

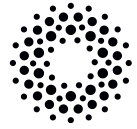
Npuls

SURF

Internationale samenwerking voor standaarden

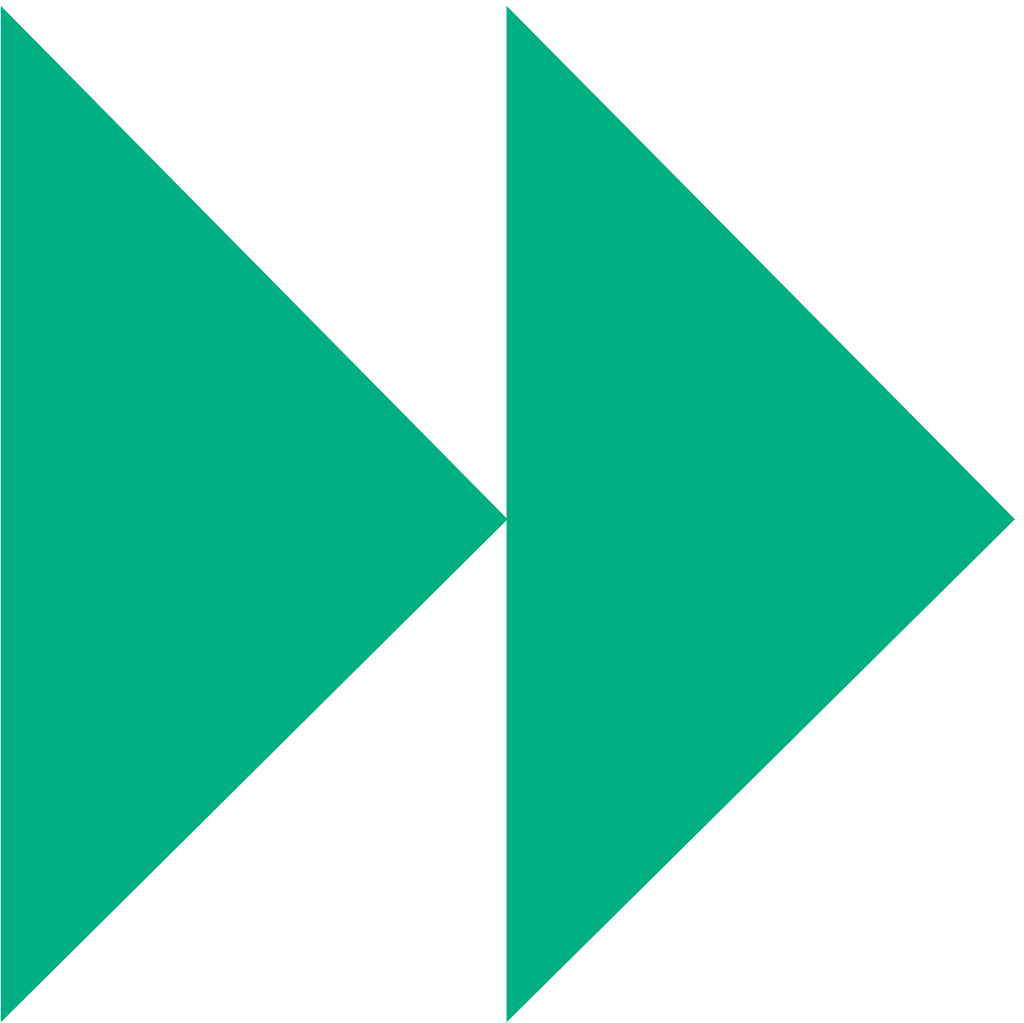
2 July 2025

Evelien Renders | Adviseur internationaal onderwijs | SURF



Npuls

SURF

- 
1. **Werkgroep internationale standaardisatie**
 2. **Update internationale samenwerking voor standaardisatie onderwijs**
 3. **Profielschets kandidaten werkgroep**

TER VOORBEREIDING

Aan: Informatiekamer Onderwijs

nota

Governance op architectuur en standaarden, een spade dieper

Februari 2023

Sponsoren

Hans Louwhoff
Larissa Zegveld
Fons Dingelstad

Auteurs

Menno Scheers
Dirk Linden
Bram Gaakeer

Datum

22 februari 2023

Bijlagen

Doel van samenwerken op architectuurgebied

Samenwerking op landelijk, sector, en projectniveau rondom architectuur is nodig om de volgende doelen te realiseren:

- 1. *Betere dienstverlening voor alle lerenden***
Diensten die door verschillende programma's worden ontwikkeld sluiten waar zinvol op elkaar aan.
- 2. *Stimuleren hergebruik***
Gebruik maken van architectuur oplossingen die elders ontwikkeld zijn. Dit bespaart kosten en kan de ontwikkelsnelheid vergroten.
- 3. *Beperken complexiteit***
Reduceren van de complexiteit door voorkomen van onnodige architectuurverschillen.
- 4. *Ontsluiten kennisinfrastructuur***
In het onderwijsdomein is de afgelopen jaren een kennisinfrastructuur ontwikkeld. Het sectoroverstijgend delen van deze kennis kan innovatie bevorderen.
- 5. *Vergroten draagvlak***
Het vergt veel inspanning om voldoende draagvlak te krijgen voor architectuurkeuzes. Bij ontwikkeling van ROSA en sectorarchitecturen zijn er processen ingericht voor deze afstemming. Er kan op een systematische wijze gewerkt worden aan samenwerking. En hier kan ook tijd aan worden besteed.

