another destination for the student (a partner with available mobility spots).

In case of acceptance of the nomination, the sending higher education institution and/or the student receives a notification. This often includes information about the next steps (both for the student and the higher education institution).

Step 4: After the nomination - Incoming mobility application at the receiving institution

After the successful nomination, students need to fulfil the formalities required by the receiving institution (application process). They need to enter their personal data, as well as information regarding mobility, as per the needs of the receiving higher education institution (e.g., registering in the local system, preparation of acceptance letters for visas, or student special needs). Some of this information is already shared via the nomination. At this point, students are asked to provide additional documents, such as language certificates, a learning agreement already signed by the student and the sending higher education institution, a copy of the passport...

Step 5: After the nomination - Student is enrolled at the receiving institution

After the student completes the application as required by the receiving higher education institution, they can be enrolled at the host institution. In rare cases, the application is rejected if the student does not meet the enrolment qualifications (e.g. does not have sufficient language proficiency).

Once the nominated student is enrolled in the receiving higher education institution, they usually receive a formal confirmation of acceptance.

At this point, oftentimes learning agreement processes come into focus. However, at some higher education institutions learning agreement or provisional learning agreement (in the form of a motivational letter) can be required as a part of the application (step 4).

## EWP objectives

The multitude of nomination procedures and deadlines creates a burden for the sending institutions. The nominations may take many weeks, especially in case of big higher education institutions managing mobilities centrally. The EWP nomination process allows for a unified and simplified way of nominating students for available spots on agreements across all partners participating in EWP and facilitates access to up-to-date information regarding deadlines and requirements in one place. The nomination is done by simply pushing a button in the local implementation used to manage outgoing student mobility, without the need of copying data from the local system to the partner's system. The acceptance/rejection of the nomination is also processed in a digital manner by the receiving higher education institution and the sending higher education institution is notified.

Implementation of EWP nominations is an opportunity to review and redesign the existing procedures. Currently, some data required by higher education institutions in nominations are not always related to mobility/studies and are not always available in the internal higher education institution system (also because of legal restrictions). Sending higher education institutions may not have students consent to share them with partner higher education institutions (e.g. address, phone, disability information). Transitioning to nominations via EWP can contribute to simplifying the amount of data requested at the earliest stage of the mobility, allowing students to provide any additional data directly to the receiving higher education institution.

Sharing sensitive personal data required in the nominations via non-encrypted emails or online forms can pose a threat to GDPR compliance. Sending nominations via EWP will significantly increase the safety of data exchanged.

## 5. Stakeholders

- Business process owners working on nominations at institutions holding an ECHE;
- IT-managers working at higher education institution & third party mobility software providers;
- IT-teams developing solutions for mobility administration

### 6. EWP user stories

#### 6.1. Nominating an outgoing student

Person entitled to nominate students from the sending higher education institution logs into the system to manage outgoing student mobility. He/she looks up a selected student and pushes a button to nominate the student. Alternatively, they select multiple students at once and push a button to nominate them all at the same time. Upon pressing the button, the nomination info is sent to the partner over EWP.

#### 6.2. Phases of the nomination at the sending higher education institution

The IRO/faculty coordinator from the sending higher education institution logs in into the system to manage outgoing student mobility. They can filter on the different phases of the nominations in the system:

- Nomination pending:
  - Sent but not yet delivered: the sending higher education institution did initiate sending the nomination data via EWP. The sending institution did not yet receive technical confirmation that the nomination reached the system at the receiving institution.
  - Delivered: the sending higher education institution did initiate sending the nomination data via EWP. The sending institution did receive the technical confirmation that the nomination reached the system at the receiving institution (this is upon a server action at the receiving institution, there is no human interaction required to confirm the nomination was delivered).
- Nomination verified:
  - o Nomination accepted: the receiving institution did accept the nomination.
  - Nomination rejected: the receiving institution did reject the nomination and added an explanation in a mandatory comment.
- Nomination cancelled: the sending higher education institution cancelled the nomination as the mobility won't take place.

Changes in the nomination phases described above and their timing should be transparent for end users. Therefore, the timestamp from the EWP-exchange invoking a new phase must be made visible to end users.

