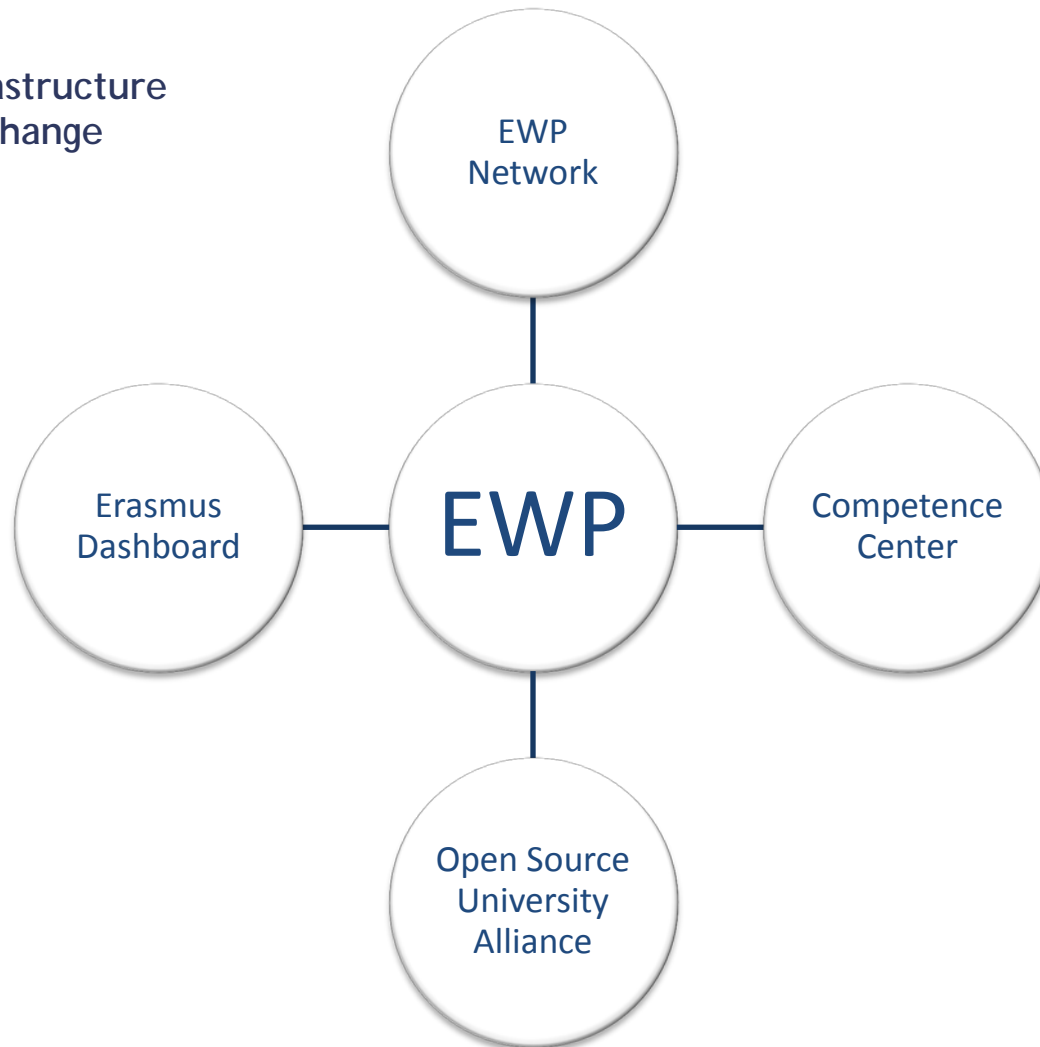


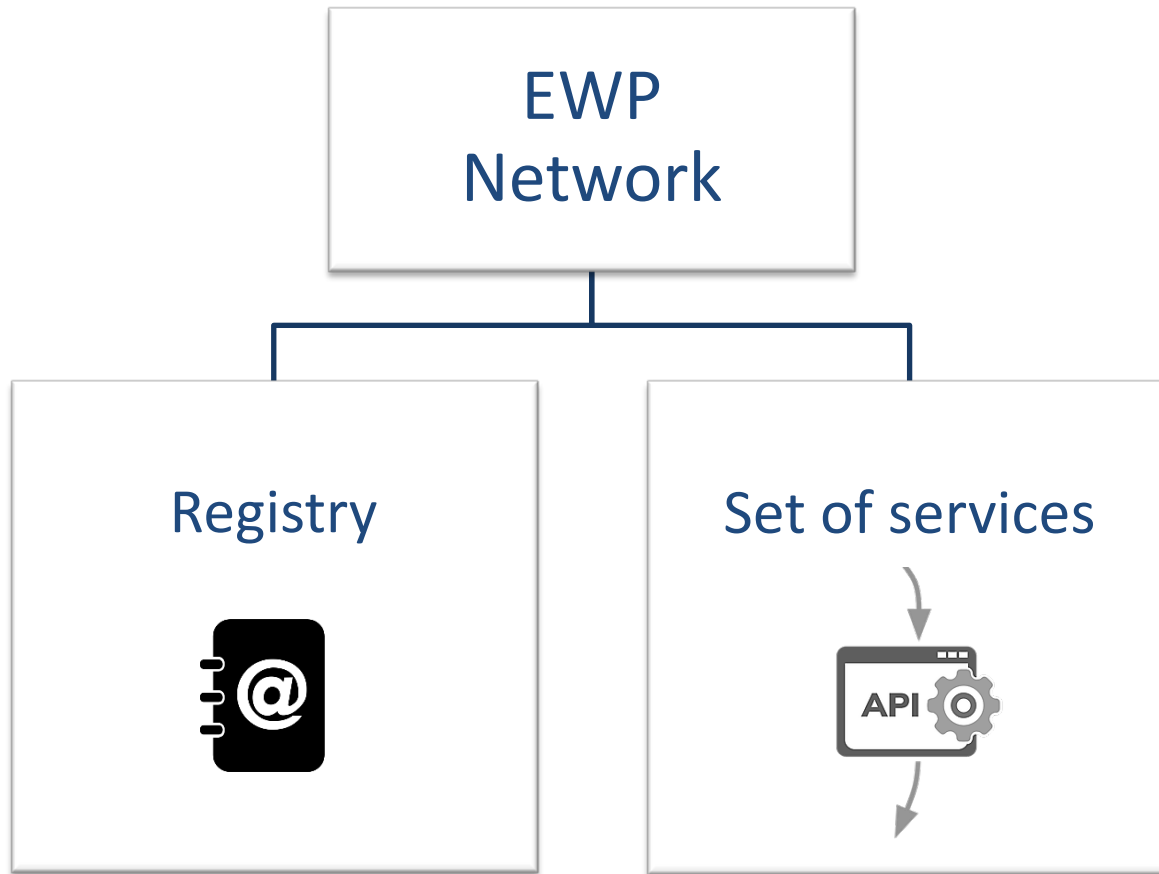
ERASMUS — Going — DIGITAL

Jornadas de movilidad Erasmus+ de
Educación Superior entre Países del
programa (KA103)

