



Co-funded by
the European Union

Creating an Interoperable Ecosystem for Reliable and Open Quality Data

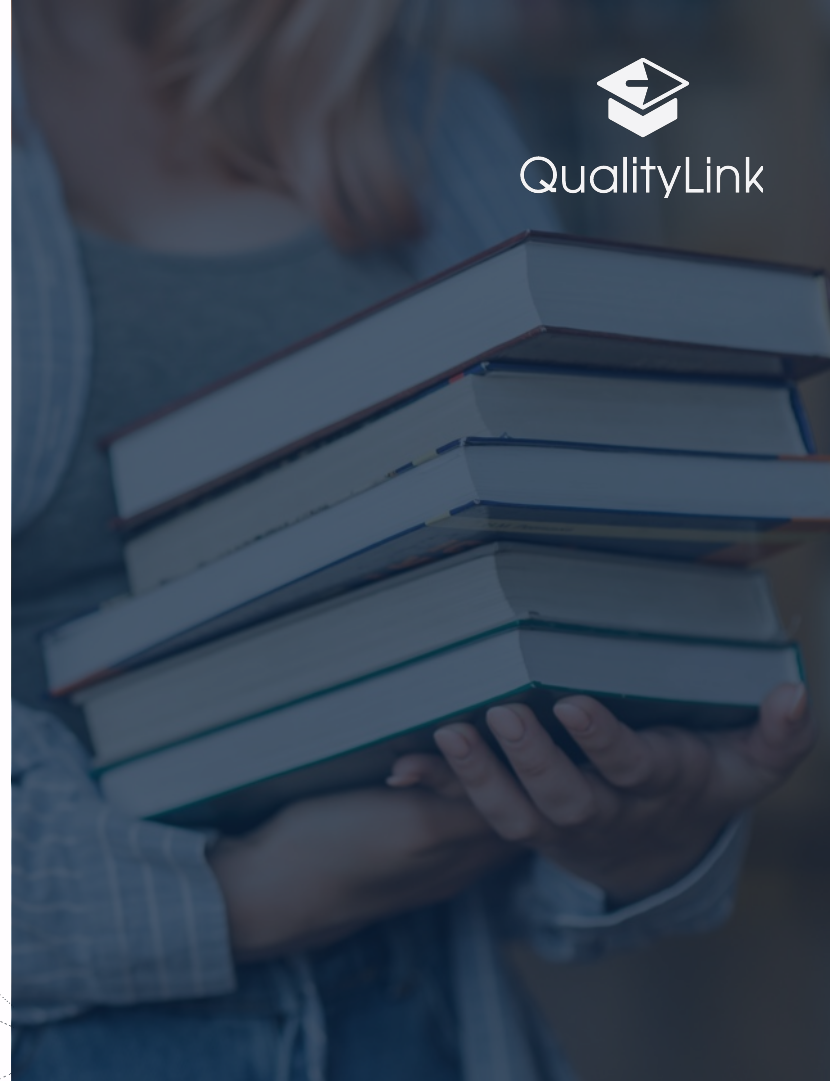
Warsaw Microcredentials Summit 2025

26 June 2025

Colin Tück (KIC)



QualityLink



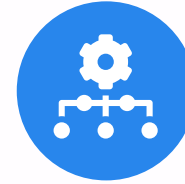
Challenges QualityLink aims to tackle



Diversity of micro-credentials and other short courses



Other data (ratings, recognition history, certifications, ...) rarely published using open standards

