World's Smoothest Cross-Border Mobility and Daily Life Through Digitalisation

Seminar 12–13 October 2022, Helsinki

Nordiska ministerrådet

WORKSHOP

WP1: Studying in another Nordic-Baltic Country (CBDS-Study)

13 October 2022

Nordiska ministerrådet

Workshop agenda 13.30–15.30 (WP1)

13:30

Welcome to the workshop

14.00

Interdependencies and preferences in the context of European digital initiatives

14:30

Small break

14:40

Input to the handbook on cross-border data exchange

15:10

Wrap-up

15:20

End of the workshop

15:30

Brief summary of the day

Workshop Goals

1. Discuss interdependencies and preferences in the context of European digital initiatives, e.g. SDG, EUDI Wallet, DC4EU
2. Give input to the handbook on cross-border data exchange
3. Enable cooperation at a deeper level between Nordic and Baltic partners

Cross-Border Mobility
Baseline study publication seminar
30.11.–1.12.2021

WP1: Studying in another Nordic-Baltic Country

GOALS

- Discuss the baseline study findings
- Build common understanding
- Start a concrete collaboration

THIS PROJECT CAN BE A "PUSH" FOR DEVELOPMENT ON EUROPEAN LEVEL, TOO!

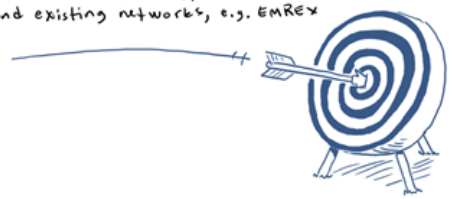
"Student data flows with a person whenever wanted and it is always accessible."
(DREAM)

VISION

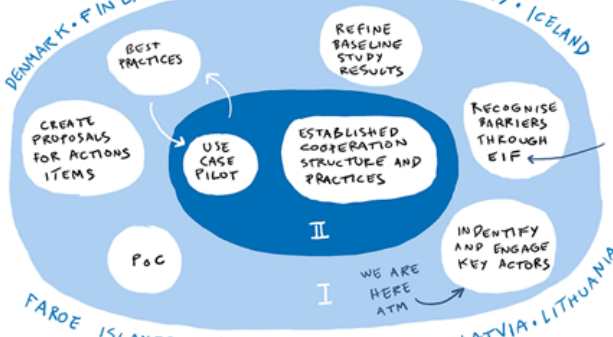
"The Nordic region will become the most sustainable and integrated region in the world in 2030."

PROJECT AIMS 2021-24

- Identify obstacels and create recommendations
- Build a Proof of Concept
- Expand existing networks, e.g. EMREX



DENMARK • FINLAND • ÅLAND • SWEDEN • NORWAY • ICELAND

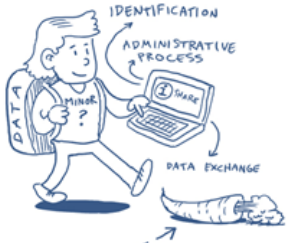


FAROE ISLANDS • ESTONIA • GREENLAND • LATVIA • LITHUANIA

USE CASE SCENARIO

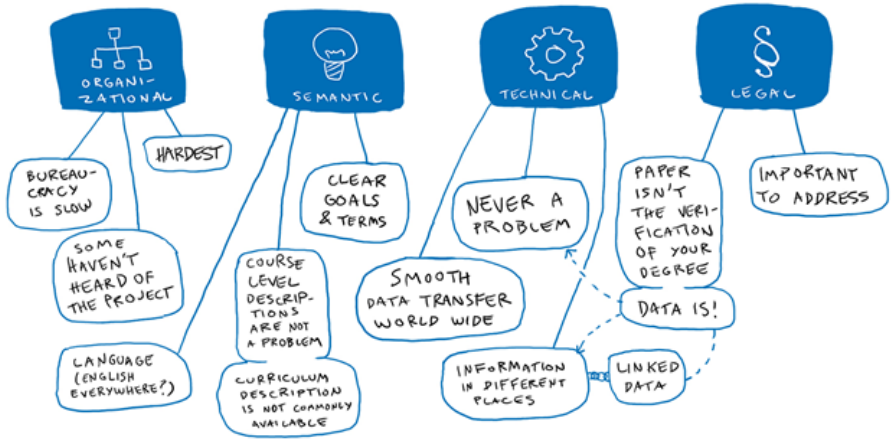
1. Learner applies for studies through the application system
2. Learner shares their previous study record data by using an electronic data exchange solution