SEPIE, Universidad de Huelva
26 de junio de 2019

Sustainable infrastructure
for digitized exchange
of mobility data





- Fully designed and specified
- Specification publicly available on GitHub
- Developers Guide
- Supporting tools for developers
- Reference connector
- Two stable DEMO environments for independent testing
- DEV Registry and PROD Registry
- EWP Network up and running in production environment (since December 2018)

Developers Guide

<https://developers.erasmuswithoutpaper.eu/>



Specifications, Validators and Tools

- Chapter 1. Working with EWP Technical Documentation v1.2.0
- Chapter 2. Introduction to EWP Network
 - Chapter 2.1. Architecture and Common Datatypes v1.10.0
 - Chapter 2.2. Authentication and Security v2.0.2
 - Chapter 2.3. Client Authentication Methods
 - Chapter 2.3.1. Handling Anonymous Clients v1.1.0
 - Chapter 2.3.2. Authenticating Clients with TLS Certificate v1.1.0
 - Chapter 2.3.3. Authenticating Clients with HTTP Signature v1.0.1
 - Chapter 2.4. Server Authentication Methods
 - Chapter 2.4.1. Authenticating Servers with TLS Certificate v1.1.0
 - Chapter 2.4.2. Authenticating Servers with HTTP Signature v1.0.1

Who should be reading this?

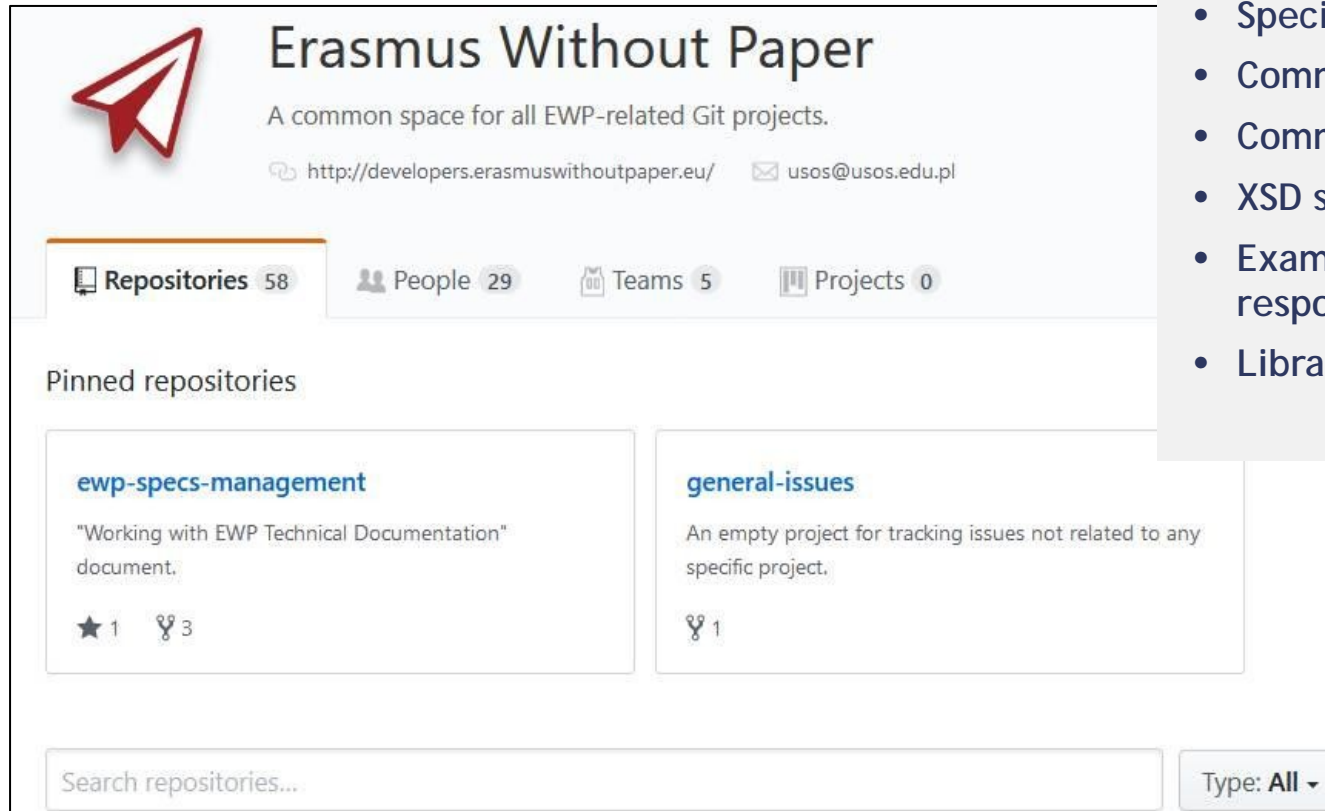
The following chapters and tools are written **by developers and for developers**. If you're a project manager, then please assign developer(s) from your team to keep track of the changes in these specifications.

Developers chosen by the partners SHOULD:

- Understand **Git** and be able to work with it fluently, in order to **continually** keep track and review all the changes to the specifications.
- Have significant experience with **XML namespaces**, and **XML Schema** language.

GitHub

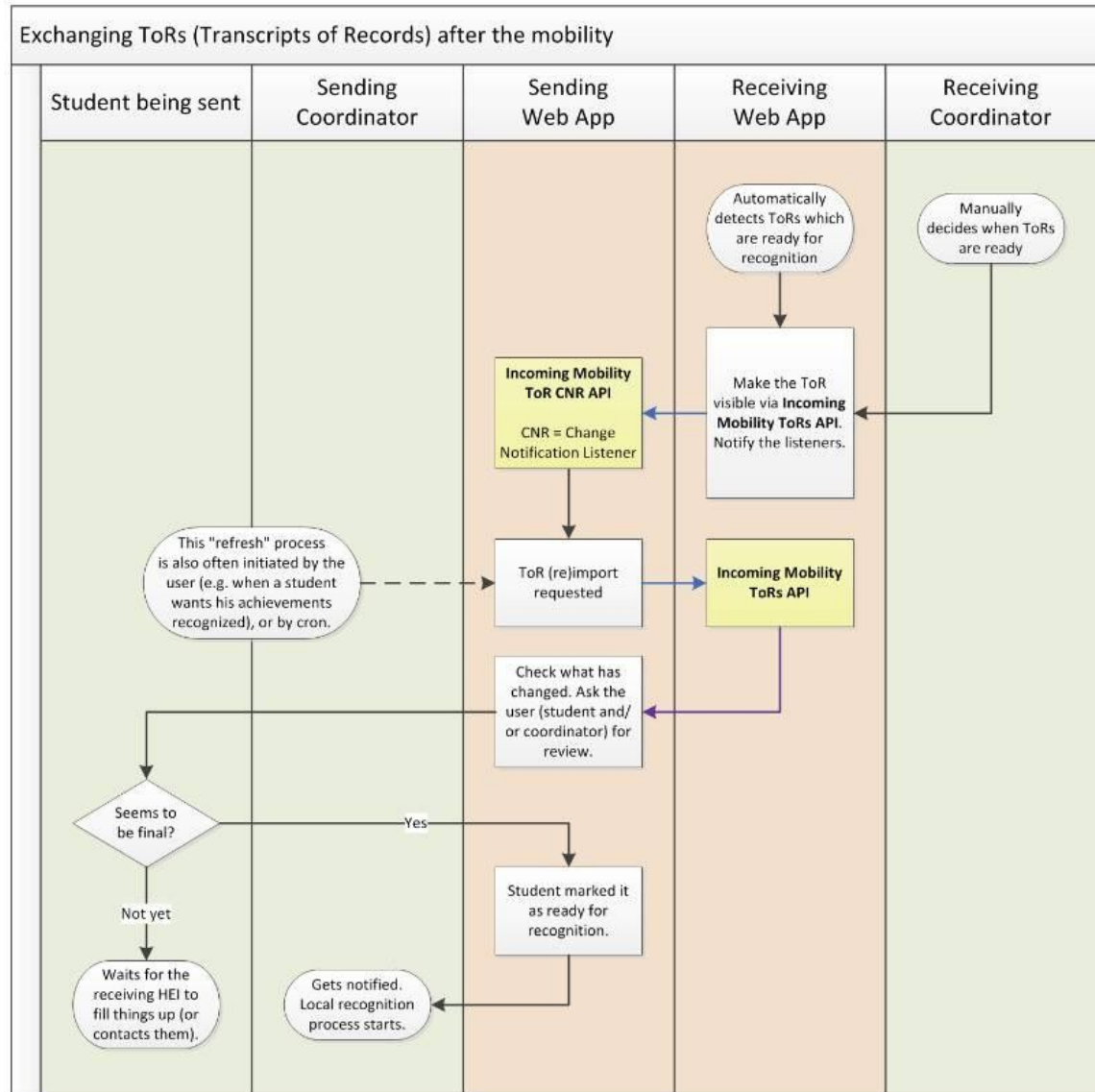
- <https://github.com/erasmus-without-paper>