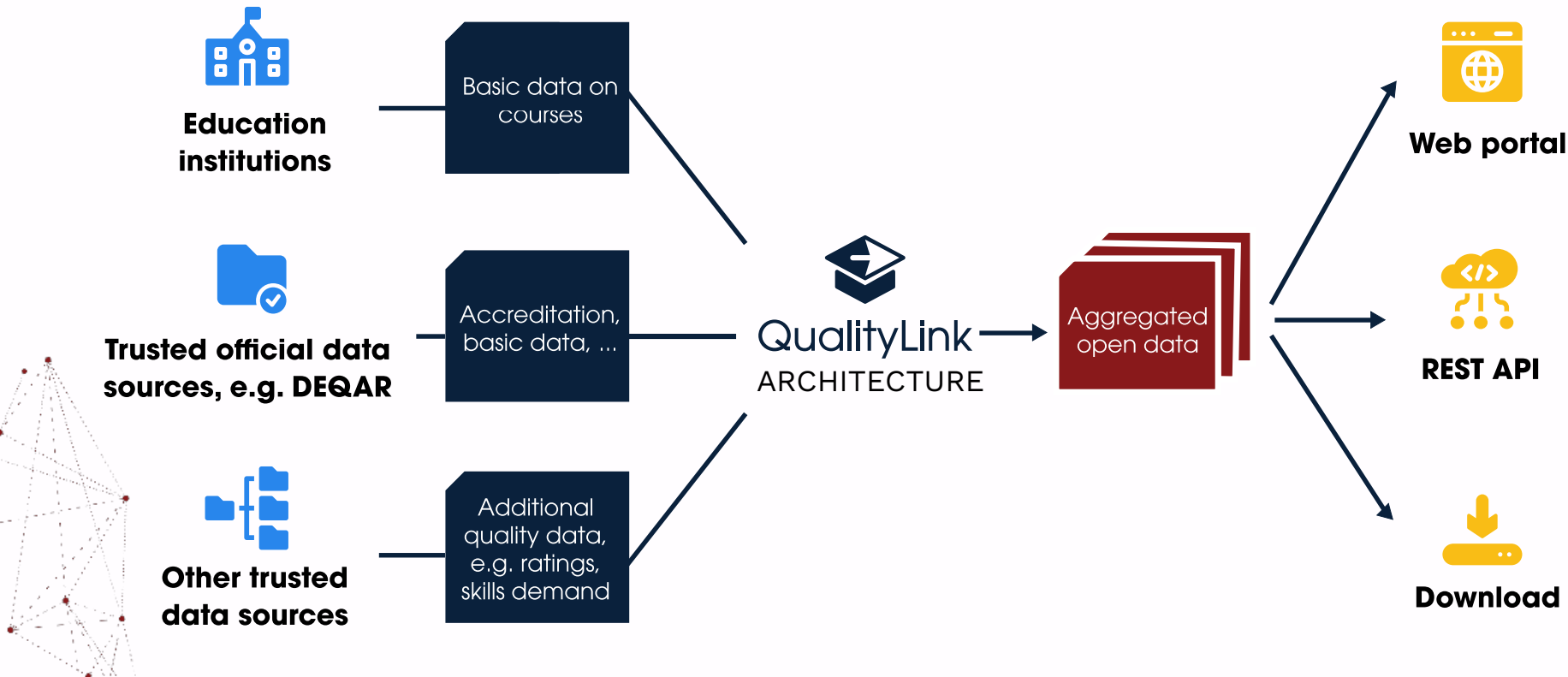


Basic course data often not published in open & structured form

Erasmus+ project running Dec 2023 – May 2026 | Partners:

Vision for an open quality data exchange architecture

(in particular, but not only for micro-credentials)



Honey Bee Health (Apiculture)

 Definition

 Disclaimer

Title	Honey Bee Health (Apiculture)
Outcomes	<p>Identify current parasites of honeybees in Ireland and more widely, considering potential threats to honeybee health from imported bees and other products.</p> <p>Describe the life cycle of the main honeybee pathogens.</p> <p>Explain the importance of plants to honeybee health.</p> <p>Link the diversity of microbes associated with honeybees with their influence on honeybee health.</p> <p>Discuss human-mediated factors involved in decline of honeybee health.</p>
Level (EQF/QF-EHEA) 	6
Language(s) of instruction	English
Costs (fee)	500 EUR
Accurate and up-to-date information: learning outcomes in ESCO ontology	No (ESCO skills generated) 