Opdracht van Standaardisatieraad: "kom **in control** mbt. Europese en (inter-)nationale ontwikkelingen qua architectuur en standaarden"

- Overzicht en inzicht:
 - Kennis van relevante ontwikkelingen op zowel sectoraal als boven-sectoraal niveau
- Risico's en kansen:
 - Identificatie van urgente risico's en kansen, met een actieplan voor respons
- Betrokkenheid:
 - Correcte betrokkenheid waarbij alle relevante perspectieven worden meegenomen, met goede communicatie en voldoende mandaat
- Capaciteit Nederlandse inzet:
 - Evenwichtige en efficiënte inzet, rekening houdend met beperkte capaciteiten
- Portfoliobenadering:
 - Integrale sectorale en boven-sectorale aanpak

Binnen scope

(Inter)nationale
standaarden en
referentiearchitecturen
in het onderwijsdomein

Standaarden op de
comply or explain-lijst
van Forum
Standaardisatie

Rolling Plan on ICT
Standardisation en
relevante Europese
kaders

Samenwerking en
duiding rond IBP, UBV,
Edukoppeling en
Toegang

Buiten scope

Puur technische
implementatie en
lokale inrichting

Operationele
projectondersteuning
binnen instellingen

Thema's die uitsluitend
technisch van aard zijn
(verwijzing naar
Architectuurraad)

Interoperability for European Alliances

2 July 2025
Evelien Renders

EUROPEAN
DIGITAL
EDUCATION
HUB



European Digital Education Hub (EDEH)

A **European Commission initiative**, funded by the Erasmus+ programme (2021-2027) and operated by a **consortium of 13 organisations** under a service contract with the **European Education and Culture Executive Agency (EACEA)** to serve as:



Collaborative Community of Practice



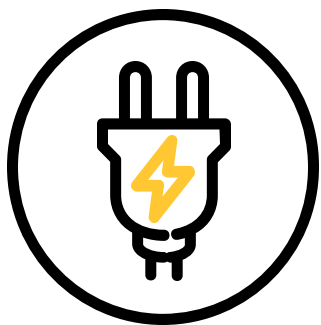
Knowledge-sharing and mapping EU tool



Platform to accelerate innovation in digital education

- To help overcome the fragmentation of digital education policy, research, and implementation practices at the European level
- To foster cooperation and exchange in the field of digital education

65 European University Alliances in Europe



Many **different** standards, systems and technologies



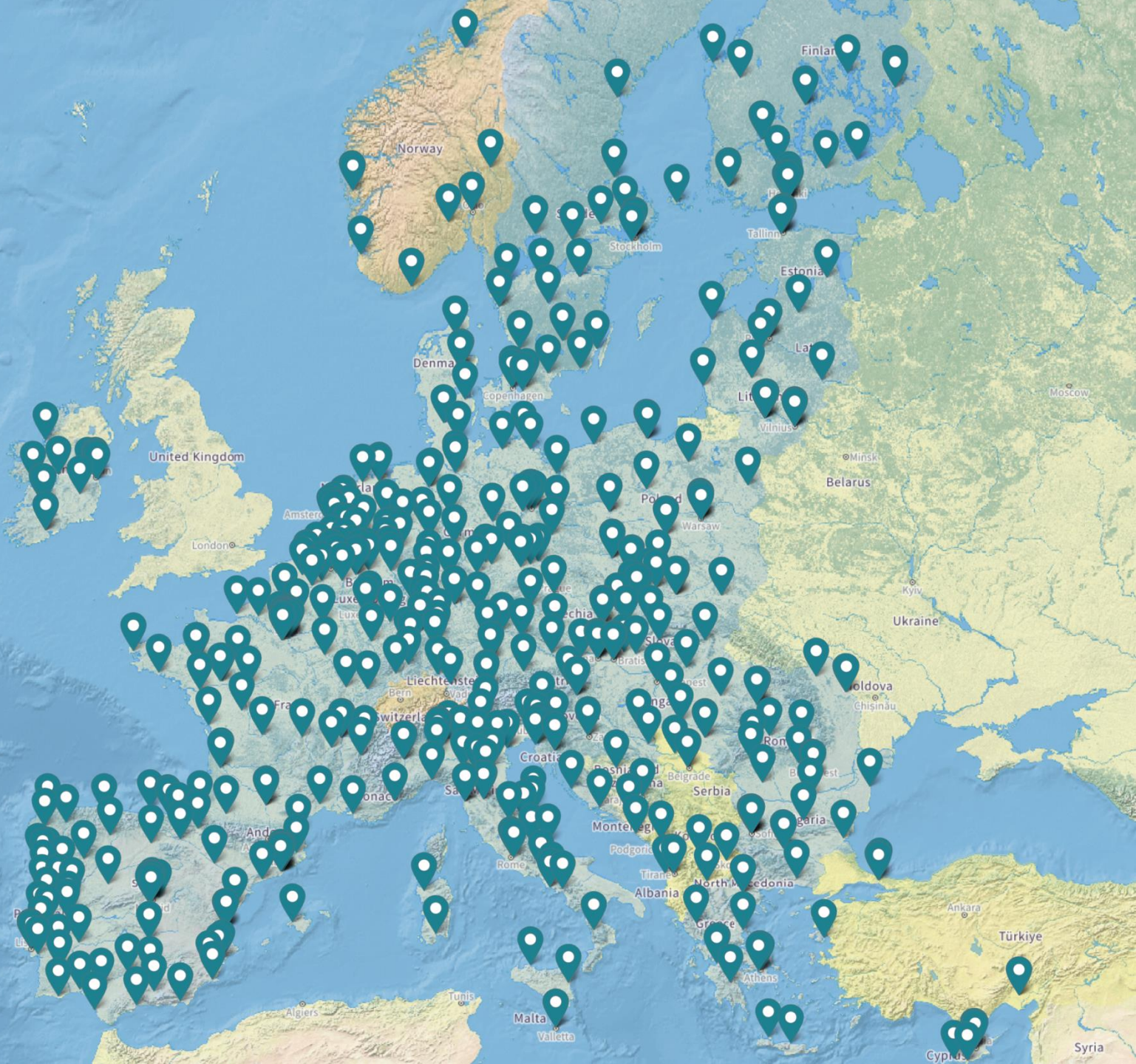
A **solution** that bridges existing systems