The screenshot shows the GitHub profile page for 'Erasmus Without Paper'. The profile name is 'Erasmus Without Paper' with a red paper airplane icon. The bio states 'A common space for all EWP-related Git projects.' and provides a website URL 'http://developers.erasmuswithoutpaper.eu/' and an email 'usos@usos.edu.pl'. Below the bio, there are statistics: 58 Repositories, 29 People, 5 Teams, and 0 Projects. The 'Pinned repositories' section shows two repositories: 'ewp-specs-management' with 1 star and 3 forks, and 'general-issues' with 1 fork. At the bottom, there is a search bar for repositories and a dropdown menu for 'Type: All'.

- Specifications
- Common data types
- Communication protocols
- XSD schemas
- Examples of requests and responses in XML
- Libraries of code

Mobility process explained with flowcharts



Security

- ECHO API (performs lots of tests)

Validation result: **NOTICE**

Basic information

- URL of the Echo API being tested: `https://ewp.demo.usos.edu.pl/ewp/echo`
- Datetime validation started: `2018-06-03T11:56:57.751Z`
- Datetime client keys regenerated: `2018-05-09T06:30:52.232Z` (2179565 seconds before validation)

Tests performed

1. Check if our client credentials have been served long enough. **SUCCESS**
 2. Verifying the format of the URL. Expecting a valid HTTPS-scheme URL. **SUCCESS**
 3. Verifying if the URL is properly registered. **SUCCESS**
- for supported security methods. Validating http-security integrity. **SUCCESS**

111. Trying Combination[PHHTT] POST request with a list of echo values [a, b, a], plus an additional GET echo=c&echo=c parameters. Expecting the GET parameters to be ignored. (It's a POST request, so all parameters are passed via POST body.)

SUCCESS

Details (click me)

112. Trying Combination[PHHTT] with additional "gzip" added in Accept-Encoding. Expecting the same response, but preferably gzipped.

NOTICE

The client explicitly accepted gzip, but the server didn't compress its response. That's not an error, but it might be useful to support gzip encoding to save bandwidth.

Details (click me)

Try again

</> XML Schema Validator

This tool will help you with writing EWP XML documents. For example, you can paste the contents of your [Manifest file](#) here before you upload it onto your production site. You should be able to validate any XML document described in all **RELEASED**, **DEPRECATED** and **OBSOLETE** specifications above (plus, perhaps, some of the **DRAFT** ones).

Note, that this tool will validate **against the schema only!** Even if such validation succeeds, your file **may still be invalid** (if, for example, you didn't adhere to the guidelines described in

`<xs:documentation>` elements included in the XSD files).

Paste your XML document below and press

```
<courses-response
  xmlns="https://github.com/erasmus-without-paper/ewp-specs-api-courses/tree/stable-v1"
  xmlns:trm="https://github.com/erasmus-without-paper/ewp-specs-types-academic-term/tree/stable-v1"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="
    https://github.com/erasmus-without-paper/ewp-specs-api-courses/tree/stable-v1
    https://raw.githubusercontent.com/erasmus-
"
>
<!--
IMPORTANT: Please see the response.xsd file for
descriptions of all the elements. You MUST NOT
solely on the example file.
```

Validation result: **PASSED**

Recognized element

This seems to be a valid `courses-response` element (from `https://github.com/erasmus-without-paper/ewp-specs-api-courses/tree/stable-v1` namespace).

[Try again](#)



DEV Registry Service

*An alternative instance of the EWP Registry Service intended to be used for development
See „Development environment“ chapter in the [Architecture](#) document*

At the following URL you will find the XML catalogue which describes all the institutions and APIs exposed by them:

<https://dev-registry.erasmuswithoutpaper.eu/catalogue-v1.xml>

This catalogue is continuously refreshed. Read the [Architecture document](#) for more information. Also check out the [Developers Hub](#) for useful tools and documents.

[Manifest Importer Status](#) | [HEI/API Coverage Matrix](#) | [EWP Developers Hub](#)

Uptime ratios

100.00% - 24 hours

100.00% - 7 days

100.00% - 30 days


99.99% - 365 days

v1.6.0-RELEASE

Manifest files

```

- <ns9:imobility-tor-cnr version="0.1.0">
  - <ns9:http-security>
    - <ns2:client-auth-methods>
      <ns17:tlscert allows-self-signed="true"/>
      <ns18:httpsig/>
    </ns2:client-auth-methods>
    - <ns2:server-auth-methods>
      <ns36:tlscert/>
      <ns37:httpsig/>
    </ns2:server-auth-methods>
  </ns9:http-security>
  <ns9:url>https://ewp.demo.usos.edu.pl/ewp/tors/cnr</ns9:url>
  <ns9:max-omobility-ids>10</ns9:max-omobility-ids>
</ns9:imobility-tor-cnr>
</ns39:apis-implemented>
- <ns38:institutions-covered>
  - <ns39:hei id="demo.usos.edu.pl">
    <ns39:other-id type="erasmus">PL WARSZAW01</ns39:other-id>
    <ns39:other-id type="pic">999572294</ns39:other-id>
    <ns39:name xml:lang="pl">Uniwersytet Warszawski</ns39:name>
    <ns39:name xml:lang="en">University of Warsaw</ns39:name>
  </ns39:hei>
</ns38:institutions-covered>
- <ns38:client-credentials-in-use>
  - <ns38:certificate>
    MIIDcTCCAImgAwIBAgIEKYg+WjANBgkqhkiG9w0BAQsFADBP
    VQQKEwdVbmtub3duMRAwDgYDVQQLLEwdVbmtub3duMQ0wCw
    DTE3MDMzMDA5MTI1OVVoXDTE5MTIyNTA5MTI1OVVowaTEQM
  
