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INTEROPERABILITY CHALLENGES IN THE EDUCATIONAL SECTOR IN GERMANY



Organisational and semantical challenges on the diploma SDG use case implementation

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Before we start: user poll (several options are valid)

Who of you knows about the following:

- a) What is interoperability?
- b) What is the SDG regulation?
- c) What is special on educational sector in Germany
- d) What is XHEIE?

What is XHEIE?

Government to Government and Government to Citizen
semantic harmonisation in education sector

See www.xheie.eu for more details (XHochschule in German)

X

X:

prefix denoting standardisation projects implemented through the use of **XML** (Extensible Markup Language)

HEI

Higher Education Institution:

inclusive term to cover all types of education institutions offering tertiary education, not only “universities”

E

Exchange:

Focus on the interoperability of the data being exchanged between the institutions

Challenges on the Organisational layer

Need for Coordination

“Hochschulautonomie”

Constitutionally guaranteed autonomy of HEIs in regards to their self-management



Responsibility is not on federal nor on state level but on HEI level (hundreds of HEIs in Germany)

“time frame”



small number of years to digitise several former paper based processes, many many players (here: that receive a diploma) but not central infrastructure

Legal basis:

German Online Access Act (OZG)

German Digitalisation law requires both federal and State-level institutions to allow digital access to about 5000 administrative services **by 2022**

Single Digital Gateway (SDG)

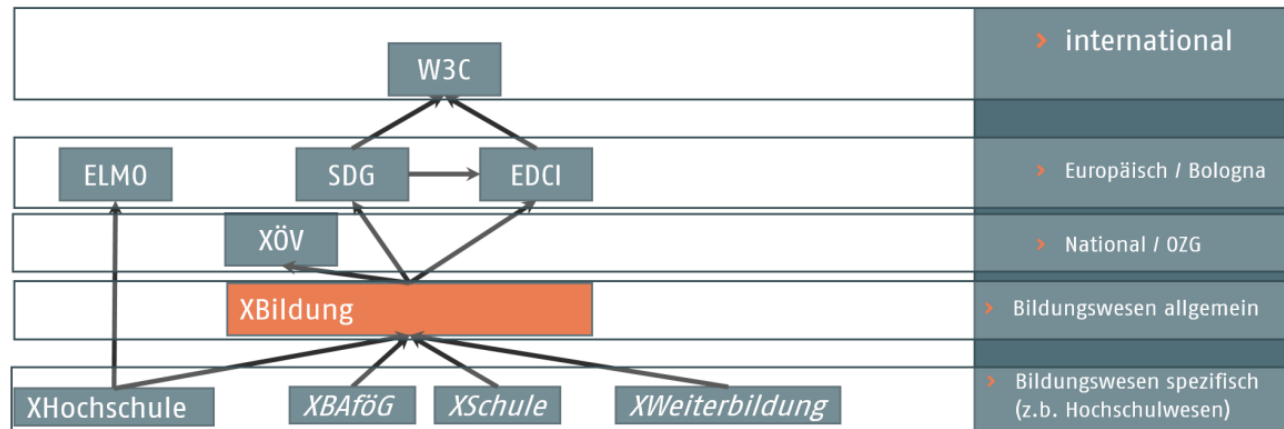
As part of the Digital Agenda for Europe 2020, the SDG regulation requires Member States to realise 21 procedures fully online and cross border, 3 of them in the education sector using cross border evidences (Article 14)

Studying	Applying for a tertiary education study financing, such as study grants and loans from a public body or institution	Decision on the application for financing or acknowledgement of receipt
	Submitting an initial application for admission to public tertiary education institution	Confirmation of the receipt of application
	Requesting academic recognition of diplomas, certificates or other proof of studies or courses	Decision on the request for recognition

Semantical Challenges: Missing common grounds

- Every HEI has its own diploma structure, shape, form, metadata,
- Diploma issued in German (and English) but on paper
- Missing machine readable core data set also for other evidences

- Diploma Supplement,
- Transcript of record
- Certificate of enrolment



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Semantical Challenges: Multitude of EU Specifications

EMREX/ELMO, DG EMPL Europass and DG Education “Erasmus Without Paper” are 3 of the existing specifications / data models in the field of Education in Europe.

ISA² SDG OOP data models in the education sector adds to this.

XHEIE tries to respect this multitude and tries to overcome challenges:

- Include and reuse specifications whenever possible
- Provide mappings between German and EU (Europass or PO) vocabularies
- Participate in the EU working groups, monitor activities and hand in change requests from a Member State point of view
- Involve many stakeholder and be as transparent and open as possible



<https://github.com/SEMICeu/SDG-sandbox/issues?q=is%3Aissue+author%3AXHochschuleDE+is%3Aclosed>

<https://github.com/SEMICeu/Core-Person-Vocabulary/issues/8>

<https://github.com/european-commission-europass/Europass-Learning-Model/issues>

<https://github.com/emrex-eu/elmo-schemas/issues>

Thank you for your attention!



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[XHEIE Diploma use case](#) (YouTube™)

German Workshop
03.02. on
XHEIE, SDG and
Europass

<http://www.xhochschule.de/web/CampusWorkshop2021-2> (Website)



[Recording of the SDG-Webmeeting](#)
September 2020 (YouTube™)

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Standardisierungsstrategie im Hochschulwesen

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[Standardisation Strategy](#)
(PDF)

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