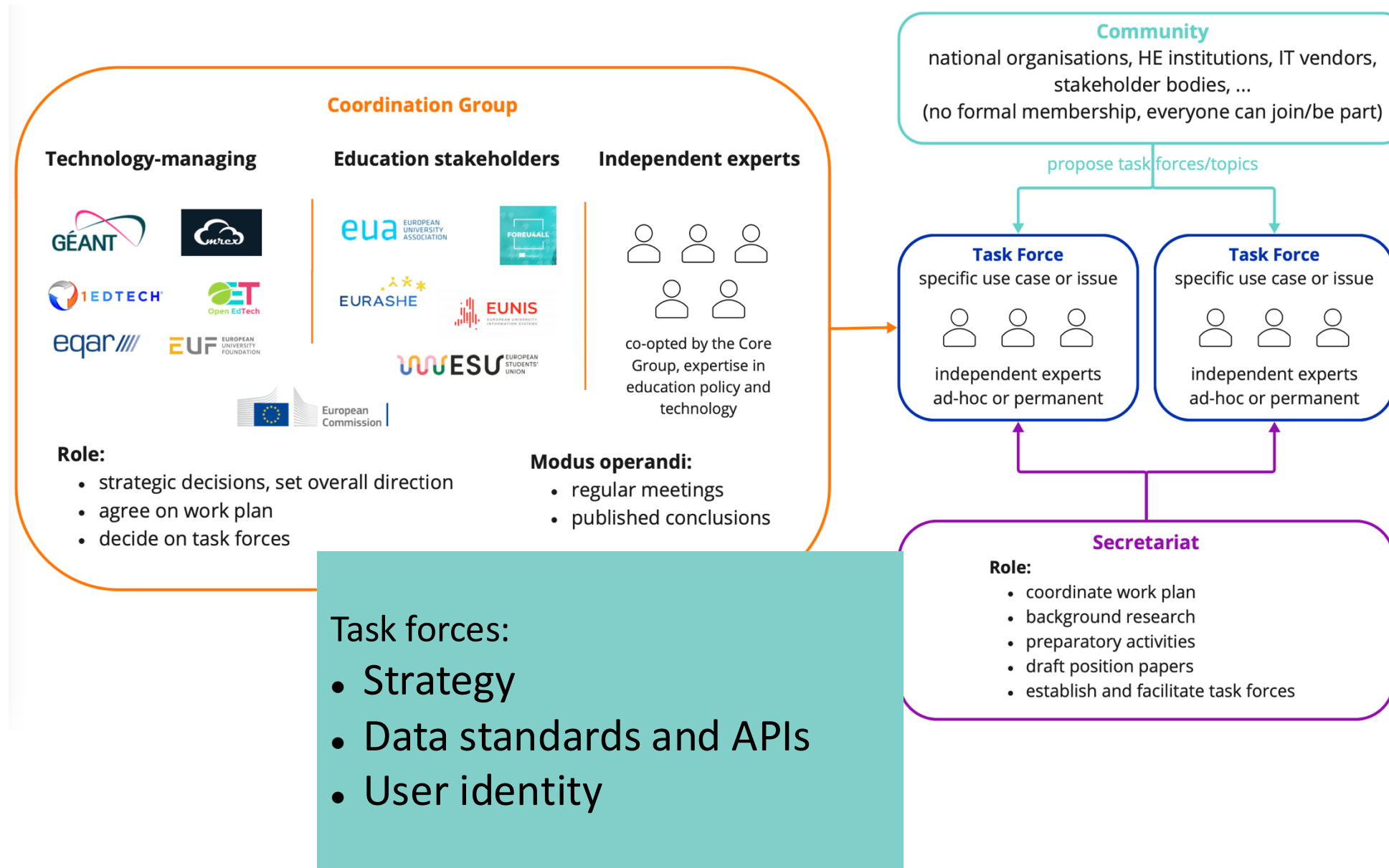
65 EUAs with more than **570** higher education institutions, which use their own or different systems...

A standardised Framework to create a more interconnected, efficient, and inclusive European higher education landscape

- 65 European University Alliances
- 570 higher education institutions involved
- Covering 35 countries
- 2200 associated partners
- 1,2billion euro Erasmus+ support
- 159 joint degrees developed



Stakeholder Coordination and Task Forces



Example: Phase 3 – Agree on standards/approaches

Phase 1: Define Objectives

Outcomes

- ✓ Clear understanding of the a
- ✓ Agreed timeline
- ✓ Clear internal mandates to s
- ✓ Necessary resources (esp. w
- ✓ Working groups established

Tasks

- ✓ Agree on aims and objective
- ✓ Identify the key stakeholders
- ✓ Inform relevant stakeholders each HEI
- ✓ Consider the resources requi
- ✓ Consider privacy issues, esp
- ✓ should feature in the joint LC

Key Resources

- ✓ ECTS Users' Guide
- ✓ EU Council Recommendation

Phase 2: Evaluate Status

Outcomes

- ✓ Clear understanding of the

Tasks

- ✓ Evaluate the status quo with following questions, amongst
 - Does the HEI have a
 - What data/informati of granularity?
 - How and where is thi
 - Is the information up cycles (e.g. annually,
 - What is the level of f choosing different co

Key Resources

There are several European standards related to this use case, all of which cover course data/catalogues in some way:

- [European Learning Model \(ELM\)](#)
- [Open Education API \(OOAPI\)](#)
- [ELMO](#)
- [EWP Courses API](#)
- [Open Course Catalogue API \(OCCAPI\)](#)
- [Edu-API](#)

The illustration below shows what other domains than courses and programmes are covered by different existing standards. These differences stem from the fact that these different standards – or the ecosystems within which they emerged – were designed for different general/broader use cases or purposes. Depending on other use cases the alliance is currently addressing, considering these different scopes can help identify the most suitable standards.