```


DEV Registry Service

Manifest Importer Status

Currently defined manifest sources and their statuses:

https://dev-registry.erasmuswithoutpaper.eu/manifest.xml	OK	details	reload now
https://ewp.demo.usos.edu.pl/ewp/manifest	OK	details	reload now
https://ewp-hei.demo.usos.edu.pl/ewp/manifest	OK	details	reload now
https://erasmuswithoutpaper.sigmaaie.org:1453/UPF_HOST.xml	OK	details	reload now
https://www.service4mobility.com/europe_test/ewp/manifest?api=all	Error	details	reload now
https://www.service4mobility.com/mobility_test/ewp/manifest?api=all	OK	details	reload now
https://ewp.its.umu.se/ewp-reference-connector/rest/manifest	OK	details	reload now
https://ewp-test.its.umu.se/ewp-reference-connector/rest/manifest	OK	details	reload now
https://qas.ewp.ugent.be/public-api/discovery/manifest.xml	OK	details	reload now
https://ewp.up.pt/rest/manifest	OK	details	reload now
https://fsweb-demo.uio.no/ewp/manifest	OK	details	reload now
https://unisa.esse3.qa.cineca.it/ewp/Manifest.do	OK	details	reload now
https://authewp.it.auth.gr/public-api/discovery/manifest.xml	OK	details	reload now
https://unizone-evaserver.herokuapp.com/ewp/manifest.xml	OK	details	reload now

(write us to add yours)

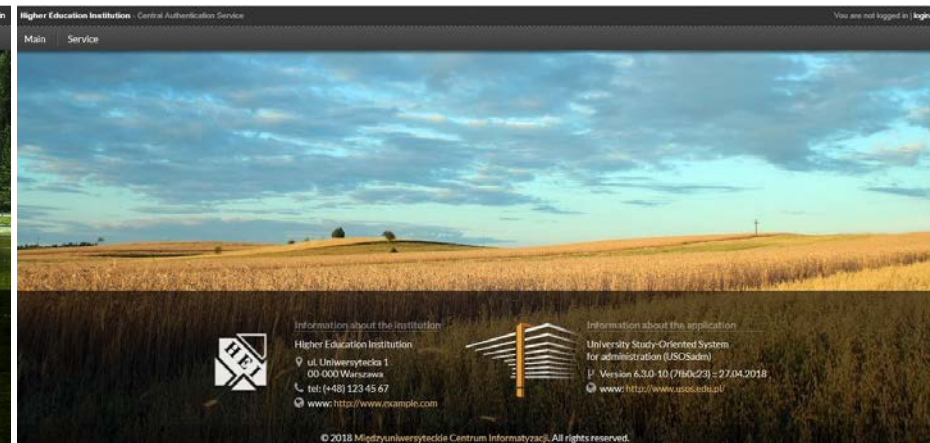
HEI/API Coverage Matrix

HEI/API Coverage Matrix																	
Institution	General Purpose APIs				IIAs			OMobilities				IMobilities			IMobility ToRs		
	inst.	ounits	courses	course replic.	ver.	CNR		ver.	update types	CNR		ver.	CNR		ver.	CNR	
						sends	recv.			sends	recv.		sends	recv.		sends	recv.
sop-at.at	2.0.0	2.0.0															
vorlage.sop-at.at	2.0.0	2.0.0															
ugent.be	2.0.0	2.0.0						0.12.1	NNN	yes	0.4.0						
upf.edu	2.0.0	2.0.0	0.7.0		2.0.0	no		0.12.1	NNN	no					0.7.0	no	
uni.gl																	
auth.gr																	
unisa.it	2.0.0	2.0.0	0.7.0														
pomodoro.university.it	2.0.0	2.0.0	0.7.0	1.0.0	2.0.1	yes	2.0.1	0.12.1	YYN	yes	0.4.0	0.1.0	yes	0.1.0	0.7.0	yes	0.1.0
ntnu.no	2.0.0	2.0.0	0.7.0	1.0.0	2.0.0	no											
uio.no	2.0.0	2.0.0	0.7.0	1.0.0	2.0.0	no											
demo.usos.edu.pl	2.0.0	2.0.0	0.7.0		2.0.0	yes	2.0.1	0.13.0	NNY	yes	0.4.0	0.1.1	yes	0.1.0	0.7.0	yes	0.1.0
hei.demo.usos.edu.pl	2.0.0	2.0.0	0.7.0		2.0.0	yes	2.0.1	0.13.0	NNY	yes	0.4.0	0.1.1	yes	0.1.0	0.7.0	yes	0.1.0
up.pt	2.1.0	2.1.0			2.1.0	no		0.14.0	NNN	no		0.1.1	no		0.7.0	no	
ikea.university.se	2.0.0	2.0.0	0.7.0	1.0.0	2.0.1	yes	2.0.1	0.12.1	YYN	yes	0.4.0	0.1.0	yes	0.1.0	0.7.0	yes	0.1.0

DEMO environments for independent testing

Two stable installations:

- University of Warsaw:
<https://usosadm.demo.usos.edu.pl/usosadm/>
- HEI - new mobility partner:
<https://usosadm-hei.demo.usos.edu.pl/usosadm/>





Practical tips



Start testing now.



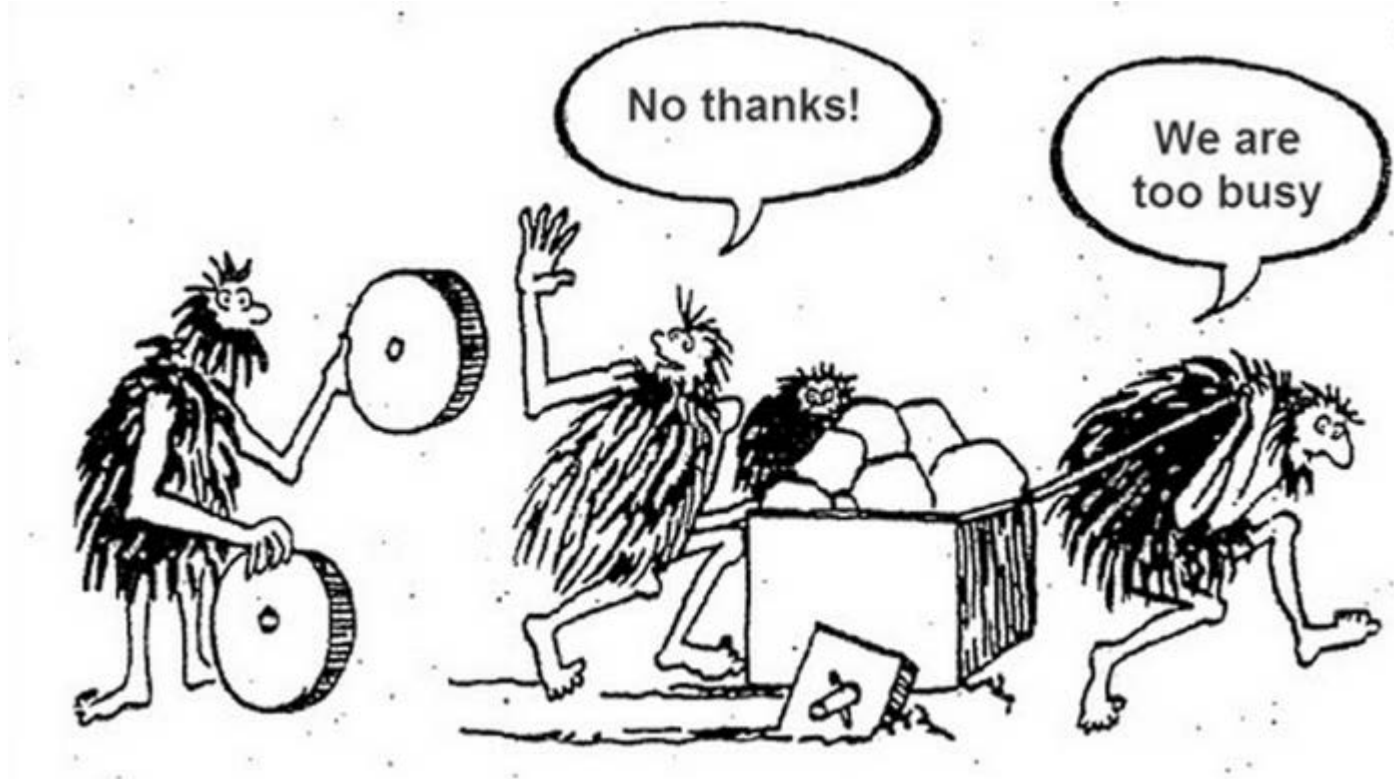
Involve partners and students.