→ The youth is three times more capable of using these services
→ They are also impatient and need to be motivated



ROUND TABLE DISCUSSION

WHICH SECTION OF THE EIF SHOULD WE PUT THE MOST EFFORT TO?



STUDY DATA AVAILABLE (Upper Secondary)

+ Machine readable
- Descriptive information in English

EMREX TRANSFERS

→ WHAT? Decentralized system used for transferring study credits internationally
→ Utilizes the ELMO xml schema
→ 2 (+1) system components:
  - EMREX client Emc
  - Data access point EMP
  (- EMREG)

EMREX.eu & EMREX service Finland

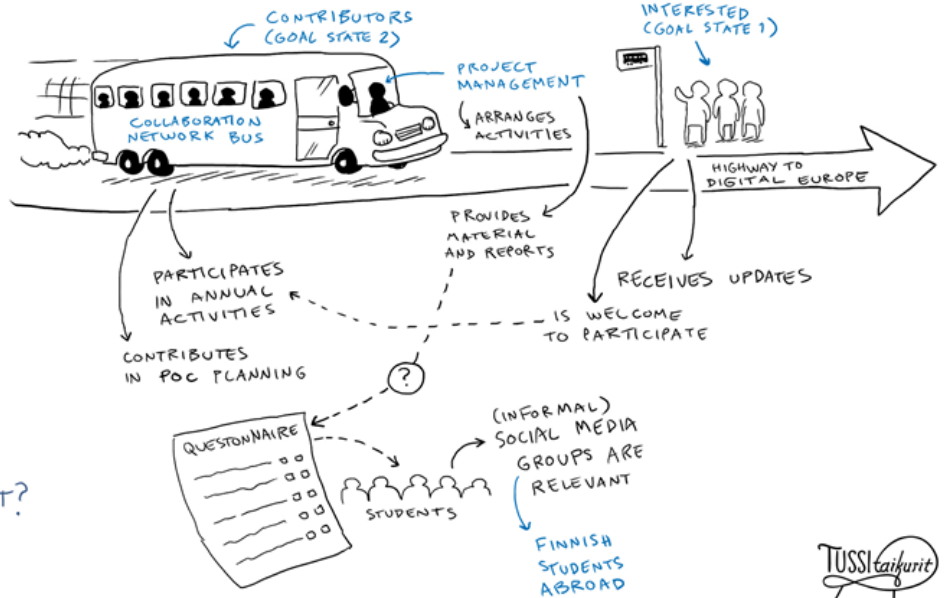
EXAMPLE: EMREX EMP in Finland
- Uses national VIRTA student information database
- Student is in control of data
- Most data is Finnish HEI's

COMMENTS & QUESTIONS

- what about countries that are not in the system?
  → we would need data converters
- in Norway we use EMREX for job recruitment
  (200 million NOK saved yearly)
  ↳ (20 million €)

REFLECTIONS FROM DAY 1

EXPECTATIONS FOR FUTURE COLLABORATION



Nordic Council of Ministers

TUSSI taikurit

Studying in another Nordic-Baltic country (CBDS-Study) in a nutshell

Name: The project is called Studying in another Nordic-Baltic country (CBDS-Study). It's also a part of Finland's presidency project of the Nordic Council of Ministers.

Goal: The project aims to fluent student record data exchange between the Nordic and Baltic countries by improving interoperability of existing digital systems and data.

