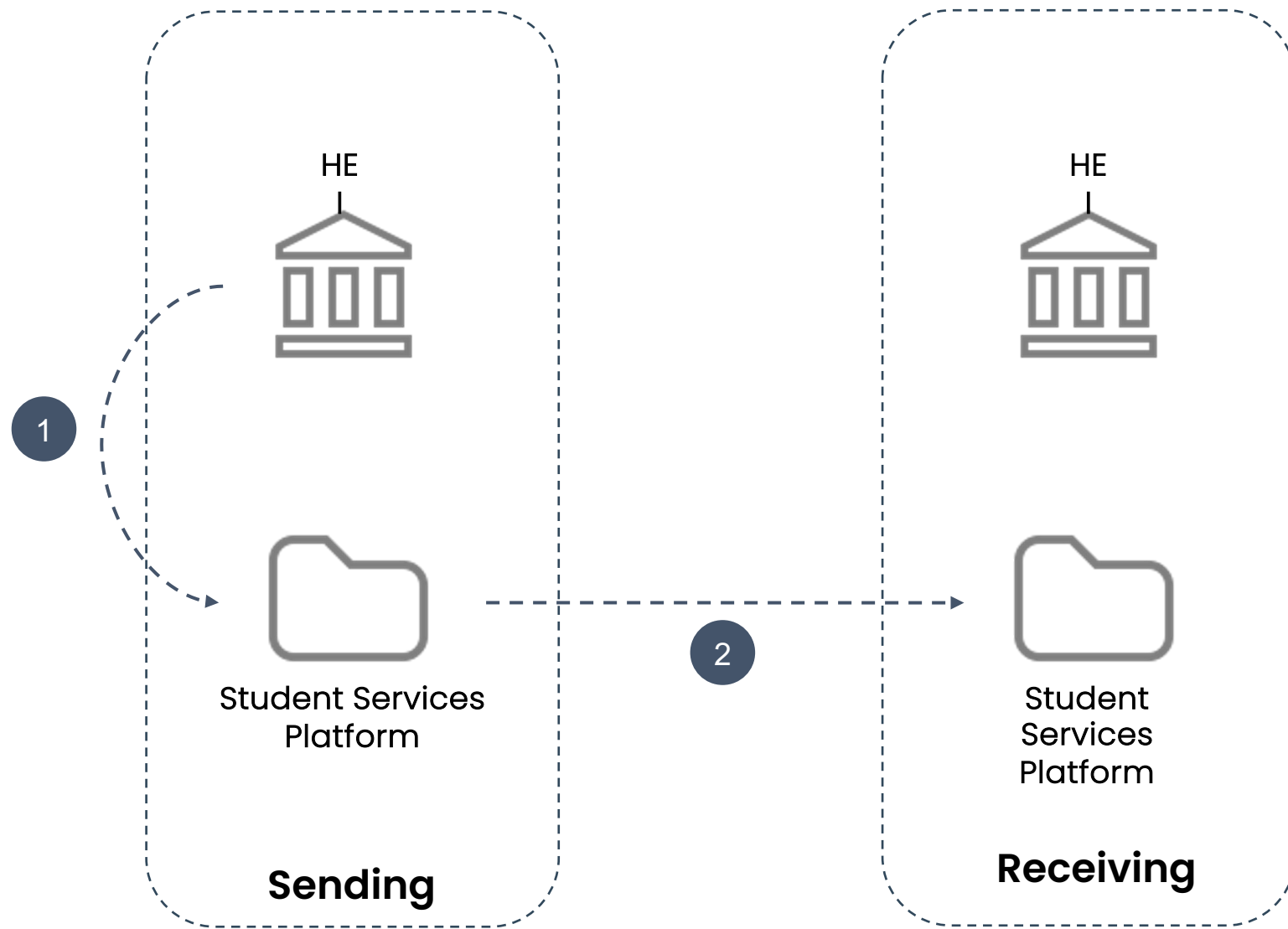




# ESI and MyAcademicID

Christos Kanellopoulos (GEANT)



The exchange of student records and the authentication of students are separate, thus the need for an identifier that will follow the student