Ensure leadership, IRO and IT work in concert.



	Own SIS	Third party SIS	Dashboard
Fees or licenses costs?	No	Yes	No
Setup cost/effort?	Yes	Depends on provider	No
Power users?	Yes	Yes	No
Full EWP functionality?	Depends on implementation	Depends on provider	2020



- EWP Network

<https://developers.erasmuswithoutpaper.eu/>

<https://github.com/erasmus-without-paper/>

- EWP Competence Center

<https://www.erasmuswithoutpaper.eu/cc/>

- Open Source University Alliance

<https://open-source-alliance.erasmuswithoutpaper.eu/>

- Launch video (live demo starts 2h15m)

<https://www.erasmuswithoutpaper.eu/launch-conference>

João Bacelar
joao.bacelar@uni-foundation.eu

**THANK YOU
FOR YOUR ATTENTION**



Co-funded by the
Erasmus+ Programme
of the European Union



Mobility Scenarios

New mobility partner: enter the name and SCHAC code

[+ Add](#) [Set the filter](#) [? Help](#)

Institutions -- External units -- -- Factsheets --

No	Name in national language	Name in English	PIC	ERASM	POL-on	hei	Instituti	
1	Higher Education Institution					hei.demo.usos.edu.pl	UZ	

First Last 1

[Details](#) [Address](#) [Telephones](#) [External units](#) [External persons](#) [Logo](#) [Factsheet](#) [Mobility Tool](#)

Name in national language: Higher Education Institution
Name in English:
Type of Institution: Foreign university
Parent unit:
Participant Identity Code:
ERASMUS code:
POL-on code:
SCHAC code: hei.demo.usos.edu.pl
Institution code:
Institution code in HR system:
NUTS region:
WWW:
E-mail:
E-mail addresses for nominations:

Display: Yes
Is public entity:
Is non-profit:

Legal status:

Legal status in English:

Grading scale:

Grading scale in English:

[Edit](#) [Get data from EWP](#)

Call EWP Institutions API

→ gets the rest of the institution data from the partner

→ copy data to the appropriate fields

Edit institution

[? Help](#)

<u>Data from EWP</u>		<u>Data in USOS</u>
SCHAC code: heI.demo.usos.edu.pl		heI.demo.usos.edu.pl
Name in national language:* Higher Education Institution (pl)	↔	<input type="text" value="Higher Education Institution"/>
Name in English: Higher Education Institution	↔	<input type="text"/>
Participant Identity Code: 999642716	↔	<input type="text"/>
ERASMUS code: PL WARSAW50	↔	<input type="text"/>
Factsheet: https://usosapps-heI.demo.usos.edu.pl/services/fac/factsheet_get?fac_id=00000000 (en)	↔	<input type="text"/>
		Bytes remaining:2000
WWW: http://usos.edu.pl	↔	<input type="text"/>
		Characters remaining:100
Logo: https://usosapps-heI.demo.usos.edu.pl/res/11/200x200/d44b21e9ef71e1291183a46b913ae6f2-2840ce3d9caf44eb6db74e91499fdbc234b29fb9.jpg		

Correspondence address

Country:		Click to choose Choose
Foreign code:	↔	<input type="text"/>
City/village:	↔	<input type="text"/>
Street:	↔	<input type="text"/>
House number:	↔	<input type="text"/>
Address type:*		Adres staly <input type="text"/>

Building address

Country: PL
Foreign code: 02097
City/village: Warszawa (Ochota)
Street: Banacha
House number: 2

Not stored in USOS

* - required fields

Mobility Scenarios

Show in the website, for students and staff, all obtained factsheets

NEWS
DIRECTORY
MY USOSWEB
STUDENT'S SECTION
STAFF SECTION
COMMON SECTION
ADMINISTRATION

INTRODUCTION

MY PROFILE

TESTS

EXAM REPORTS

EDITING COURSES

EXAMS

POSTULATES

OPINIONS ON APPLICATIONS

STUDENT MOBILITY

- ▶ coordinated faculties
- ▶ **partner institutions**
- ▶ university's agreements
- ▶ my commissions
- ▶ my opinions

APPLICATIONS COORDINATING

SURVEYS RESULTS

Partner institutions

i This page displays foreign higher education institutions with which DEMO University has signed at least one agreement for international exchange that fulfills the following criteria:

- agreement comes into effect within a year from now,
- end date is later than today or is not determined.

FILTER OPTIONS

Country:

City:

Institution name (in native language):

Institution name (in English):

Erasmus code:

Factsheet (for institutions and/or units):

CLEAR FILTERS APPLY

Showing elements 1..7 (out of 7)

No.	Country and city	Erasmus code	Institution name	Institution name (Eng.)	Web page	Factsheet
1	Belgium (Antwerp)	B ANTWERP01	Universiteit Antwerpen <small>(show units)</small>	University of Antwerp	http://www.ua.ac.be	show from partner show from USOS
2	Belgium (Gent)		Universiteit Gent <small>(show units)</small>	Ghent University		show from USOS
3	Portugal (Porto)	P PORTO02	Universidade do Porto <small>(show units)</small>	University of Porto	http://www.up.pt	show from partner
4	Russia (Ulan-Ude)		Бурятский государственный университет	Buryat State University	http://www.bsu.ru/	show from USOS
5	Sweden (Lund)	S LUND01	Lunds Universitet <small>(show units)</small>	Lund University	http://www.lu.se	show from partner show from USOS
6	Sweden (Umea)	S UMEA01	Umea Universitet <small>(show units)</small>	Umea University	http://www.umu.se	show from partner
7	Switzerland (Geneva)	CH GENEVE01	Université de Geneve <small>(show units)</small>	University of Geneva	http://www.unige.ch	show from USOS

Mobility Scenarios

Call EWP Organizational Units API

→ gets the faculties /
divisions

→ only the ones which
participate in the
mobility are copied

The screenshot shows a web application window titled "External units". It contains two main panels: "Data from EWP" on the left and "Data in USOS" on the right. Each panel lists organizational units with their English (en) and Polish (pl) names and codes. The "Data from EWP" panel has "Add" buttons for each unit, while the "Data in USOS" panel has "Update" buttons. A "? Help" button is in the top right, and a "Close" button is in the bottom left. A legend at the bottom right indicates that a red asterisk (*) denotes required fields.