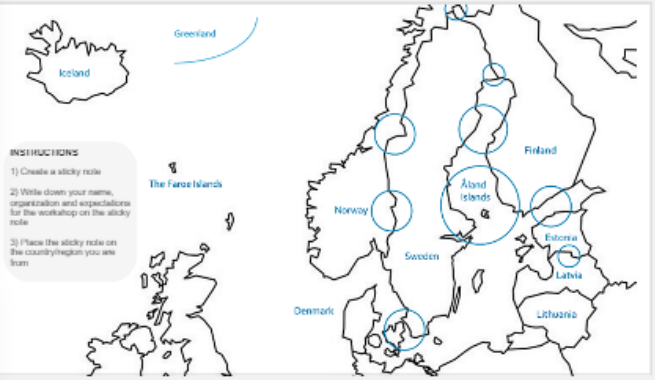
Use case example: For example, when a person moves from Estonia to Sweden, she/he can transfer her/his study records electronically and in machine-readable format from an Estonian HEI to a Swedish HEI.

Currently in progress:

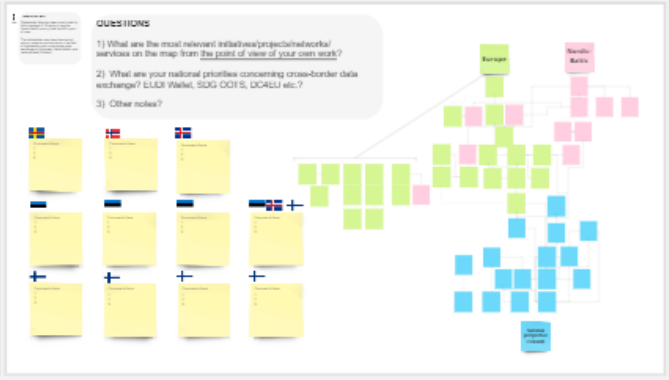
- Working on interdependencies e.g. SDG, EUDI Wallet, DC4EU
- Creating a handbook on cross-border data exchange
- Expanding a good practice called EMREX data exchange solution.
- Investigating machine translation possibilities in descriptive student record data e.g. learning outcomes/objectives.
- Cost-benefit analysis