#### 6.3. Accepting a nomination of an incoming student

The IRO/faculty coordinator from the receiving higher education institution logs into the system to manage incoming student mobility. He/she can search for incoming nominations and accept them one by one or in batch. Upon accepting, the receiving institution informs the sending institution. Upon

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accepting the nomination, the system at the receiving institution can also notify the student (upon a manual or automatic action) of the next steps to get accepted as an exchange student.

The acceptance of a nomination does not entail acceptance for the incoming mobility. It is merely a check if the nominated candidate meets the requirements in terms of spots available on the interinstitutional agreement, deadlines.... The acceptance of the incoming mobility as a whole takes place only after the application from the incoming student has been received and accepted.

#### 6.4. Rejecting a nomination of an incoming student

The IRO/faculty coordinator from the receiving institution logs into the system to manage incoming student mobility. He/she can search for incoming nominations and reject the incoming nomination, adding a mandatory comment. Upon rejecting the receiving institution informs the sending institution.

#### 6.5. Student nominated on wrong agreement

Managing incoming nominations, the IRO/faculty coordinator identifies a nomination on the wrong agreement. He/she rejects the nomination and passes on the correct inter-institutional agreement's details for a new nomination in the mandatory comment.

The sending IRO/faculty coordinator can see the rejection and the comment and nominates the student on the right agreement.

#### 6.6. Different systems for incoming and outgoing mobilities

In some institutions the system used to manage incoming applications differs from the system used to manage outgoing mobilities.

## 6.7. Both partners agree to allow more students to be nominated than the spots of the agreement for a given academic year

Agreeing that more students can be nominated for a given academic year is not part of the nomination process. The partners can modify the inter-institutional agreement or agree via email (also see the user guide for inter-institutional agreements). This process should be completed before the nomination takes place as it is required for the call for applications at the sending institution.

#### 6.8. Outgoing student resigns from mobility

At various stages of the processes mentioned above, a student can withdraw from a mobility/spot on an agreement. If this happens, the sending institution can cancel the mobility in the system to manage outgoing mobilities. Upon cancellation after the nomination took place, the outgoing nomination is automatically cancelled as well, and a notification must be sent to the receiving institution.

Another outgoing student can be nominated at the receiving institution in the system for managing outgoing mobilities from the sending institution (if deadlines allow for it).

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## 7. EWP interoperability mandatory requirements

- Data fields to be exchanged as part of the nomination process:
  - Personal data required for the nomination and purpose:
    - First name: identification of student.
    - Last name: identification of student.
    - European Student Identifier: unique identification of student.
    - Date of birth: identification of student.
    - Email address: to further communicate with the student.
    - Gender: identification of student
    - Nationality: if need be specific instructions can be sent by the receiving higher education institution at an early stage concerning visa requirements.
  - Mobility related data required for the nomination:
    - SCHAC code of the sending higher education institution: SCHAC is the EWP identifier for higher education institution.
    - SCHAC code of the receiving higher education institution: SCHAC is the EWP identifier for higher education institution.
    - iia-id sending higher education institution: if the agreement is bilaterally approved via EWP this field should be available and must be shared.
    - iia-id receiving higher education institution if the agreement is bilaterally approved via EWP this field should be available and must be shared.
    - 4-digit ISCED field of education of the inter-institutional agreement: some interinstitutional agreements with several cooperation conditions that might have different fields of education.
    - EQF level of education at departure: some inter-institutional agreements with several cooperation conditions that might have different fields of education.
    - 4-digit ISCED field of education of the student: field of education that is closest to the home degree at departure.
    - Academic year in which the mobility will take place.
    - Term(s) in which the mobility will take place.
    - Activity type: student mobility for studies, student mobility for traineeships
    - Mobility type: long-term mobility, short-term mobility with a mandatory virtual component, short-term doctoral mobility
  - Optional information for the nomination
    - Organisational unit id at the sending higher education institution.
    - Organisational unit id at the receiving higher education institution.
    - Additional information (comments).
- In case the inter-institutional agreement is not bilaterally approved via EWP (or sending
  institution uses a different solution for inter-institutional agreement and nominations API
  connection) the iia-ids might not be available: if the organizational unit at the receiving
  institution is available at the sending higher education institution, it must be shared.