Language	Unit Name	Code	Action
en	College of Inter-faculty Studies in the Humanities	70401200	Add
pl	Kolegium Międzywydziałowych Indywidualnych Studiów Humanistycznych		
en	College of Inter-Faculty Individual Studies in Mathematics and Natural Sciences (MISMaP)	40130000	Add
pl	Kolegium Międzywydziałowych Indywidualnych Studiów Matematyczno-Przyrodniczych		
en	University of Warsaw	00000000	Add
pl	Higher Education Institution		
en	Institute of Philosophy	35010000	Add
pl	Instytut Filozofii		
en	Institute of Archaeology	31010000	Add
pl	Instytut Archeologii		
en	Institute of Experimental Physics	11010000	Add
pl	Instytut Fizyki Doświadczalnej		
en	Institute of Journalism	21010000	Add
pl	Instytut Dziennikarstwa		
en	Centre for Local Government and Development Studies	40070000	Add
pl	Centrum Studiów Samorządu Terytorialnego i Rozwoju Lokalnego		
en	Centre for Europe	40030000	Add
pl	Centrum Europejskie		
en	Institute of Polish Culture	30020000	Add
pl	Instytut Kultury Polskiej		

Mobility Scenarios

Enter details of bilateral agreement

Add agreement

? Help

Type of agreement: *

Date of signing: *

Number: *

Start date: *

Expiration date:

Status: *

Migrate: *

Foreign higher education institution or external institution: Higher Education Institution

ERASMUS code:

City/village: Warszawa (Ochota)

Country: Polska

Continent: Europa

External institutional coordinator: *Click to choose*

Institutional coordinator of the home institution: Marek Góralowski

Person: *Click to choose*

Notes:

Bytes remaining:4000

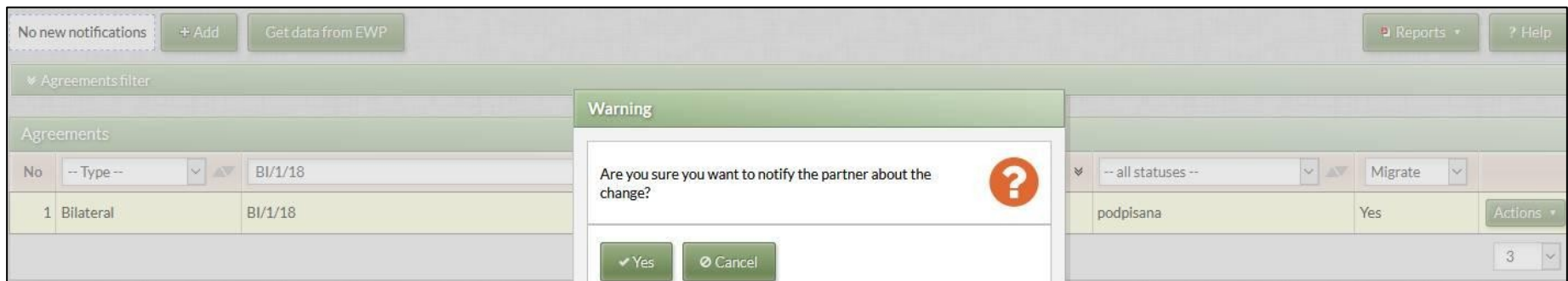
* - required fields

Call EWP

IIA CNR API

(Interinstitutional Agreement Change Notification Request)

→ Notify the partner that the draft agreement is ready



The screenshot displays a web application interface for managing agreements. At the top, there are buttons for "No new notifications", "+ Add", and "Get data from EWP". On the right, there are "Reports" and "Help" buttons. Below these is an "Agreements filter" section. The main area contains a table of agreements with columns for "No", "Type", and "Date". A dialog box titled "Warning" is overlaid on the table, asking "Are you sure you want to notify the partner about the change?" with "Yes" and "Cancel" buttons. The table shows one agreement with ID "1", type "Bilateral", and date "BI/1/18".

No	-- Type --	BI/1/18
1	Bilateral	BI/1/18

Mobility Scenarios

HEI receives notification and calls EWP

IIA API

→ get agreement data

There are new EWP notifications from demo.usos.edu.pl.

New EWP notifications Download + Add Get data from EWP Reports ? Help

Agreements filter

Agreements

No	-- Type --	Number	Date of signing	Start date	Expiration date	-- all statuses --	Migrate	Actions
1	Bilateral	1/2/3/4/5	23.09.2014	01.10.2014	30.09.2020	podpisana	Yes	Actions
2	Bilateral	1/E+/X13	21.10.2013	01.07.2014	30.09.2021	podpisana	Yes	Actions
3	Bilateral	1/E+107/116	28.01.2016	28.01.2016	30.09.2021	podpisana	No	Actions

First << < 1 2 3 4 5 > >> Last 3

Details Projects Units Cooperation conditions

Foreign higher education institution or external institution: Universidade do Porto
ERASMUS code: P PORTO02
City/village: Porto
Country: Portugalia
Continent: Europa

External Institutional coordinator: → Go to external persons
Institutional coordinator of the home institution:
Person:

Notes: [EWP 26.10.2017] KOD UMOWY PO STRONIE PARTNERA: 983/E+/III14-15[/EWP] g

Edit

Nominate a student for outgoing mobility under the newly signed agreement with the HEI

Notifications of dates [Download](#)
TOR notifications [Download](#)
Replies to nominations [Show](#)

[Set the filter](#)
[Reports](#)
[Help](#)

Departures filter

Choose a person by typing PESEL, student number or name [?](#) [Contact interface number](#) [Contactless interface number](#)

Choose program unit:
 Choose program:
 Choose stage:
 Choose didactic cycle:
 -- no filter --
 Choose a place where program is ta:
 [Specify filters](#)

No	Brzezińska	Danuta	PESEL	Main student nur	Main program	Person's unit
1	Brzezińska	Danuta	64022034.104	123451263	ZD-HUM (Humanistyczne Studia Doktoranckie w zakresie nauk o polityce)	21000000

[First](#)
[«](#)
[»](#)
[Last](#)
1

2017 [Add](#)