Further details can be found in the mapping report as well as these existing mappings of ontologies and data standards:

- [QualityLink mapping of ontologies](#)
- [Data Ecosystem Schema Mapper \(DESM\)](#)

Diagram illustrating the mapping of various domains to different European standards. The diagram shows a central area with boxes for 'organisations', 'programmes/courses', 'programme/course instances', 'academic sessions', 'rooms/buildings', 'persons', and 'association (e.g. enrolment)'. These are mapped to standards: OCCAPI v1 (covers organisations, programmes/courses, programme/course instances), EWP Courses v0 (covers programme/course instances, persons), Edu-API v1 (covers organisations, academic sessions, rooms/buildings, persons, association), and OOAPI v5 (covers all domains). Other standards shown are ELM v3 (covers credentials, accreditation) and education results. The diagram is surrounded by a large orange border.

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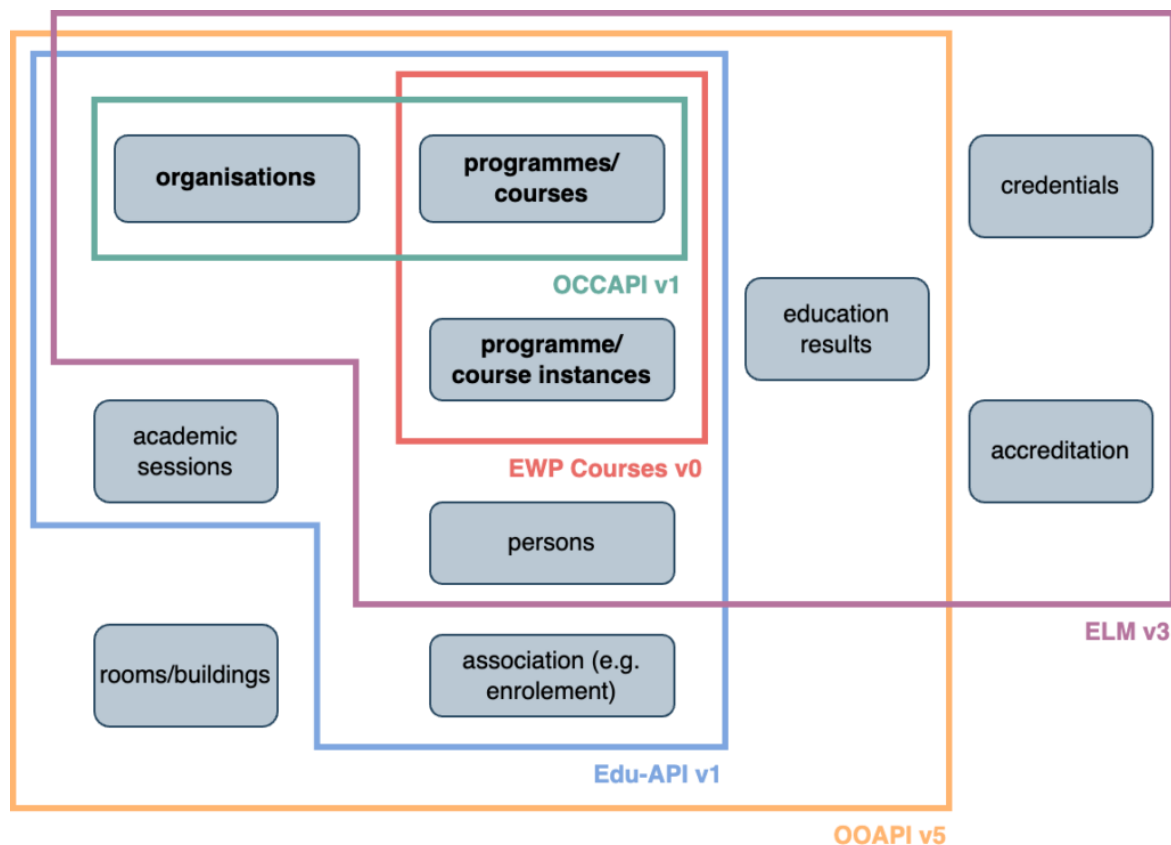
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Stakeholders taking the Framework further

- QualityLink continuing the standards alignment www.quality-link.eu





Partnering for Progress

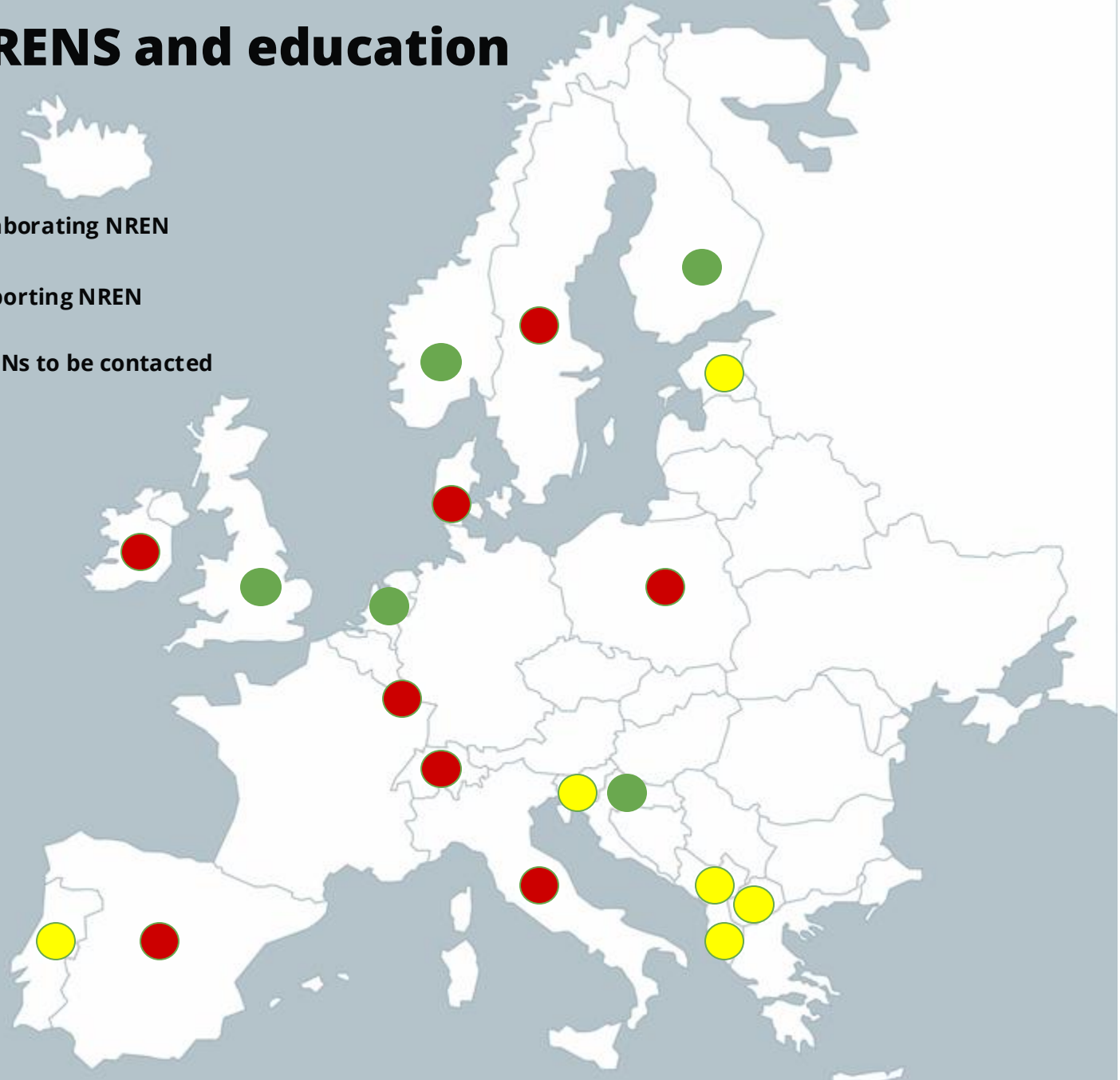
NRENs and GÉANT as strategic enablers for a federated and interoperable European Education Area