Definition text, explaining what the data type represents



	Course 1	Course 2
Title	Honey Bee Health (Apiculture)	Fundamentals of Accessibility
Outcomes	<p>Apis mellifera</p> <p>Identify current parasites of honeybees in Ireland and more widely, considering potential threats to honeybee health from imported bees and other products</p> <p>Describe the life cycle of the main honeybee pathogens</p> <p>Explain the importance of plants to honeybee health</p> <p>Link the diversity of microbes associated with honeybees with their influence on honeybee health</p> <p>Discuss human-mediated factors involved in decline of honeybee health.</p>	<p>student will know:</p> <ul style="list-style-type: none"> - The main accessibility concepts and terminology, - different stakeholders and their needs, - principles of legislation, - technologies to support accessibility ranging from traditional accessibility solutions to new ones such as AI and robotics, - principles of accessible translation methods and digital services, - how to apply theory to practical accessibility solutions
Level (EQF/QF-EHEA)	6	6
Language(s) of instruction	English	English
Costs (fee)	500 EUR	Free
Accurate and up-to-date information: learning outcomes in ESCO ontology	No (ESCO skills generated)	No (ESCO skills generated)
Type of assessment	Continuous Assessment	unclear, grading scale: pass-fail


Definition text, explaining what the data type represents

Disclaimer text, noting any considerations about provided data



Quality Domains and Indicators

- 1) Content Relevance, Labour Market Demand and Accuracy
- 2) Teaching Methods and Pedagogy
- 3) Accessibility and Inclusivity
- 4) Learner-Centred Approach, Satisfaction and Success
- 5) Institutional Reputation



Level of similarity of micro-credential skills/learning outcomes with those identified in forecasts (numeric scale)

The ratio of students per academic staff (numeric)

Ratio of students from a disadvantaged socio-economic background (numeric)

Grade distribution table, following ECTS Users' Guide practices (numeric)

HEIs that have recognised the micro-credential, e.g. towards a larger degree programme (numeric, list + links)