<p>Folder number: 100008554/1/2/3</p> <p>Organizational unit: 22000000 (Wydział Prawa i Administracji)</p> <p>Foreign Higher Education Institution: Higher Education Institution</p> <p>ERASMUS code:</p> <p>City/village: Warszawa (Ochota)</p> <p>Country: Polska</p> <p>Agreement: BI/1/18</p> <p>Type of agreement: Bilateral</p> <p>Type of cooperation: student-studia</p> <p>Cooperation level: drugi</p> <p>Domain: 10000 Prawo</p> <p>ISCED code: 0421 Prawo</p> <p>In second round: No</p> <p>Agreement with student: Yes</p> <p>Erasmus in the past: No</p> <p>Speaks Polish: Yes</p> <p>Classes in the official language: Yes</p> <p>Type of departure: Studies</p> <p>Status: Active</p> <p>Reasons for resignation:</p>	<p><u>Application information</u></p> <p>Program: DM-SM-ISM</p> <p>Type of study: Jednolite magisterskie</p> <p>Study mode: Stacjonarne</p> <p>Year of study: 4</p> <p><u>Departure information</u></p> <p>Program:</p> <p>Type of study:</p> <p>Study mode:</p> <p>Year of study:</p> <p>Academic year: 2017</p> <p>Academic year of funding: 2017</p> <p>Scholarships group: Trzecia stawka stypendialna (najniższa)</p> <p>Disability subsidy: No</p> <p>Co-financing from organizational unit: None</p> <p>Received scholarships: Other</p> <p>If other, then which: Opts otrzymanego stypendium</p>	<p>Date of granting: 07.03.2017</p> <p>Duration of the intended stay: Winter semester</p> <p>Duration of the intended stay - comment:</p> <p>Stay from: 30.08.2017</p> <p>Stay to: 02.02.2018</p> <p>Date of departure:</p> <p>Date of return:</p> <p>Actual date of departure:</p> <p>Actual date of return:</p> <p>Prolongation/Shortening:</p> <p>Number of months with scholarship: 5, days: 150</p> <p>Number of months of prolongation:</p> <p>Number of months without scholarship: 0.17, days: 5</p> <p>Notes (visible in USOSweb):</p> <p>Notes (not visible in USOSweb):</p>
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[Edit](#)
[Delete](#)
[EWP](#)
[Transcript of records](#)

[Learning Agreement](#)
[History of decisions \(EWP\)](#)

Call EWP

Outgoing Mobility CNR API

→ Notify the partner about new nominations or changes in nominations

2017 Add

Folder number: 1000008554/1/2/3	<u>Application information</u>	Date of granting: 07.03.2017
Organizational unit: 22000000 (Wydział Prawa i Administracji)	Program: DM-SM-ISM	Duration of the intended stay: Winter semester
Foreign Higher Education Institution: Higher Education Institution	Type of study: Jednolite magisterskie	Duration of the intended stay - comment:
ERASMUS code:	Study mode: Stacjonarne	Stay from: 30.08.2017
City/village: Warszawa (Ochota)	Year of study: 4	Stay to: 02.02.2018
Country: Polska		Date of departure:
Agreement: BI/1/18		Date of return:
Type of agreement: Bilateral		Actual date of departure:
Type of cooperation: studenci-studia		Actual date of return:
Cooperation level: drugi		Prolongation/Shortening:
Domain: 10000 Prawo		Number of months with scholarship: 5, days: 150
ISCED code: 0421 Prawo		Number of months of prolongation:
In second round: No		Number of months without scholarship: 0.17, days: 5
Agreement with student: Yes		Notes (visible in USOSweb):
Erasmus in the past: No		Notes (not visible in USOSweb):
Speaks Polish: Yes		
Classes in the official language: Yes	Received scholarships: Other	
Type of departure: Studies	If other, then which: Opis otrzymanego stypendium	
Status: Active		
Reasons for resignation:		

Warning

Are you sure you want to notify the partner about the change?

Yes Cancel

Edit Delete EWP Transcript of records

Mobility Scenarios

HEI receives notification and calls EWP
Outgoing Mobility API

→ get student data

New EWP notifications Download Pending nominations Show Get data from EWP ? Help

+ Add Enter nominating enti

No	Di	Family name
1	2016	Ancerowic
2	2016	Biedrzycki
3	2016	Bogdański

Number of checked: 0 Uncheck al

Sex: female
E-mail: kowalska130
Date of nomination: 02.05.2018 0
Date of response: 03.05.2018 1
ERASMUS code: PL WARSZAW
Contract number:
Type of cooperation:

Arrival nominations

? Help

Data from EWP

Family name **Biedrzycki** Add
Given names **Aleksander Piotr**
Academic year **2016/2017**
Mobility id **6ADC1F2112FDD550E05000C192418894**

Family name **Brzezińska** Add
Given names **Danuta**
Academic year **2017/2018**
Mobility id **6236B741AC3B5D02E05000C1924172FD**

Data in USOS

Family name **Biedrzycki** Update
Given names **Aleksander Piotr**
Academic year **2016**
Mobility id **6ADC1F2112FDD550E05000C19241...**