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- When the receiving institution did well-receive a nomination in its system, a technical confirmation must be sent to the sending institution that the nomination reached the system at the receiving institution.
- Upon rejecting a nomination, a comment must be added by the receiving institution. This
  comment is also visible for the sending institution when the nomination is rejected.
- It must be possible for the sending institution to notify the receiving institution about a cancellation of nominated student, regardless of the nomination status.
- From the sending institution perspective, the whole nomination process must be integrated in
  one and the same system: nominating a student, receiving the technical confirmation that the
  nomination was received as well as informing on accepted or rejected nominations by the
  partner.
- European Student Identifier is required to link the digital nomination to the digital learning agreement and other digital processes.
- It is at the discretion of the institution to choose the systems that meet their requirements, should they wish to use different systems for nominating outgoing students and processing incoming students.

## 8. User requirements in the local implementation

- There is a strong connection between digital inter-institutional agreements, digital nominations and digital learning agreements. However:
  - Institutions must have the possibility to initiate the digital processes independently from each other as in the transition phase things might go wrong in each of processes (either on a technical, on a functional level or on a user level). However, it must also be noted that technical teams might be inclined to offer a solution where nominations are underpinned by the inter-institutional agreements in the same system to avoid quality issues and reduce complexity.
  - There must be flexibility for the sending and receiving institutions to overrule numbers (e.g. nominate / accept more students than there are places on the agreement) or to deviate from the study fields on the agreement (e.g. nominate / accept a student from another study field) than stipulated in the inter-institutional agreement.

## 9. User recommendations in the local implementation

- The nomination phases should be visible to end users who can filter/search/report on the different phases:
  - Nomination pending:
    - Sent but not yet delivered: the sending higher education institution did initiate sending the nomination data via EWP. The sending institution did not yet receive technical confirmation that the nomination reached the system at the receiving institution.
    - Delivered: the sending higher education institution did initiate sending the nomination data via EWP. The sending institution did receive the technical confirmation that the nomination reached the system at the receiving institution (this is upon a server action at the receiving institution, there is no human interaction required to confirm the nomination).
  - Nomination verified:
    - Nomination accepted: the receiving institution did accept the nomination.

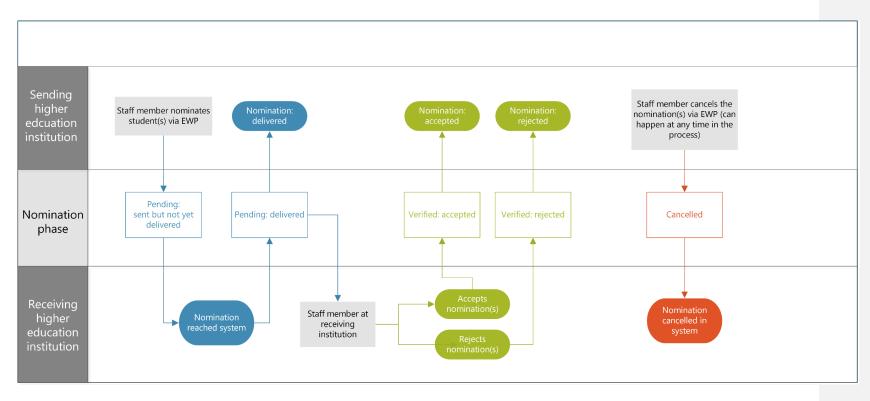
- Nomination rejected: the receiving institution did reject the nomination and added an explanation in a mandatory comment.
- Nomination cancelled: the sending higher education institution cancelled the nomination as the mobility won't take place.
- For transparency reasons changes in the nomination phases described above and their timing should be transparent for end users. Therefore, the timestamp from the EWP-exchange invoking a new phase must be made visible to end users.
- It must be possible to nominate students one by one or in bulk.
- Nomination deadlines of the receiving institution (retrieved via the EWP factsheet API) should be directly visible / enforced in the nomination module, and it should be possible to get specific reports (e.g. in Excel format) with an overview of those deadlines.
- Upon receiving a nomination, the receiving institution should store the data from the nomination in its system and not request any information that was already shared via the nomination (once only principle).
- Make use of the <u>push notification functionality</u> (this API allows third-party and in-house providers to share notifications directly via Erasmus+ App even if the application/nomination process is not managed via the EWP Dashboard) in the Erasmus+ App for notifying the student about the nomination status.
- The local implementation should make sure the nomination is shared with the correct faculty/department/unit/person at the receiving institution. The prime identifier to do so should be the iia-id (receiving-hei-iia-id).