Use cases



Europe-wide
visibility



Potential learners,
guidance



Mapping and
benchmarking



Credential
transparency for
the labour market

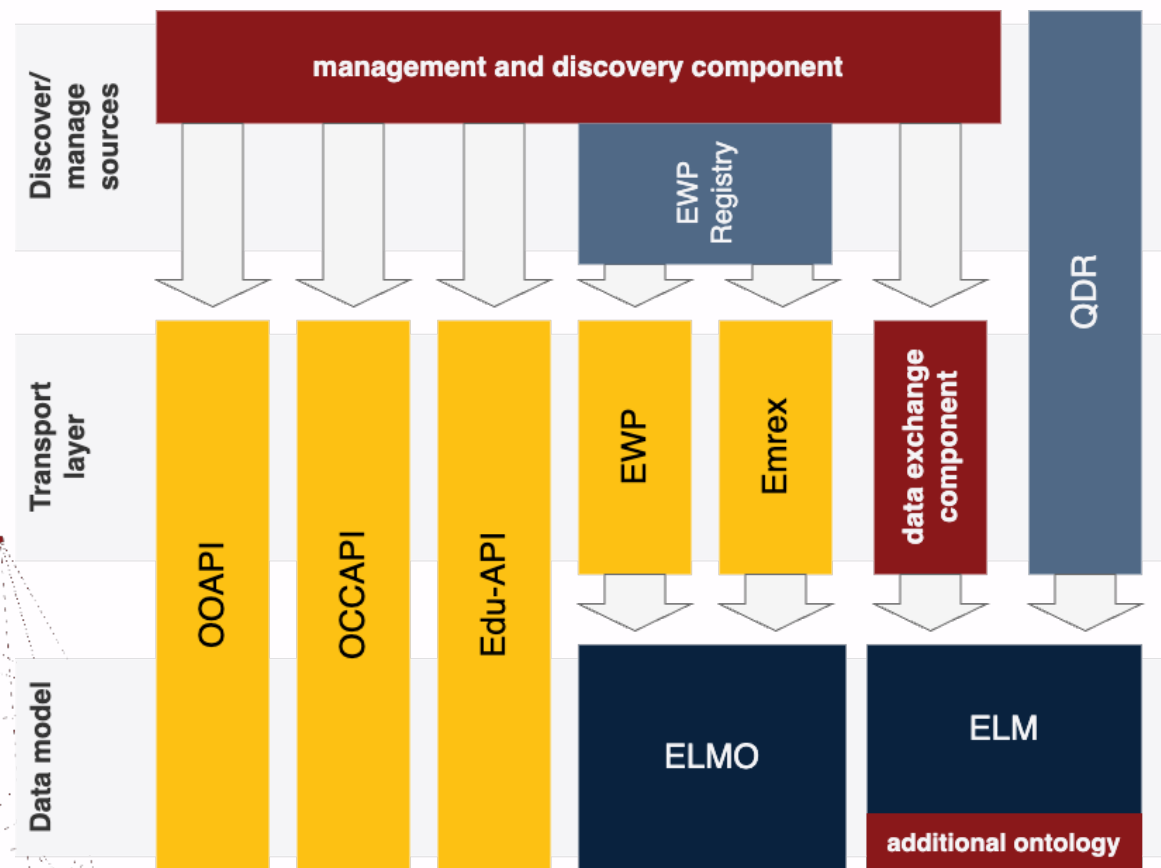


Reliable
information for
recognition



Alliances' joint
catalogues

Architecture – overview



Principles:

- Build on existing standards
- Low bar to adoption
- Flexibility where helpful
- Open to extensions
- New components open source

Landscape of data standards used in Europe

Standard	Maintained by	Used by	Tech
ELM	EU	EDC, QDR	RDF ontology & profiles
ELMO	EMREX	EWP, EMREX	XML schema
OOAPI	SURF	Dutch HEIs, European alliances	REST API
OCCAPI	EUF	Some HEIs	REST API
Edu-API	1EdTech	Various	REST API