The ESI is a protocol neutral identifier

ESI specifications developed with Erasmus+ and eduGAIN

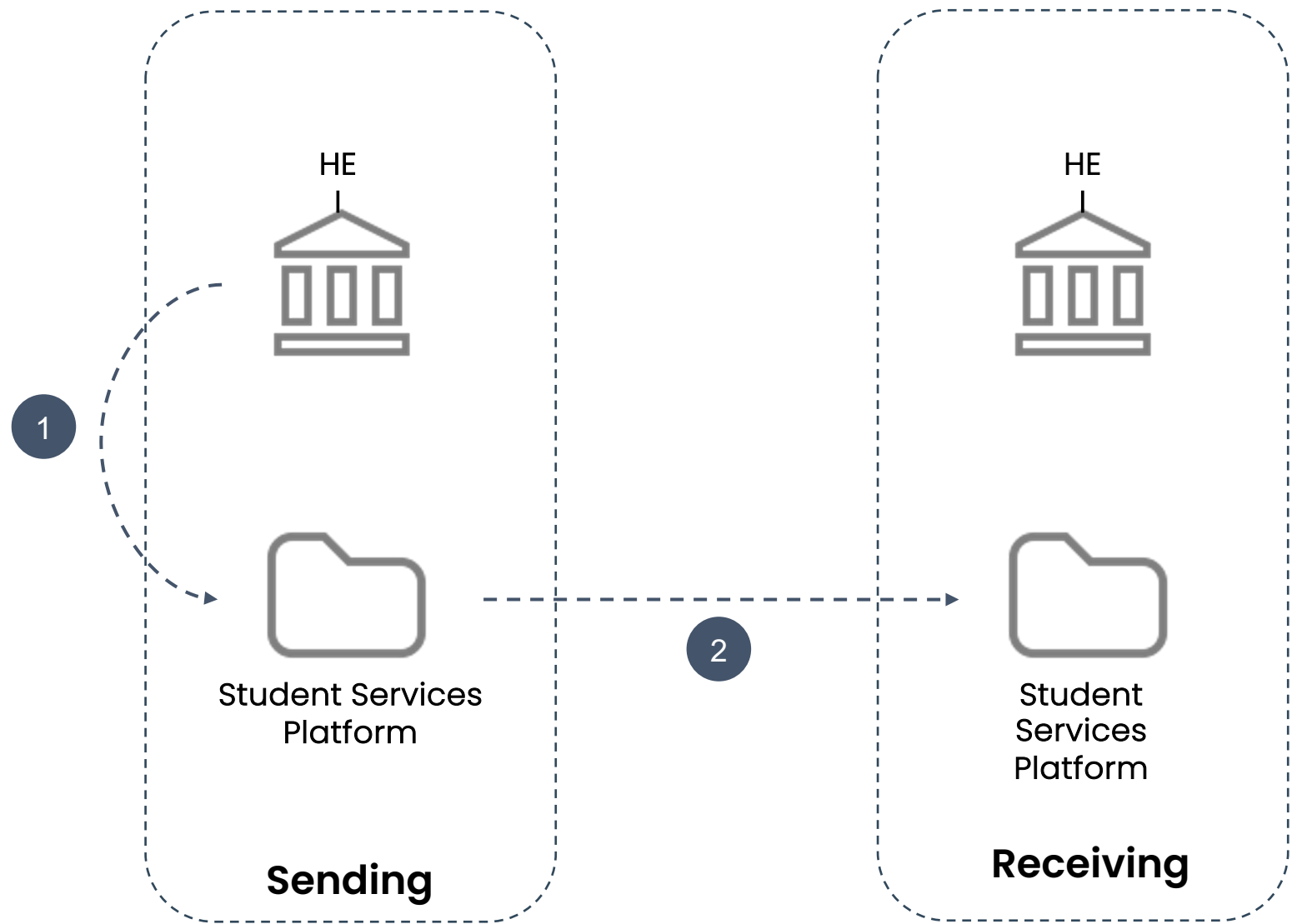
Process agreed to determine which services can use it

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

<https://wiki.geant.org/display/SM/European+Student+Identifier+Entity+Category>



Defined a governance for the ESI



The student does not need to know the ESI.

1

ESI via the student authentication mechanism - SSO \* (Front-channel).

2

ESI transported via the EWP APIs (Back-channel)

[\*] Requirements for service providers to get the ESI via the academic federations:  
<https://wiki.geant.org/x/QwKCFO>

A general purpose identifier to be used in any interactions of the student with electronic services. Only eligible services will be receiving the ESI

An identifier for a service to determine the HEI a student is studying at

A lifelong identifier that will follow the student across their studies in their lifetime



- Student Mobility Services directly enabling mobility, for example, the Erasmus+ programme.
- Services that transfer student records or transcripts of records between educational institutions and which need to identify the students to which the records belong to.
- University Alliances where students' records are shared across (some of) the universities of the Alliance.
- Formal learning and teaching activities and/or the administrative activities related to those within an institution, for example, Learning Management Systems and remote e-assessment tools.

The ESI is generated by the HEI. There are 2 main 'ingredients' needed

Something to identify the HEI.

For this we use:

`schacHomeOrganization value`  
(sHO)

Something to identify the student.

For this we use:

the student number (code)

`urn:schac:personalUniqueCode:int:esi: <sHO>:<code>`

This is the case in which the student number is managed by the HEI

Ex: `urn:schac:personalUniqueCode:int:esi:hei.edu:23490G`

The ESI is generated by the HEI. There are 2 main 'ingredients' needed

Something to identify the HEI.

For this we use:

The ISO country code

Something to identify the student.

For this we use:

the student number (code)

```
urn:schac:personalUniqueCode:int:esi: <country>:<code>
```

This is the case in which the student number is managed by the HEI

```
Ex: urn:schac:personalUniqueCode:int:esi:HR:23490G
```



## Student Basic Attributes

1. General purpose identifier
2. First Name
3. Last Name
4. Full Name
5. Email address
6. Affiliation
7. Organisation
8. European Student Identifier