NRENS and education

-  collaborating NREN
-  supporting NREN
-  NRENS to be contacted



Our commitments

1	Solutions for use cases Discover, Identity and Apply & Recognition	• Pilot with and deliver scalable solutions for European Universities • Align current solution and design common roadmaps • Explore sustainable delivery models
2	Putting the European Higher Education Interoperability Framework into practice	• Actively participate in EDEH Coordination group as policy and governance advisor, subject matter expert and execution power • develop and support implementing and adoption solutions for challenges of Coordination Group
3	Support policy development to organize an interoperable infrastructure	• Deliver federated interoperable infrastructures for education • Advise on infrastructural and architectural funding preconditions and criteria

Key IT challenges for digital education



organise sovereign, safe and reliable solutions to support education at an institutional, national and international level to enable a **Europe of Skills**



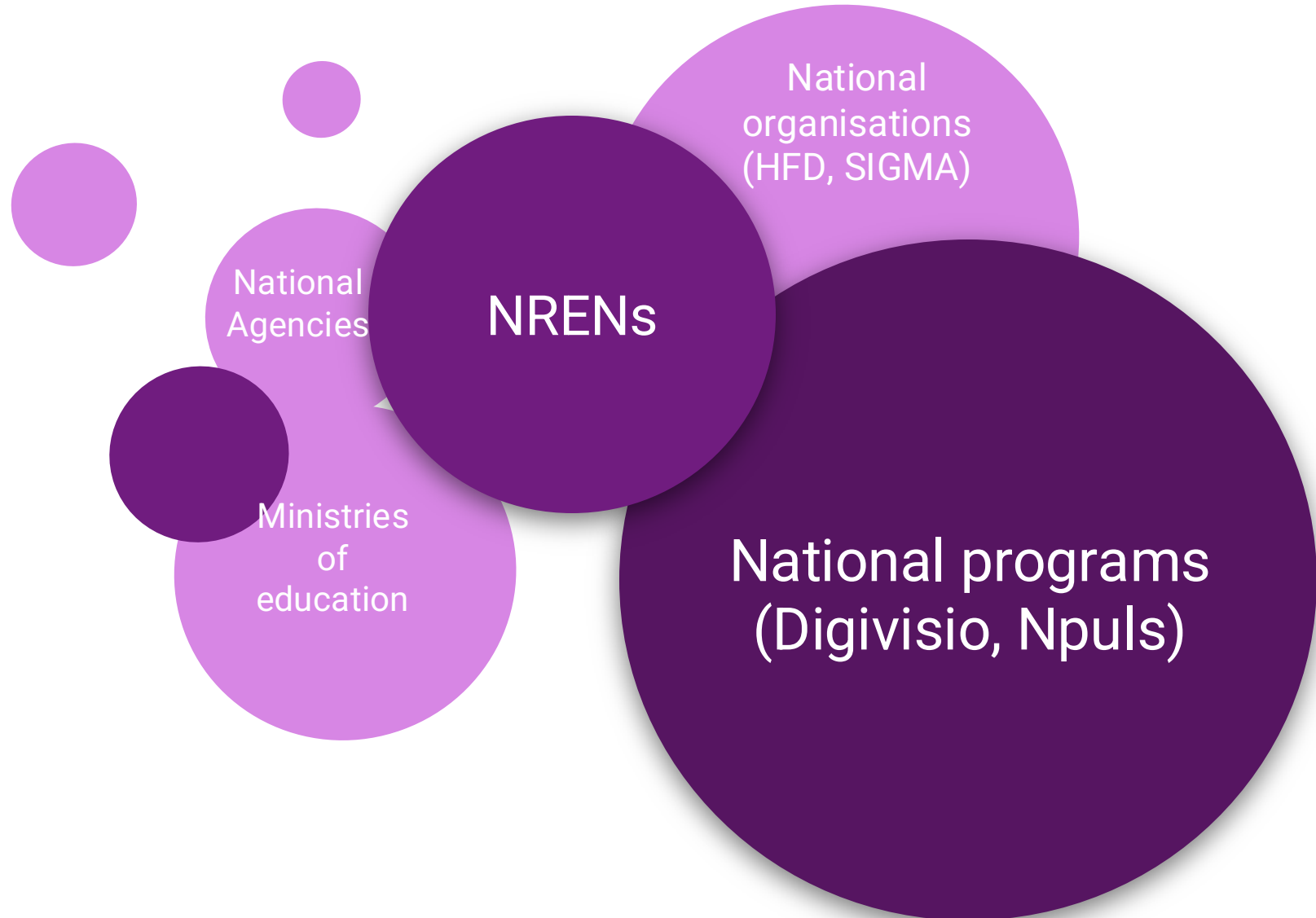
organise seamless data flow to support increasing mobility and collaboration to create a united **European Education Area**



organise and implement a European interoperable infrastructure for education to achieve the ambition of the **European Digital Education Action Plan**