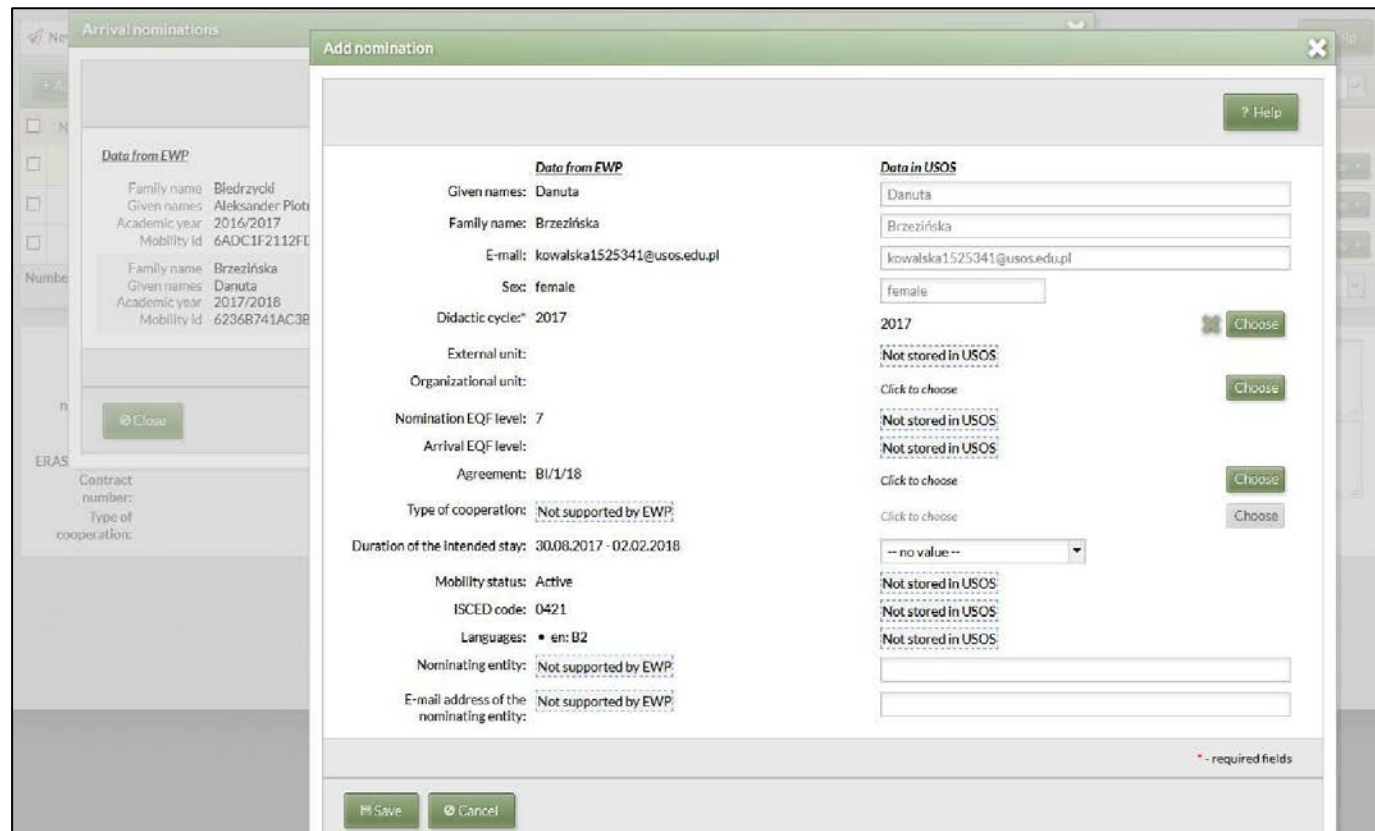
Close

* - required fields

Mobility Scenarios

HEI can copy the data from EWP

- should be stored in the local system
- no need to enter data by hand



The screenshot shows a web application interface for adding a nomination. It features a sidebar on the left with a list of nominations and a main form area. The form is divided into three sections: 'Data from EWP', 'Data from FWP', and 'Data in USOS'. The 'Data from EWP' section shows two entries with fields for Family name, Given names, Academic year, and Mobility id. The 'Data from FWP' section shows a single entry with fields for Given names, Family name, E-mail, Sex, Didactic cycle, External unit, Organizational unit, Nomination EQF level, Arrival EQF level, Agreement, Type of cooperation, Duration of the Intended stay, Mobility status, ISCED code, Languages, Nominating entity, and E-mail address of the nominating entity. The 'Data in USOS' section shows a single entry with fields for Given names, Family name, E-mail, Sex, Didactic cycle, External unit, Organizational unit, Nomination EQF level, Arrival EQF level, Agreement, Type of cooperation, Duration of the Intended stay, Mobility status, ISCED code, Languages, Nominating entity, and E-mail address of the nominating entity. The 'Data in USOS' section has several fields marked as 'Not stored in USOS' and 'Click to choose'. The form also includes a 'Close' button in the sidebar, a 'Help' button in the top right, and 'Save' and 'Cancel' buttons at the bottom.

Section	Field	Value
Data from EWP	Family name	Bledrzycki
	Given names	Aleksander Piotr
	Academic year	2016/2017
	Mobility id	6ADC1F2112FE
Data from EWP	Family name	Brzezińska
	Given names	Danuta
	Academic year	2017/2018
	Mobility id	6236B741AC3B
Data from FWP	Given names	Danuta
	Family name	Brzezińska
	E-mail	kowalska1525341@usos.edu.pl
	Sex	female
	Didactic cycle	2017
	External unit	
	Organizational unit	
	Nomination EQF level	7
	Arrival EQF level	
	Agreement	BI/1/18
	Type of cooperation	Not supported by EWP
	Duration of the Intended stay	30.08.2017 - 02.02.2018
	Mobility status	Active
	ISCED code	0421
	Languages	en: B2
	Nominating entity	Not supported by EWP
E-mail address of the nominating entity	Not supported by EWP	
Data in USOS	Given names	Danuta
	Family name	Brzezińska
	E-mail	kowalska1525341@usos.edu.pl
	Sex	female
	Didactic cycle	2017
	External unit	Not stored in USOS
	Organizational unit	Click to choose
	Nomination EQF level	Not stored in USOS
	Arrival EQF level	Not stored in USOS
	Agreement	Click to choose

Mobility Scenarios

At the end of the mobility,
HEI generates ToRs for incoming students
Then notifies the partner calling EWP
ToR CNR API

Choose a person by typing PESEL, student number or

<input checked="" type="checkbox"/>	No	Family name	Given name	PESEL	Main student	Main program	Person's unit
<input checked="" type="checkbox"/>	4	Brzezińska	Danuta	64022034104	123451263	ZD-HUM (Humanistyczne Studia Doktoranckie w zakresie nauk o polityce)	21000000
<input checked="" type="checkbox"/>	5	Szyjka	Maria	61031100901	123433308	DD-FL (Studia trzeciego stopnia, stacjonarne na Wydziale Neofilologii)	33000000

Number of checked: 2 Uncheck all

Mobility Scenarios

Receive notification and call EWP Incoming Mobility ToR API

→ download ToR to the local system

The screenshot shows the EWP system interface. At the top, there are navigation buttons: 'Notifications of dates' (Download), 'TOR notifications' (Download), and 'Replies to nominations' (Show). A 'Departures Filter' section is visible, with a search bar for 'Choose a person by typing PESEL, student number'. Below this is a table with columns 'No', 'Brzezińska', and 'Danuta'. The first row is highlighted. A 'Transcript of records' dialog box is open, displaying details for two records:

Family name	Given names	Academic year	Mobility id	Transcript of records
Brzezińska	Danuta	2017	6236B741AC3B5D02E05000C1924172FD	YES
Bagiński	Robert Zygmunt	2017	6A9FB1EEB544A452E05000C19241D900	YES

Each record has a 'Download TOR' button. The dialog also has a 'Close' button. In the background, a detailed record is visible with the following information:

Folder number: 1000008
Organizational unit: 2200000
Administrative unit: Administ
Foreign Higher Education Institution: Higher Ed
ERASMUS code:
City/village: Warszawa (Ochota)
Country: Polska
Agreement: BI/1/18
Type of agreement: Bilateral
Type of cooperation: studenci-studia
Cooperation level: drugi
Domain: 10000 Prawo
ISCED code: 0421 Prawo
In second round: No
Agreement with student: Yes
Erasmus in the past: No
Speaks Polish: Yes
Classes in the official language: Yes
Type of departure: Studies
Status: Active
Reasons for resignation:

Departure information
Program:
Type of study:
Study mode:
Year of study:
Academic year: 2017
Academic year of funding: 2017
Scholarships group: Trzecia stawka stypendialna (najniższa)
Disability subsidy: No
Co-financing from organizational unit: None
Received scholarships: Other
If other, then which: Opis otrzymanego stypendium

Date of departure: 07.03.2017
Date of return: Winter semester
Actual date of departure: 30.08.2017
Actual date of return: 02.02.2018
Prolongation/Shortening:
Number of months with scholarship: 5, days: 150
Number of months of prolongation:
Number of months without scholarship: 0,17, days: 5
Notes (visible in USOSweb):
Notes (not visible in USOSweb):

At the bottom right, there are buttons for 'Edit', 'Delete', 'EWP', and 'Transcript of records'.

- Sharing new versions of factsheets
- Approval/rejection of nominations
- Changes in nominations
- Learning agreements - future integration w/ OLA
- Confirmation of the arrival and departure dates → grants
- Digitally signed Transcript of Records
- Greater process automation
- Use GitHub to tell about your favorite scenarios
 - are any APIs or parameters missing?

- Get in touch with the EWP Competence Centre.
- Depending on the situation:
 - Develop your own connector
 - Use a connector developed by a national Consortium (if you are a member)
 - Use a connector developed by a commercial provider
 - Use the Erasmus Dashboard
- Contact EWP technical team to be entered to the DEV Registry.
- Test, test, test.
- Contact EWP technical team to be entered to the PROD Registry.
- Enjoy easy data exchange at you institution.
- Encourage your partners in mobility to join.