Attribute	Explanation
<p><u>Any of:</u></p> <ul style="list-style-type: none"> <li>• Persistent NameID</li> <li>• eduPersonPrincipalName*</li> <li>• eduPersonTargetedID</li> <li>• eduPersonUniqueID</li> <li>• eduPersonOrcid</li> <li>• subject-id</li> <li>• pairwise-id</li> </ul>	<p>The services requires to uniquely identify users throughout the student mobility process. Without some kind of unique identifier, it is not possible to distinguish between two different users.</p> <p><i>*: The eduPersonPrincipalName can be used only if one of the following conditions are met: i) the IdP supports the R&amp;S Entity Category, ii) the eduPersonAssurance attribute is also released and it has a value of <a href="https://refeds.org/assurance/ID/eppn-unique-no-reassign">https://refeds.org/assurance/ID/eppn-unique-no-reassign</a>, iii) the federation in which the IdP has registered has a policy that prohibits the reassignment of the value of the eduPersonPrincipalName attribute</i></p>
eduPersonAssurance	The eduPersonAssurance attribute is required in the case an IdP releases only eduPersonPrincipalName as an identifier and the IdP does not support the Research and Scholarship entity category. In this case, if eduPersonAssurance has a value of value of <a href="https://refeds.org/assurance/ID/eppn-unique-no-reassign">https://refeds.org/assurance/ID/eppn-unique-no-reassign</a> , in order to be able to use eduPersonPrincipalName as an identifier.
<p><u>Any of:</u></p> <ul style="list-style-type: none"> <li>• cn</li> <li>• displayName</li> <li>• sn + givenName</li> </ul>	The Erasmus process needs to know the name of the person participating in the student mobility process.
mail	The service needs to be able to contact the user regarding the status of student mobility process.
schacPersonalUniqueCode	The student mobility processes require the use of a number of services, all of which are involved in different stages of the pipeline and which will need to be able to exchange data about the students who are in mobility. The <a href="#">European Student Identifier (ESI)</a> is globally unique, persistent, non-targeted, protocol neutral and data transport neutral. In SAML, the ESI is transported in the schacPersonalUniqueCode attribute (as defined in the SCHEMA for Academia). Currently support for the ESI is being rolled out in Higher Education Institutions around Europe. If your HEI, already supports the ESI, you can release it to the ERASMUS SP Proxy using this attribute. <b>Relevant only for students</b>
schacHomeOrganization	The student mobility processes need the to identify the Home Institution from which the user is coming from.
eduPersonScopedAffiliation	The student mobility processes rely on authorising access to users based on the affiliation of their members in their home organisation.
eduPersonEntitlement	<p>The service relies on this attribute to authorise users as EWP Administrators. The expected value for the EWP Admin role is:</p> <p><b>urn:geant:erasmuswithoutpaper.eu:ewp:admin</b></p> <p>For more information read <a href="#">EWP Admin Role</a></p>

<https://wiki.geant.org/x/DQDgCQ>

Pages / Student Mobility Home / European Student Identifier Analytics Edit Save for later Watching Share ...

## European Student Identifier Entity Category

Created by Christos Kanellopoulos, last modified by Peter Brand on Nov 10, 2021

### Overview

All Identity Providers are invited to use the European Student Identifier Entity Category to manage the release of the European Student Identifier [ESI] attribute value to Service Providers meeting the requirements described below.

This definition is written in compliance with the Entity Category SAML Entity Metadata Attribute Types specification [EntityCatTypes]; this specification may be extended to reference other protocol-specific formulations as circumstances warrant.

### 1. Definition

The purpose of the European Student Identifier entity category is to support Higher Education Institutions (HEI) in identifying students as part of formal learning and teaching activities and/or the administrative activities related to those. These activities require data exchanges to take place, primarily, within or between institutions. The ESI plays a significant role in reliably identifying the students throughout these data exchanges.

This entity category may be used together with other entity categories to transfer additional attributes.

### 2. Registration Criteria

This Entity Category is addressed to any Service Provider Organisation established in any of the Member States of the European Union and in any other countries belonging to the European Economic Area (Iceland, Liechtenstein and Norway).

Furthermore, Service Provider Organisations established in any third country or International organization offering an adequate level of data protection in the terms of Article 45 of the GDPR can also subscribe to this Entity Category.

The current list of Identity Federations that can issue this Entity Category to Service Providers is maintained by GEANT [ESI-EC-ID-Feds].