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## 10. High level flow chart

#### Figure 1: High level flow chart



## 11. Semantic interoperability specification

Field name	Mandatory (M) / Conditional (C) / Optional (O)	Type of Field	Short description	Data Length	Data Validation
First Name	М	String	First name of the student	255	
Last Name	М	String	Last name of the student	255	
European Student Identifier	М	String	The European Student Identifier is a unique electronic identifier number used to identify and authenticate mobile students using Erasmus Without Paper consistently across different IT systems. The ESI field should not be visible to end users.	255	
Omobility-id	М	String	Technical identifier of the mobility		
Date of Birth	М	Date	Date of birth of the student		Valid Date dd-mm-yy
Gender	М	ISO/IEC 5218 code of human sex	0 = Not known; 1 = Male; 2 = Female; 9 = Not applicable		Valid gender
Email Address	М	String	Email address from the student	255	Valid Email
Nationality	М	ewp:Cou ntryCod e	Nationality of the student	2	2-letter country code
SCHAC Code of Sending higher education institution	М	String	Technical identifier for sending higher education institution	255	
SCHAC Code of Receiving higher education institution	М	String	Technical identifier for receiving higher education institution	255	

### Table 1: Semantic interoperability specification

iia-id Sending higher education institutionCewp:Asci iPrintabl eldentifi erTechnical identifier at the sending approved via EWP. If the agreement was digitally approved, this field must be provided.255iia-id Receiving higher education institutionCewp:Asci iPrintabl eldentifi erTechnical identifier at the receiving institution of the agreement approved via EWP. If the agreement was digitally approved, this field must be provided.255iia-id Receiving higher education institutionCewp:Asci iPrintabl eldentifi erTechnical identifier at the receiving institution of the agreement agreement was digitally approved, this field must be provided.2554-digit ISCED Field of Education (Agreement)MISCED 4-digit codeThe field of education of the agreement. Field must use the 4- digit code based on ISCED-F 2013 standards. It is strongly recommended to use 4-digit codes that are included in the Beneficiary Module data dictionary.255EQF Level of Education at Departure (Agreement)MENERCEN LevelEQF level of education in the inter- institutional agreement44-digit ISCED Field of Education (Student)MISCED LevelThe field of education at departure that is closest to the home degree of the student. Field must use the 4-digit code 2013 standards. It is strongly4
Receiving higher education institutioniPrintable iPrintableiPrintable eldentifiiPrintable eldentifiiPrintable eldentifi4-digit ISCED Field of Education (Agreement)MISCED 4-digit codeThe field of education of the agreement. Field must use the 4- digit code based on ISCED-F 2013 standards. It is strongly recommended to use 4-digit codes that are included in the Beneficiary Module data dictionary.EQF Level of Education at Departure (Agreement)MISCED 4-digit codeEQF level of education in the inter- institutional agreement4-digit ISCED Field of Education at Departure (Agreement)MISCED 4-digit codeThe field of education at departure that is closest to the home degree of the student. Field must use the 4- digit code based on ISCED-F4
Field of       4-digit       -digit
Education at Departure (Agreement)       Level       Level       Education in the inter- institutional agreement         4-digit ISCED Field of Education (Student)       M       ISCED 4-digit code       The field of education at departure that is closest to the home degree of the student. Field must use the 4-digit code based on ISCED-F       4
Field of     4-digit     the list of code to the home degree       Education     code     of the student. Field must use the       (Student)     4-digit code based on ISCED-F
recommended to use 4-digit codes that are included in the Beneficiary Module data dictionary.
Academic M trm:Acad Year Academic year in which the mobility will take place 255 Will take place
Term(s) of Mobility     M     String     Term(s) in which the mobility will take place at the sending higher education institution     255
Activity Type     M     Mobility ActivityT     Type of activity: student mobility for studies or student mobility for traineeships.     255
Mobility Type M String Type of mobility: e.g., long-term, 255 short-term with a mandatory virtual component, short term doctoral mobility
Organisation al Unit ID at Sending higher education institution

Organisation al Unit ID at Receiving higher education institution	0	ewp:Asci iPrintabl eldentifi er	Technical identifier of the organizational unit at the receiving higher education institution	255	
Additional Information (Comments)	0	String	Additional information/comments	1000	

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