NRENs as well-connected Linking Pins



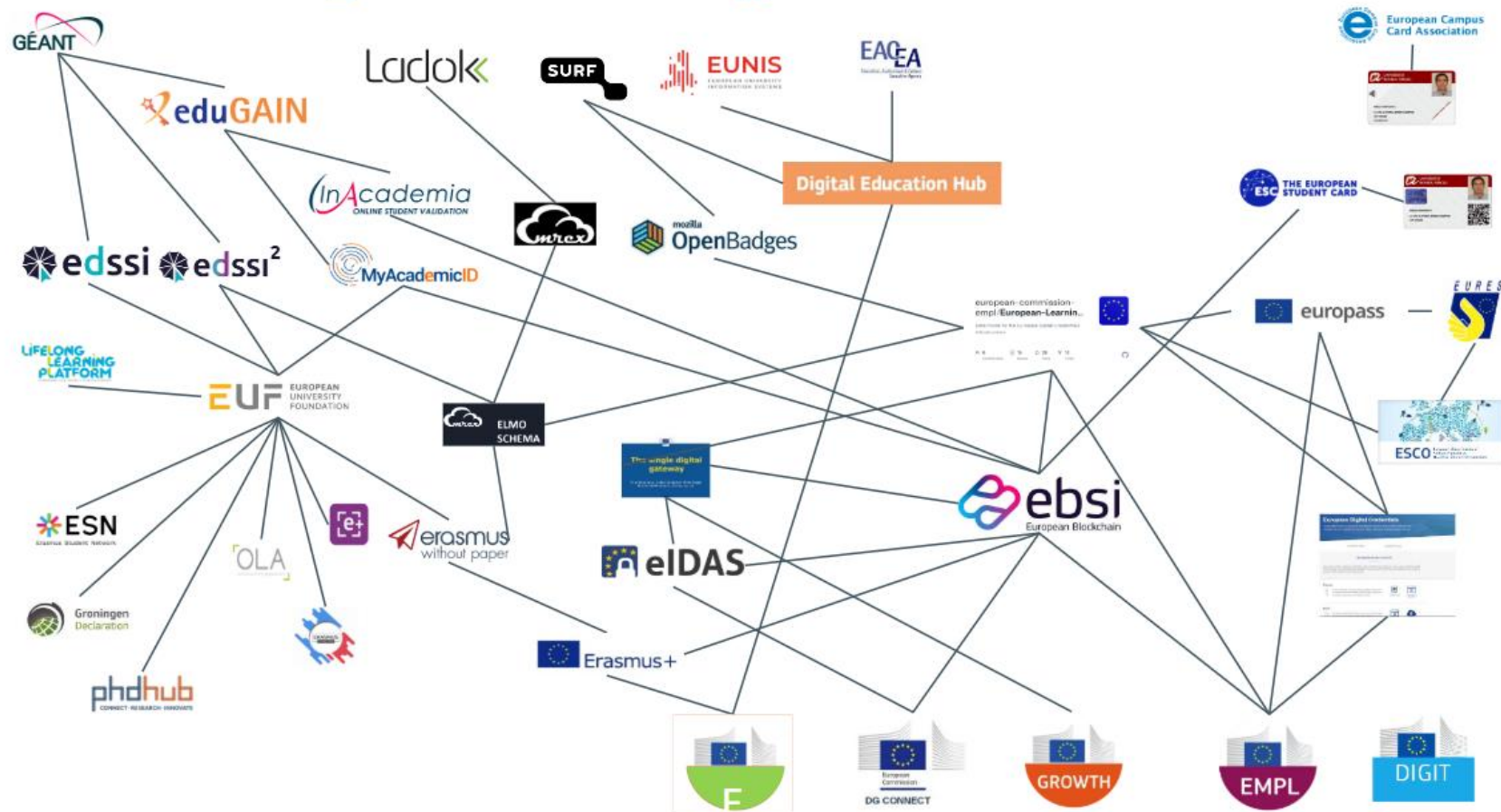
We are not starting from scratch

- Interoperability framework European Digital Education Hub
- European Learning Model European Commission
- EC funded projects, ESCI II, QualityLink, DC4EU, etc
- FOREU4ALL (collaboration of European Universities)
- EUNIS Enterprise Architecture Special Interest Group
- Work of NRENs and GÉANT (EduGAIN, MyAcademicID)



| We are all making overviews

Fourth step ... More previous work



Het in kaart brengen Europese digitale onderwijslandschap

2023:

www.eduxs.eu

pilot.eduxs.eu

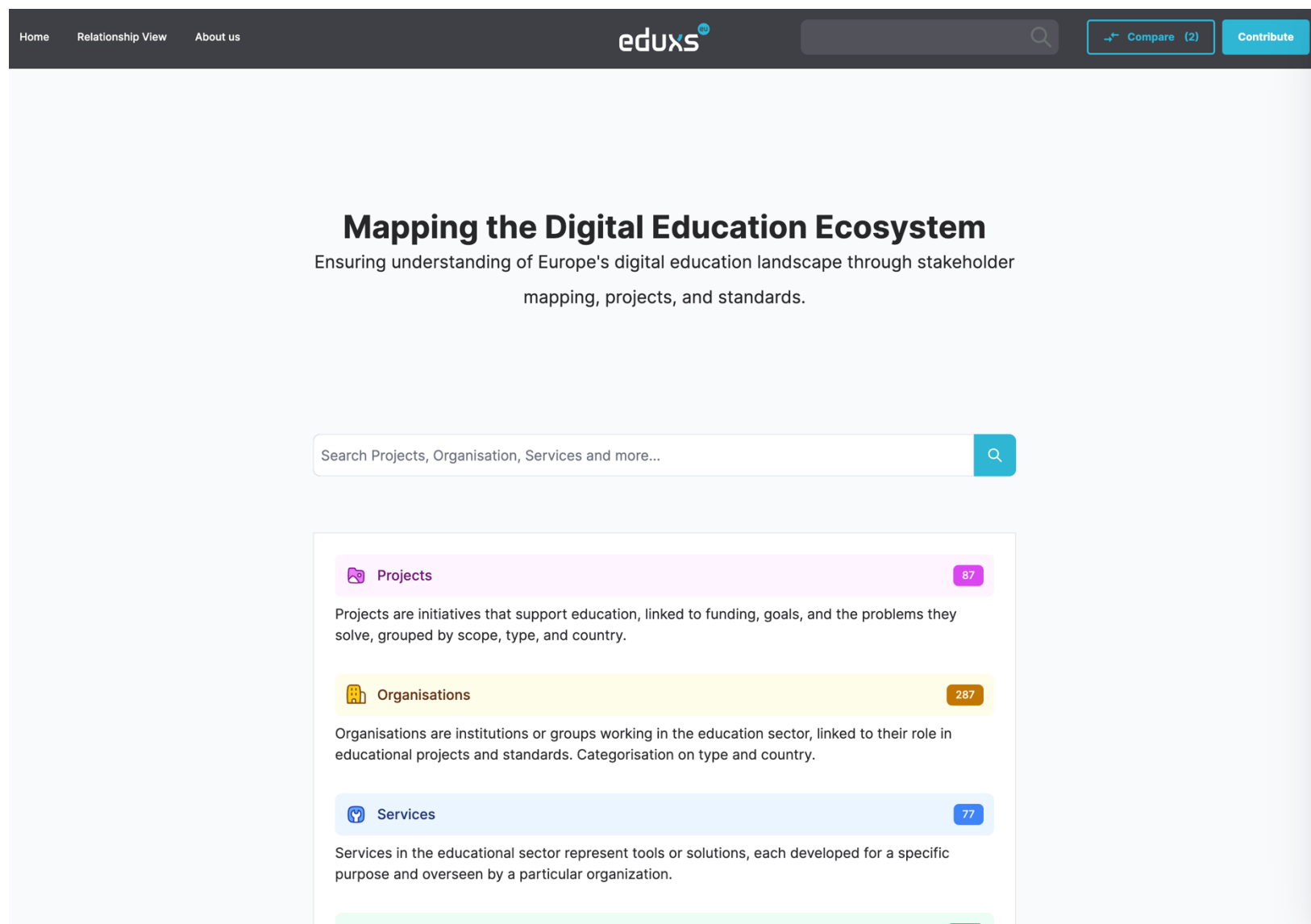
2024:

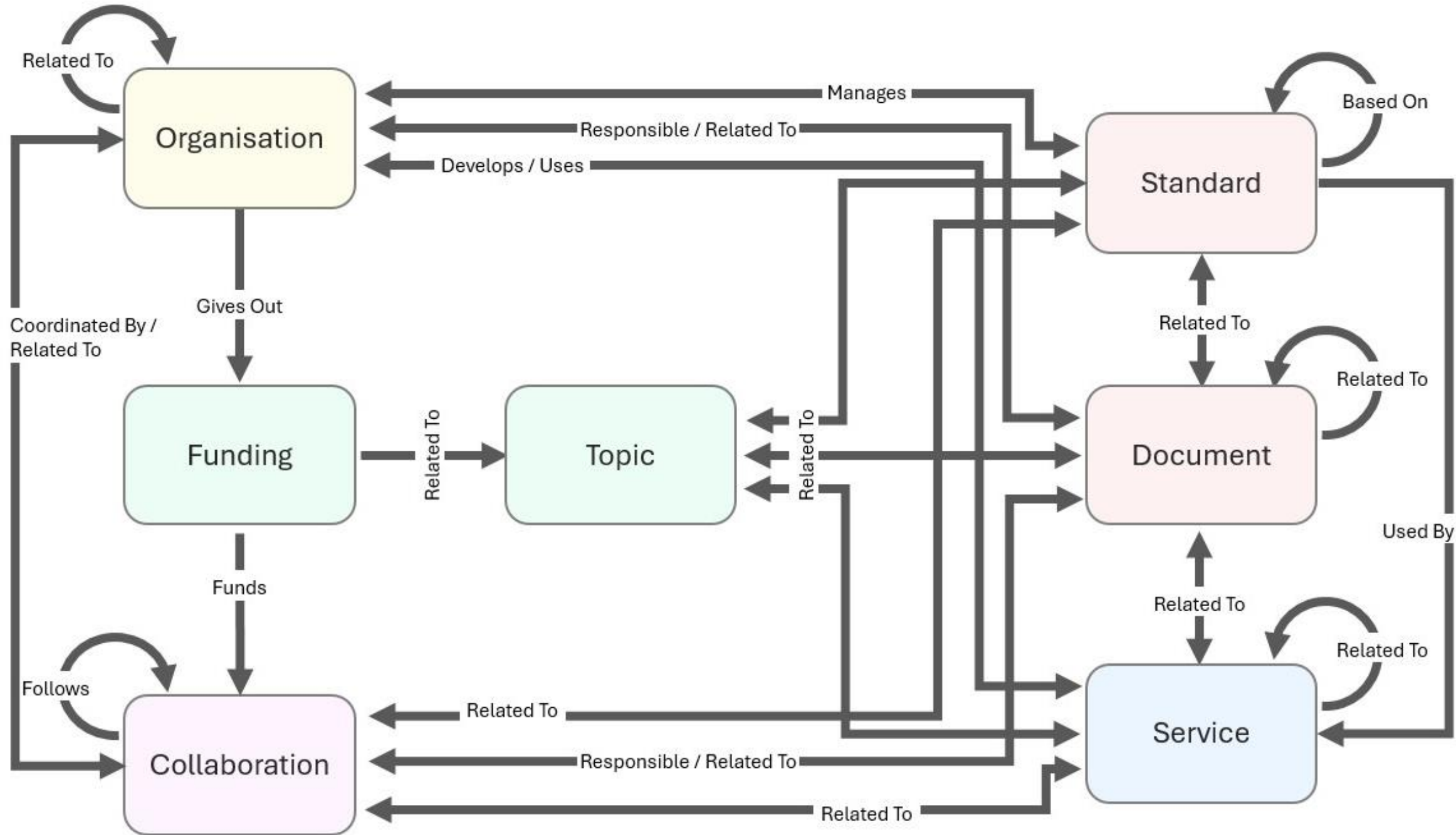
Minimal Viable Product live

2025:

PRD live (front en back-end)

European Programme





Profielschets voor de Werkgroep Standardisatie

Organisatie:

- Vertegenwoordigers vanuit DUO, Kennisnet, SURF, en OCW.
- Uitbreiden met? MboDigitaal, ...?

Expertise:

- Kennis en ervaring op minimaal één van de volgende onderwerpen:
- IBP (Identiteit, Betrouwbaarheid en Privacy)
- UBV (Uitwisseling Basisgegevens Voorzieningen)
- Edukoppeling
- Toegang

Competenties:

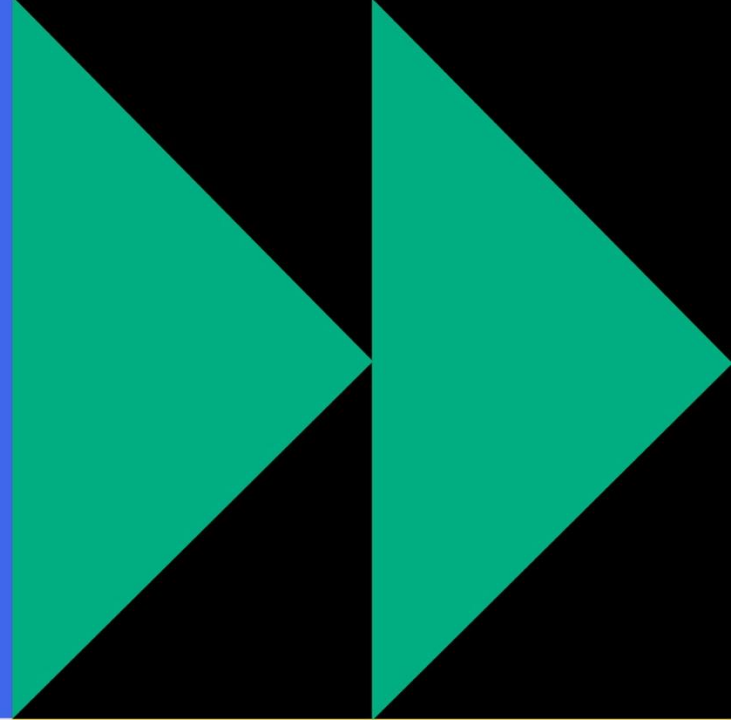
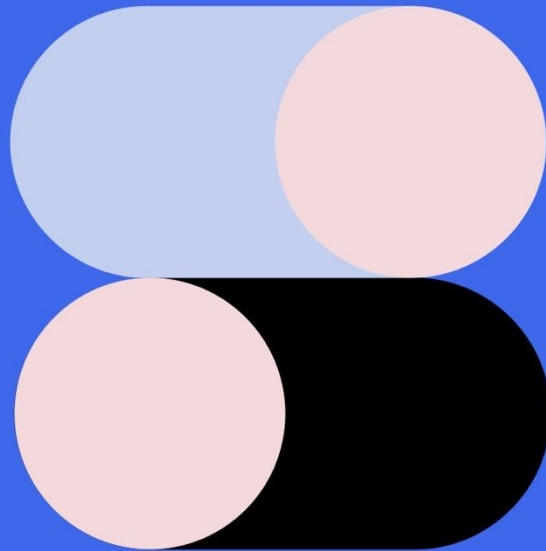
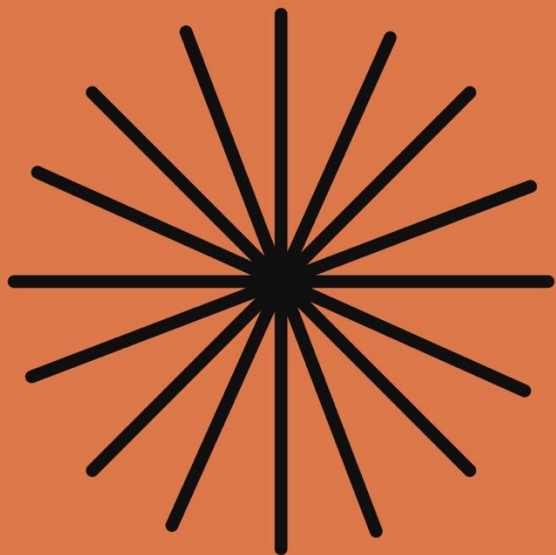
- Affiniteit met (inter)nationale standaarden en architecturen
- Inzicht in sectorale ontwikkelingen en adoptie van standaarden
- Vermogen om bestuurlijke en inhoudelijke afwegingen te verbinden

Rol en inzet:

- Twee mogelijkheden:
- *Actief lid*: deelneemt aan overleggen en meewerkt aan producten
- *Meedenkend lid*: beschikbaar voor advies en feedback op verzoek

Beschikbaarheid:

- Tijd om bij te dragen gedurende 2025 (in overleg te plannen)



Dank voor de aandacht!
Evelien Renders
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