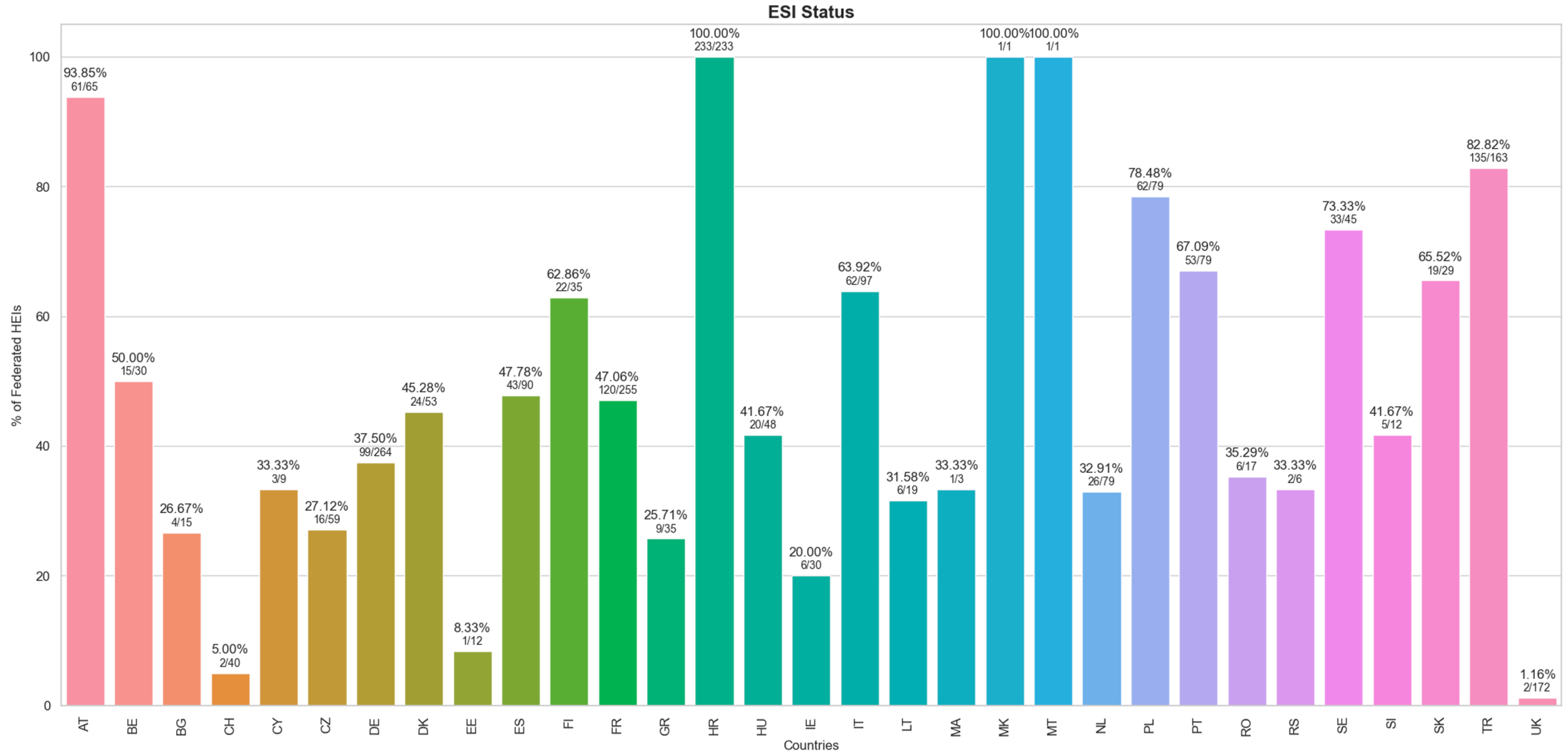
Services eligible for the ESI Entity Category:

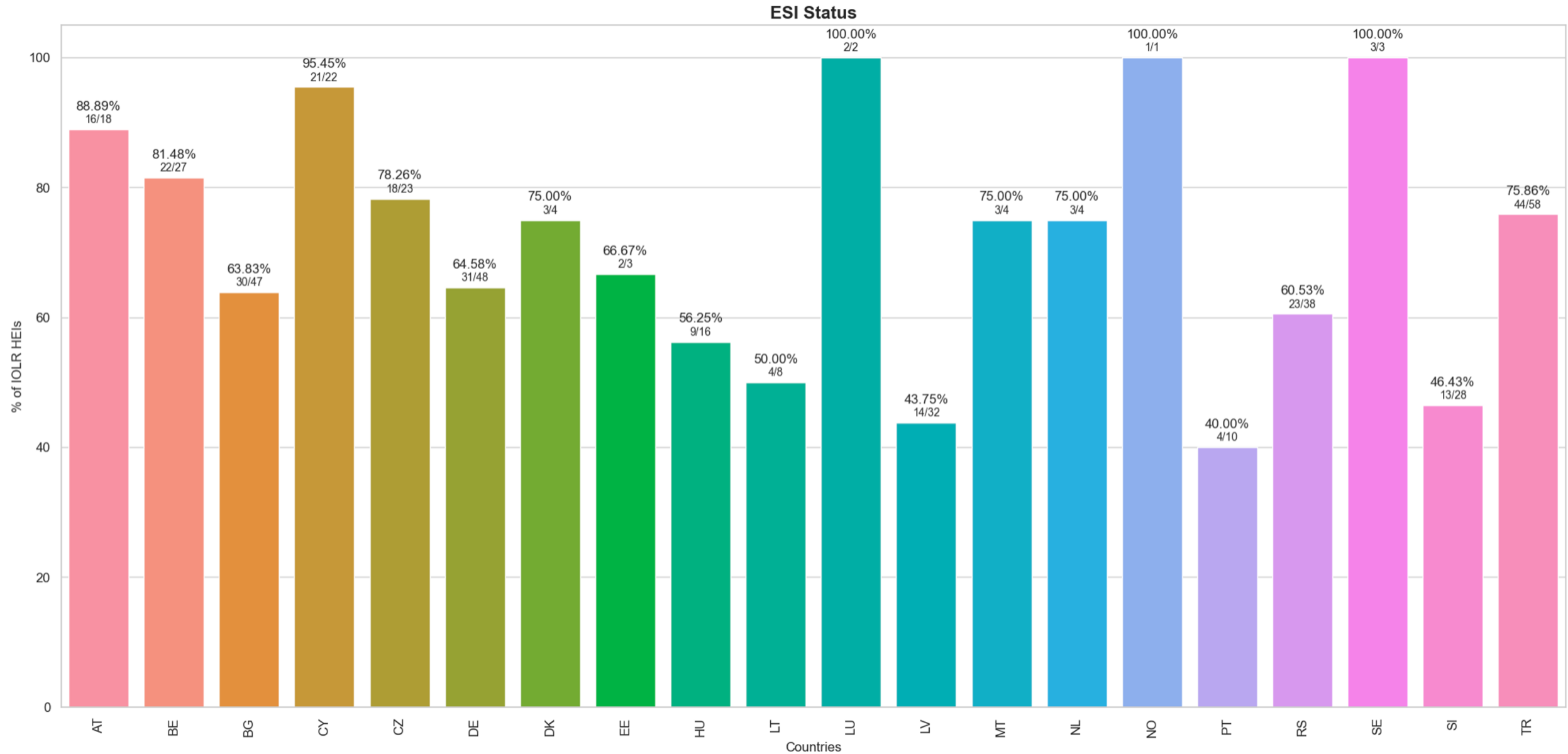
- Student Mobility Services directly enabling mobility, for example, the Erasmus+ programme.
- Services that transfer student records or transcripts of records between educational institutions and which need to identify the students to which the records belong to.
- University Alliances scenarios where students' records are shared across (some of) the universities of the Alliance.
- Formal learning and teaching activities and/or the administrative activities related to those within an institution, for example, Learning Management Systems and remote e-assessment tools.