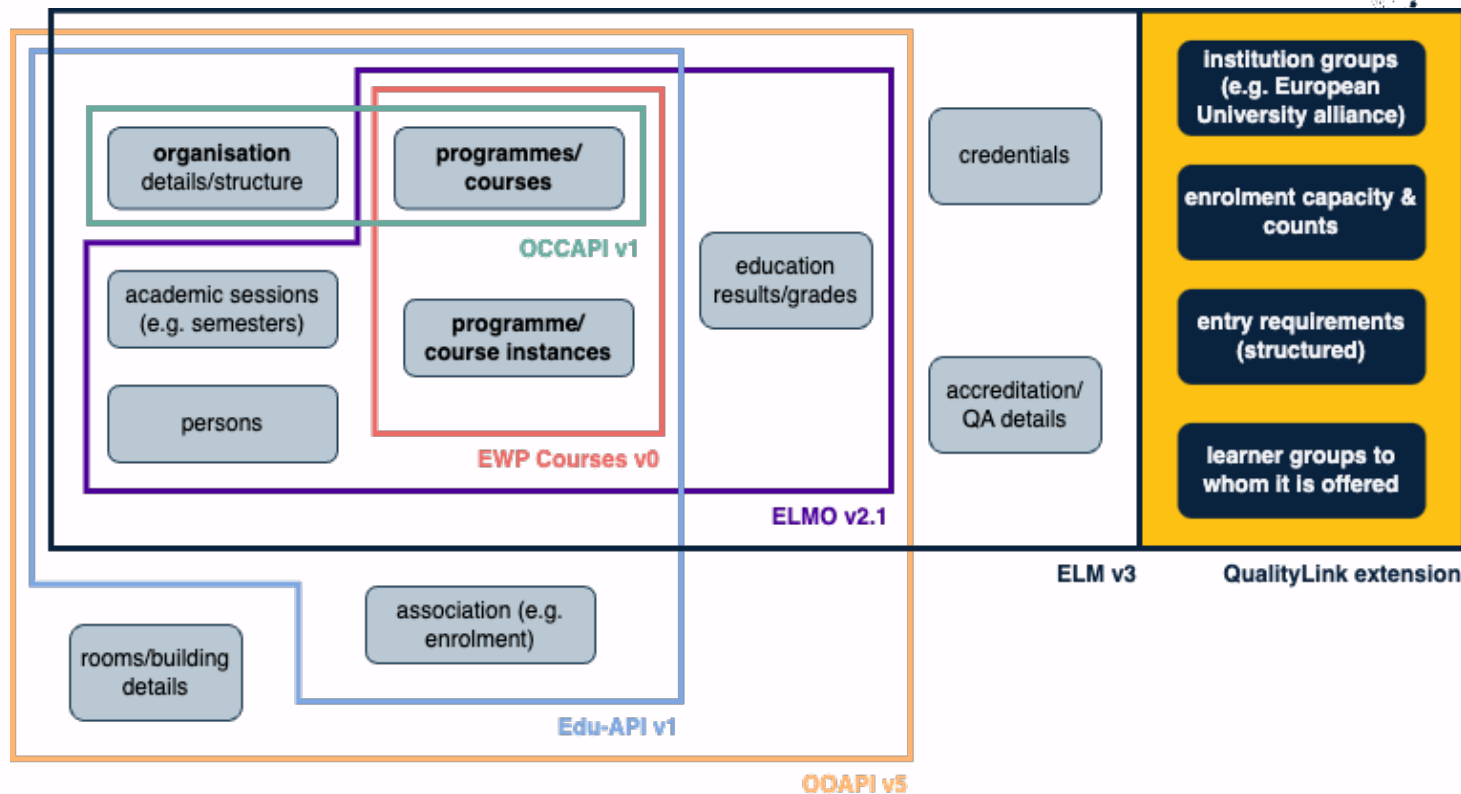
DEQAR

EQAR

EQAR & QA agencies

REST API

Coverage of information domains



Using DESM for mapping

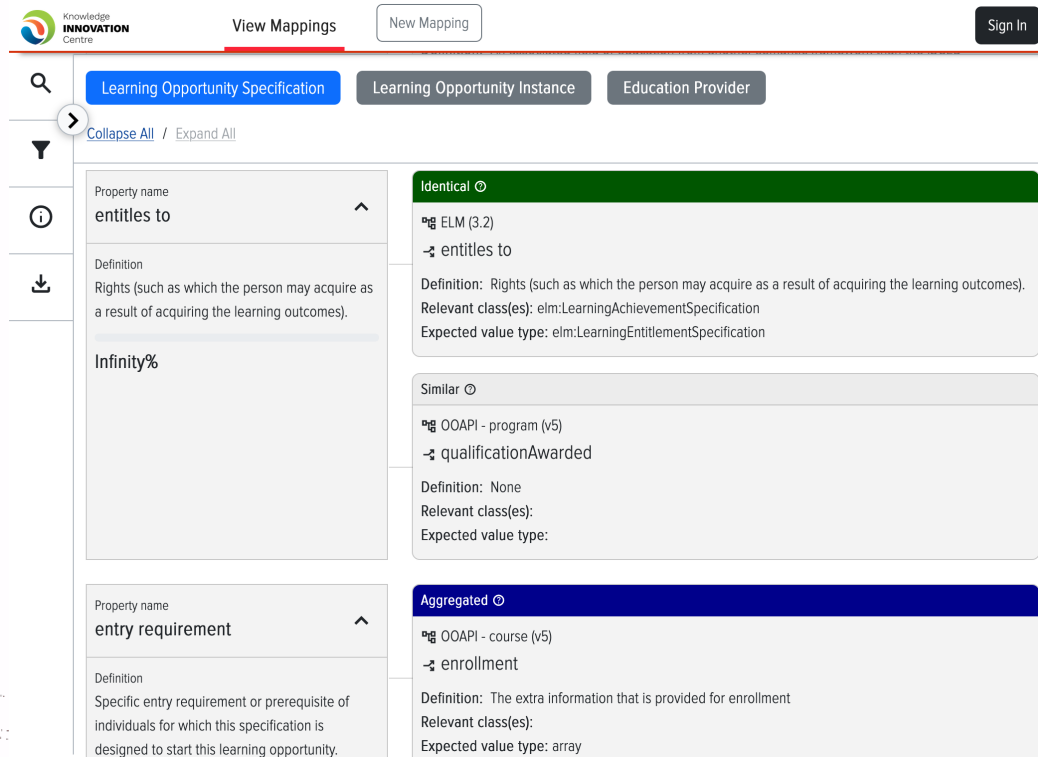
<https://mappings.skilldata.info/mappings-list?cp=4>

Benefits:

- Good user interface
- Browse and filter properties
- Scales well to many standards