Country	Federation	Support for Identity Providers	Support for Service Providers	Information URL
AT	ACOnet Identity Federation		YES	
CH	SWITCH edu-ID	YES	YES	<a href="https://help.switch.ch/eduid/docs/unis/idm/identifiers/esi/">https://help.switch.ch/eduid/docs/unis/idm/identifiers/esi/</a>
DE	DFN-AAI	YES	YES	<a href="https://doku.tid.dfn.de/de:shibidp:config-attributes-erasmus">https://doku.tid.dfn.de/de:shibidp:config-attributes-erasmus</a>
DK	WAYF		YES	
FR	RENATER	YES	YES	
HU	KIFŰ	YES	YES	<a href="https://wiki.niif.hu/index.php?title=Erasmusplus_ESI">https://wiki.niif.hu/index.php?title=Erasmusplus_ESI</a>
IT	IDEM	YES	YES	<a href="https://wiki.idem.garr.it/wiki/Erasmus_Plus_e_ESI">https://wiki.idem.garr.it/wiki/Erasmus_Plus_e_ESI</a>
PT	RCTSaai	YES		
SE	SWAMID	YES	YES	<a href="https://wiki.sunet.se/x/E4ArBg">https://wiki.sunet.se/x/E4ArBg</a>
SK	safeID	YES	YES	<a href="https://www.safeid.sk/doc/esiec">https://www.safeid.sk/doc/esiec</a>

<https://wiki.geant.org/x/RwKCFQ>

<https://wiki.geant.org/x/QwKCFQ>





# MyAID Key Facts



Enable NRENs to support a very important and large use-case



MyAID IAM launched in  
Nov 2020



MyAID IAM operated by  
GÉANT



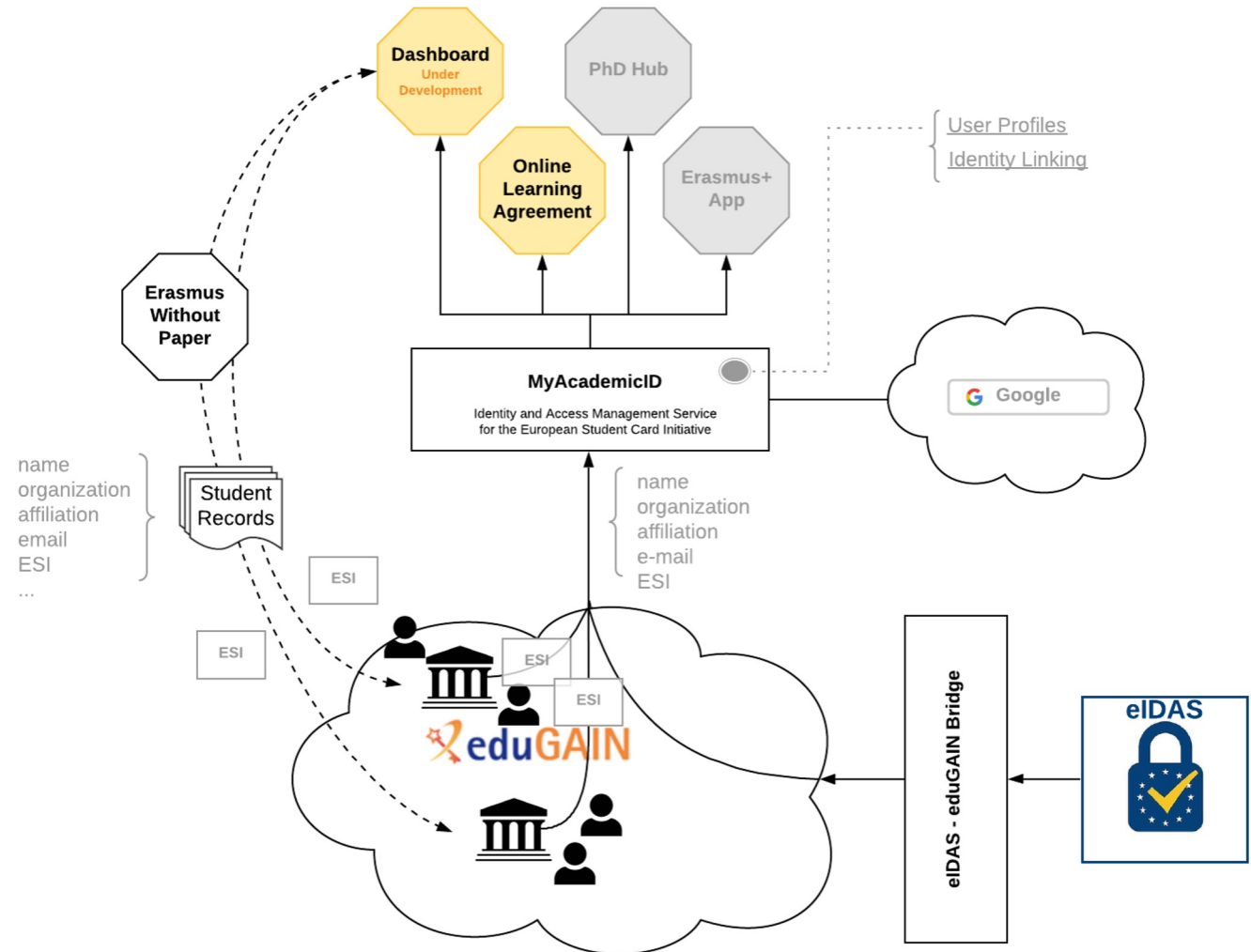
MyAID IAM based on  
the GEANT Core AAI  
Platform



Leverages eduGAIN and  
eIDAS

# The MyAcademicID Authentication Proxy:

- The MyAcademicID Service was launched in November 2020 MyAcademicID Project
- Provides an Authentication Proxy for the core Erasmus+ services (Online Learning Agreement, Dashboard, the Erasmus+ App).
- Supports authentication via eduGAIN, eIDAS and Google
- Provides a catch-all IdP of Last Resort

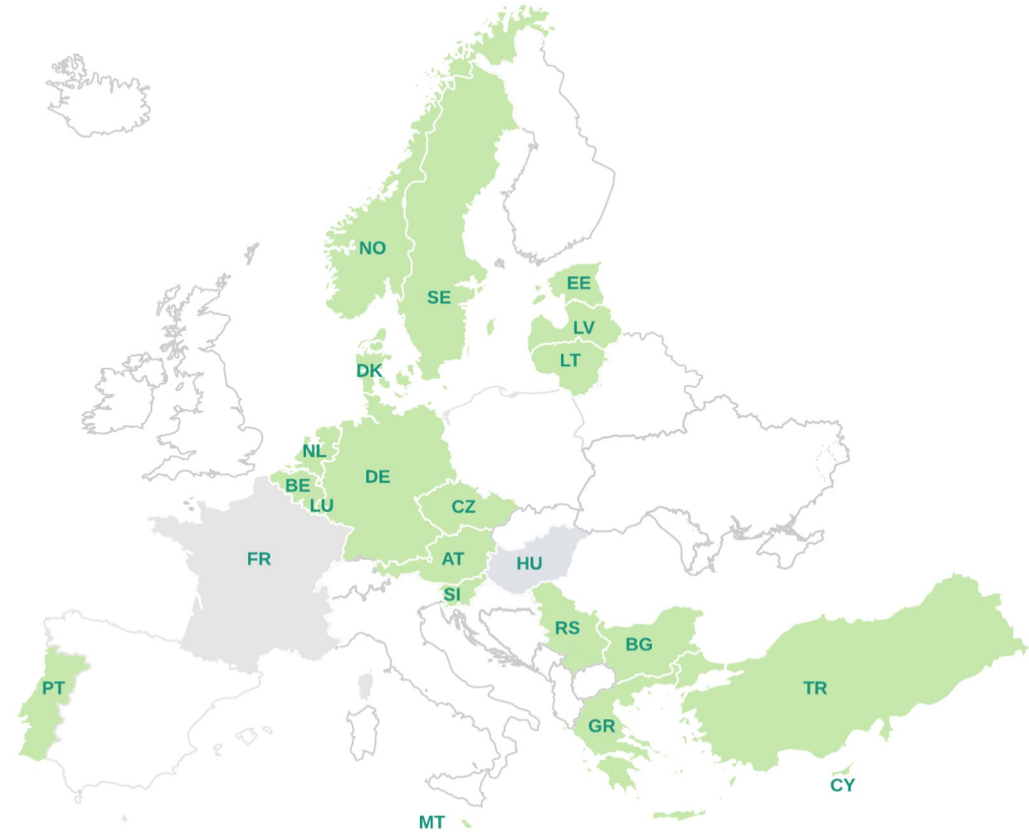


## National IdPs of Last Resort

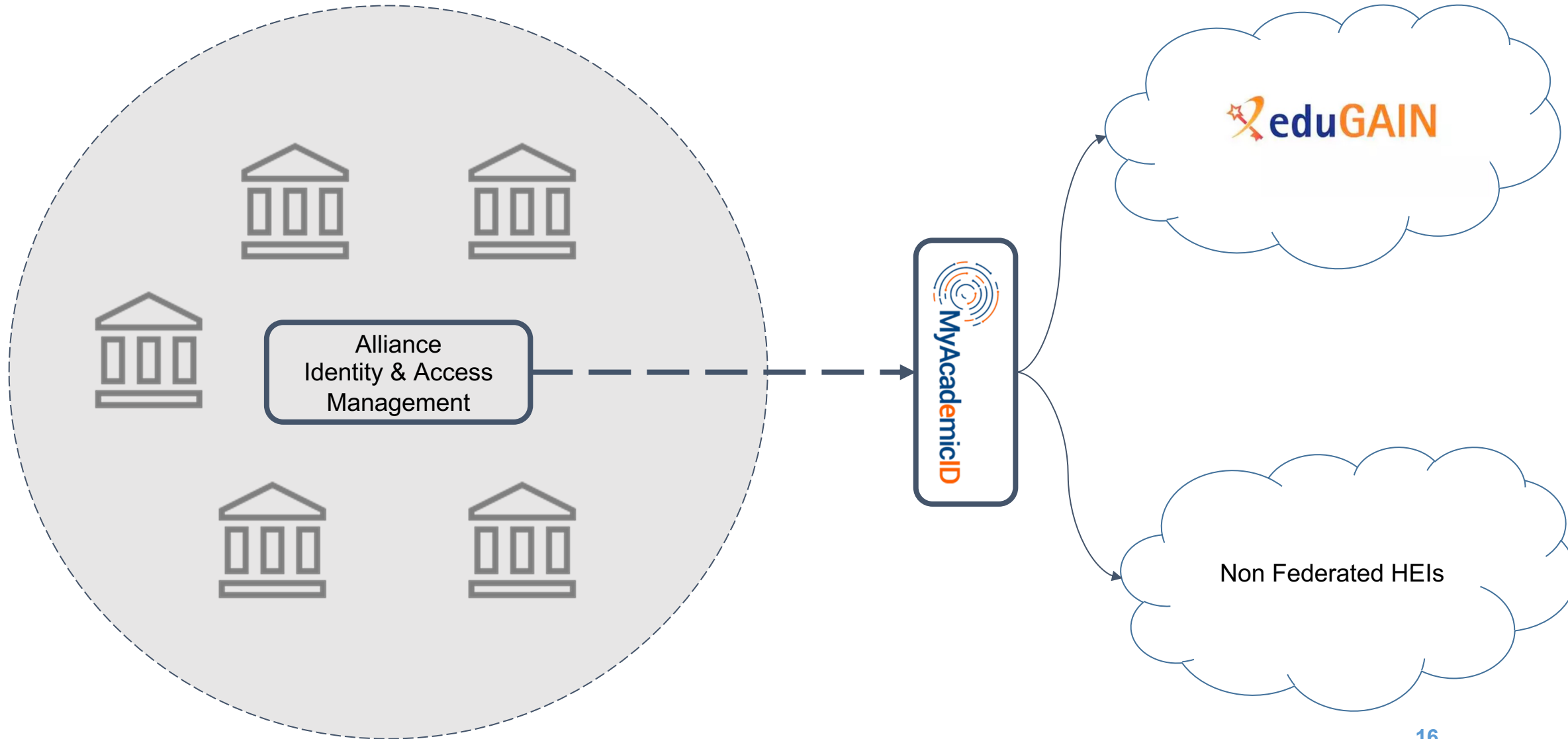


FR, HU, IT, PL, ES