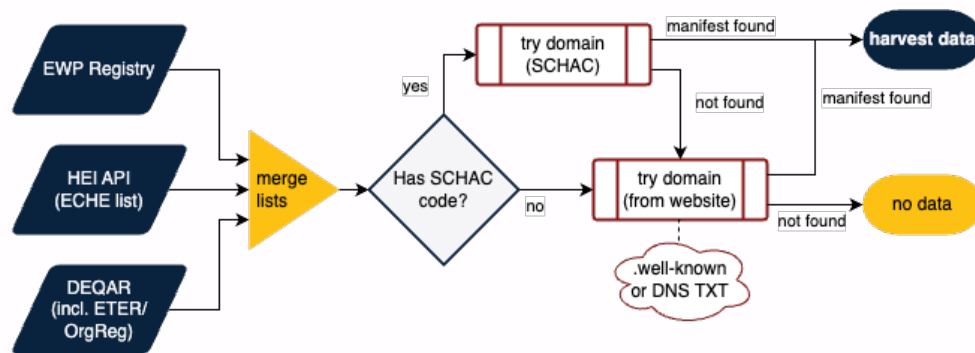
Limitations:

- Difference in abstract classes, i.e. concepts not matching 1:1
- Class inheritance not straight-forward
- Does not build your converter