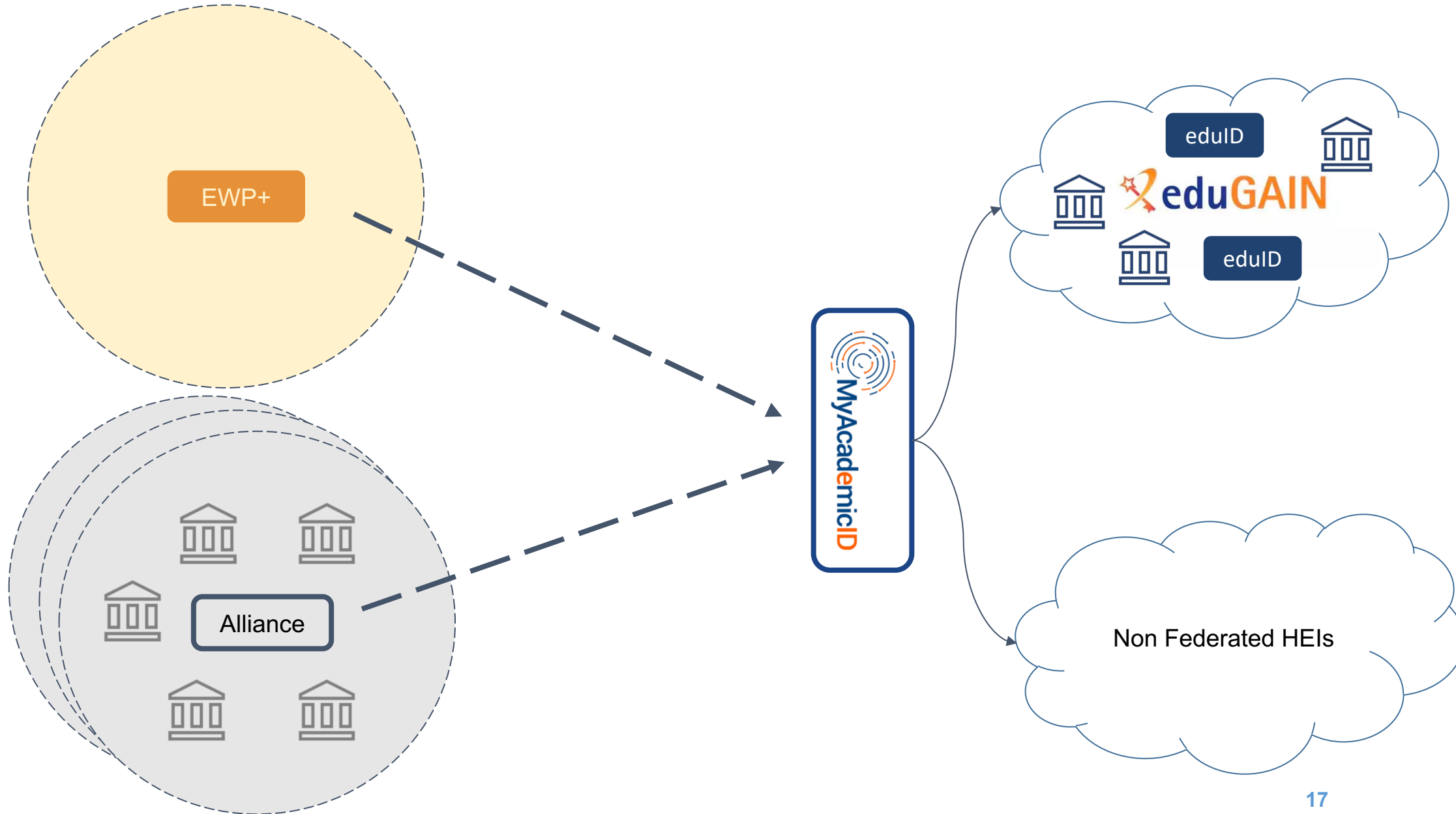
## MyAcademicID of Last Resort

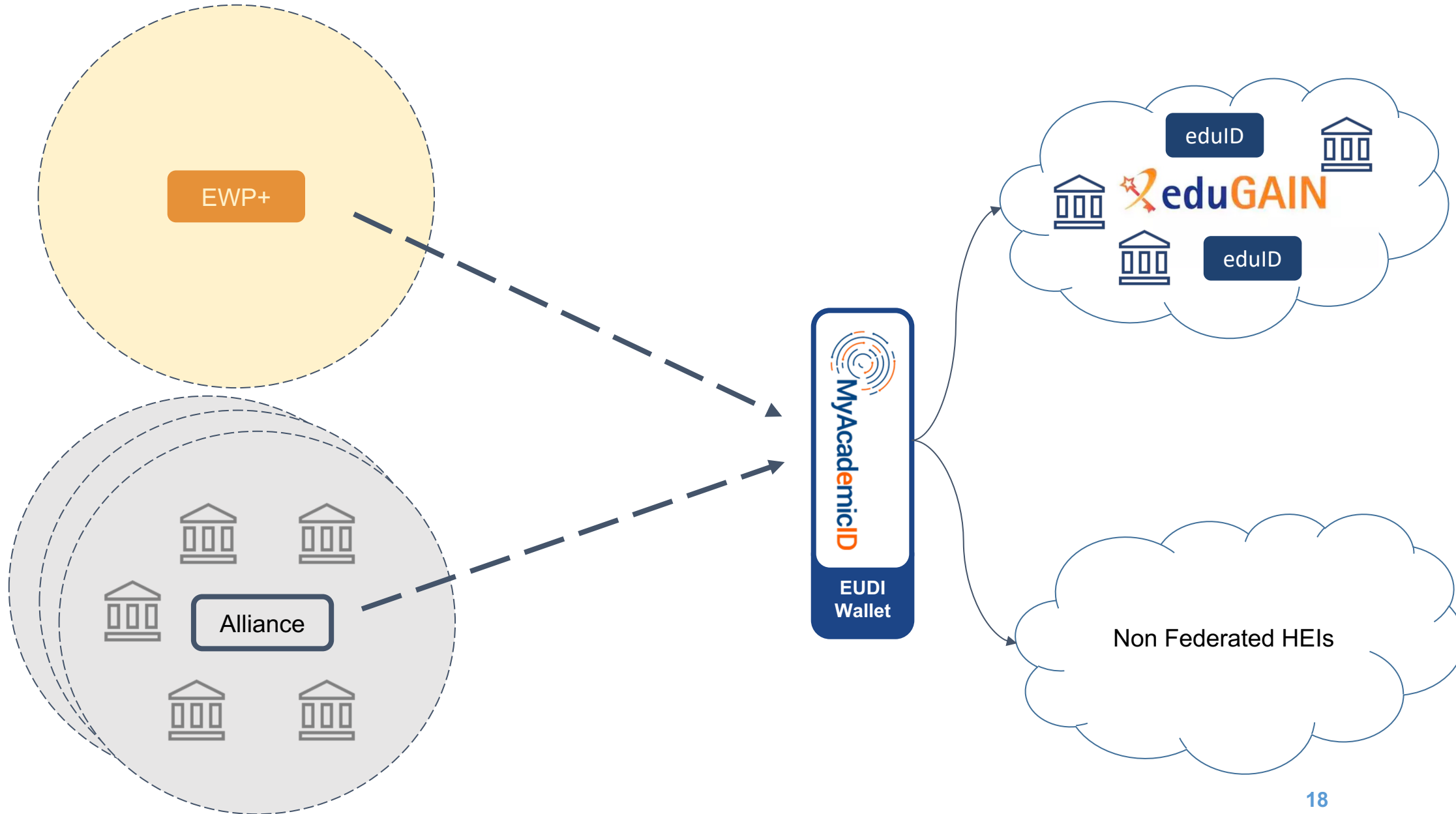


AT, BE, BG, CY, CZ, DE, DK, EE, GR, HU, LT, LU,  
LV, MT, NL, NO, PT, RS, SE, SI, TR











# Thank you

Christos Kanellopoulos (GEANT)