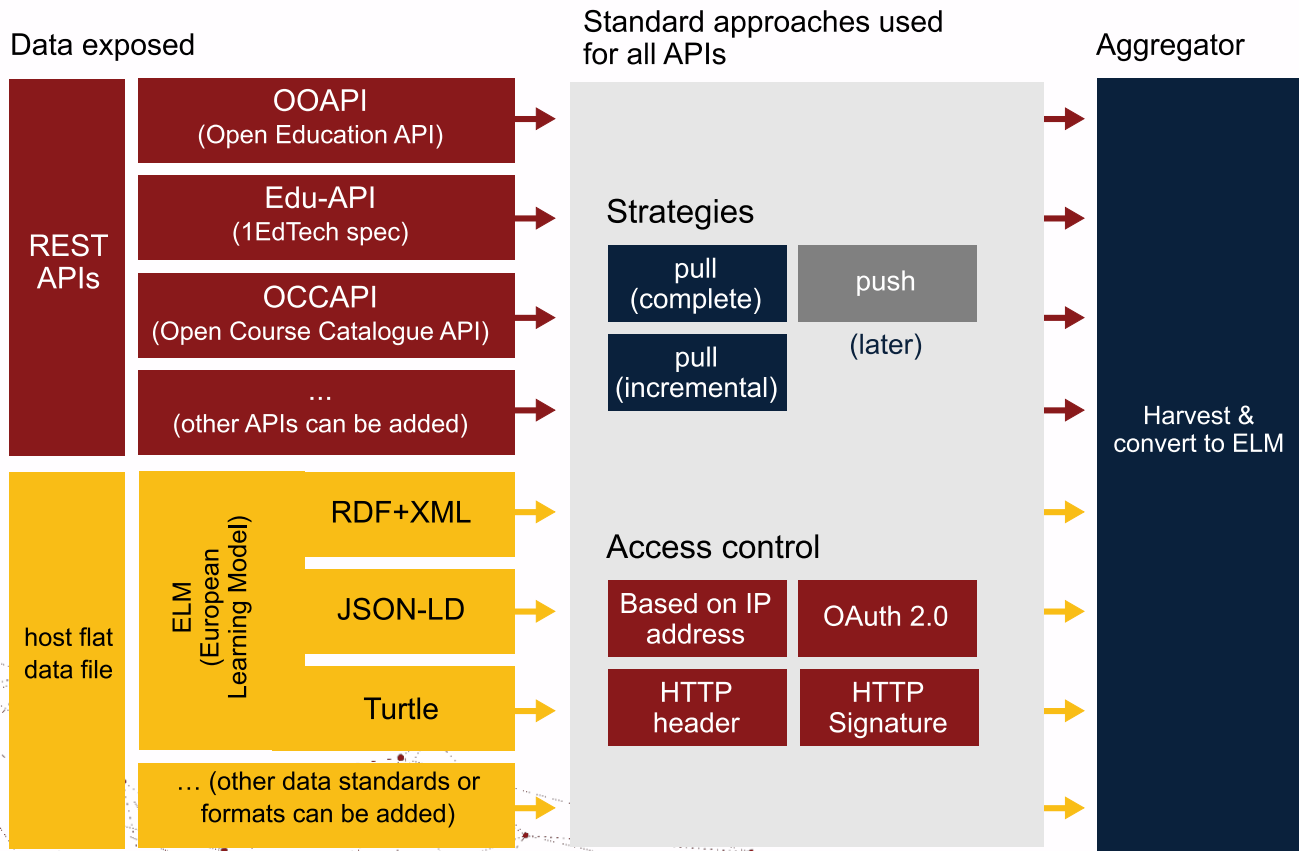


The screenshot displays the SkillData Mappings web application. At the top, there is a navigation bar with the Knowledge INNOVATION Centre logo, a 'View Mappings' tab, a 'New Mapping' button, and a 'Sign In' button. Below the navigation bar, a search bar contains the text 'Learning Opportunity Specification'. To the right of the search bar are two filter buttons: 'Learning Opportunity Instance' and 'Education Provider'. A 'Collapse All / Expand All' link is also present. The main content area is divided into two columns. The left column shows a list of mappings, with the first one having the property name 'entitles to' and the definition 'Rights (such as which the person may acquire as a result of acquiring the learning outcomes)'. The right column shows the details for the selected mapping, which is 'Identical'. It includes the source standard 'ELM (3.2)', the target standard 'entitles to', the definition 'Rights (such as which the person may acquire as a result of acquiring the learning outcomes)', the relevant class(es) 'elm:LearningAchievementSpecification', and the expected value type 'elm:LearningEntitlementSpecification'. Below this, there is a 'Similar' section showing a mapping from 'OOAPI - program (v5)' to 'qualificationAwarded'. At the bottom, there is another mapping entry with the property name 'entry requirement' and the definition 'Specific entry requirement or prerequisite of individuals for which this specification is designed to start this learning opportunity.'.

- Builds on existing registries
 - Database of External Quality Assurance Results (DEQAR)
 - Erasmus Charter
 - EWP Network
- Manifest file under institution's web domain



Data Exchange Architecture





European HE Interoperability Framework (HEIF)



- Developed within the European Digital Education Hub (EDEH)
- 8 use cases - QualityLink covers UC1
- Use QL architecture and specifications:
 - Get ready to publish info on courses as open data (now)
 - Pilot data aggregation (autumn 2025)
 - Publish joint catalogue as a filtered view (winter 2025)
- Early adopters call: apply by 15 July!

USE CASE 1

Discover



Enhancing the visibility and comparability of diverse learning and mobility opportunities across HEIs, emphasising the importance of machine-readable metadata for easy comparison and discovery.

CMS (Website)

Course catalogue

Curriculum management



Implementation options (for HEIF use case 1)

Expose information

Export ELM data

Implement OOAPI

Implement Edu-API

Implement OCCAPI



Aggregate data

QualityLink aggregator
(project instance)

QualityLink aggregator
(own instance)

Custom aggregator



Public catalogue

QualityLink pilot platform
(hosted, filtered view)

QualityLink pilot platform
(own instance)

Own custom front-end



All combinations are possible

What's next

- **Consultation:** review our **draft specifications** and share your feedback
- **And:** tell us which **quality indicators** are the most relevant to you
- **Next:** working on data **converters and aggregators** (pilot open in autumn 2025)
- **Later this year:** expose your own course catalogue in the **pilot platform**



<https://quality-link.eu/technical-specs/>



<https://quality-link.eu/>

Short description of QualityLink

QualityLink aims to address all stakeholders' needs by furnishing them with all relevant information about courses and micro-credentials from a diversity of sources to improve recognition decisions and allow learners to follow flexible learning pathways. To make sure that the standards are of high quality and have ownership in the community, the consortium will create a Standards Consultation Board – a group of higher education interoperability experts from across different countries. Through creating open standards and collaboration, the project aims to establish the infrastructure for aggregating quality information from a wide range of sources.

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

This work is licensed under a Creative Commons Attribution ShareAlike 4.0 International License.

You are free to:

Share — copy and redistribute the material in any medium or format

Adapt — remix, transform, and build upon the material

for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following conditions:

Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

ShareAlike — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original.

No additional restrictions — You may not apply legal terms or technological



Co-funded by
the European Union