An overview of working with the MIRO board

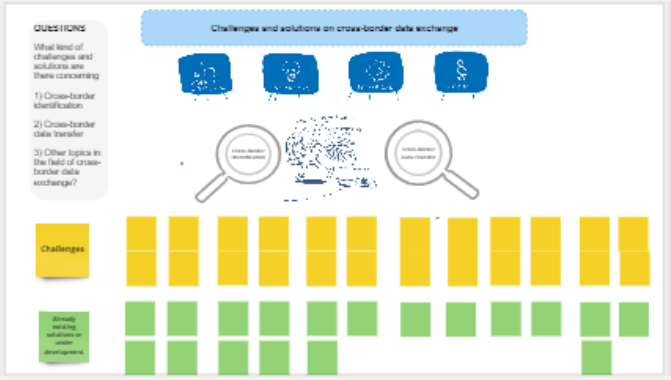
Frame 1 **CHECK-IN**



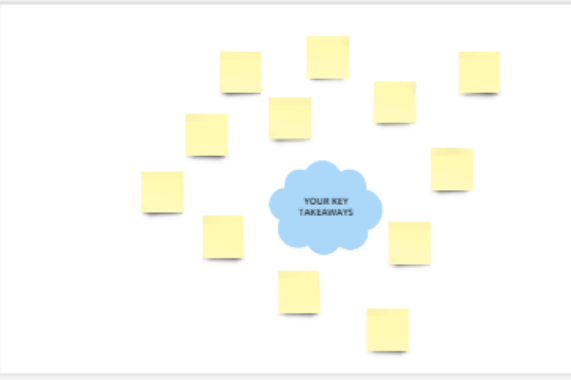
Frame 2 **STAKEHOLDER MAP**



Frame 3 **HANDBOOK**

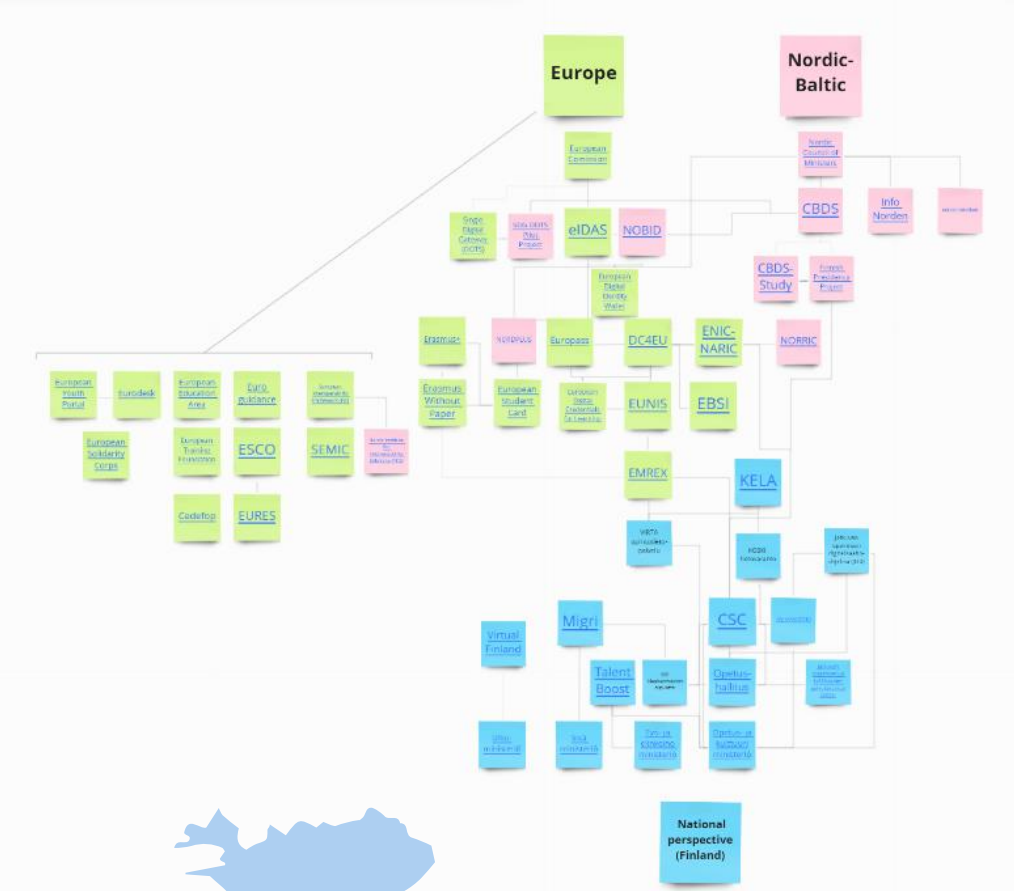


Frame 4 **CHECK-OUT**



Interdependencies and preferences in the context of European digital initiatives

Stakeholders Map (Miro)



1) What are the most relevant initiatives/ projects/ networks/services on the map from the point of view of your own work?

2) What are your national priorities concerning cross-border data exchange? EUDI Wallet, SDG OOTS, DC4EU etc.?

3) Other notes?

Input to the handbook on cross-border data exchange

Organizational

Organizational interoperability refers to the way in which public administrations align their business processes, responsibilities and expectations to achieve commonly agreed and mutually beneficial goals

Technical

Technical interoperability factors cover the applications and infrastructures linking systems and services

Semantic

Semantic interoperability ensures that the precise format and meaning of exchanged data and information is preserved and understood throughout exchanges between parties

Legal

Legal interoperability is about ensuring that organizations operating under different legal frameworks, policies and strategies are able to work together

Factors slowing, constraining, or preventing cross-border data access and exchange

- Differences in school systems between countries
- **Motivation for change and willingness to put money and effort into joint solutions varies between countries**
- Existing and outdated organizational processes and structures in countries do not support automated solutions cross-border data exchange
- Autonomous information management inside countries, responsibility is spread and uncertain

- **Different levels of digital maturity**
- **Different systems, data models, formats, solutions, database structures**
- Digital **data does not exist** or is not in machine-readable format
- No technical knowledge

- Lack of understanding other Nordic and Baltic languages
- Lack of translations
- **Lack of shared vocabulary**
- Lack of agreed formats and standards
- **Lack of descriptive data**
- **Different concepts and meanings**

- **Regulations that limit data transfer**
- **Regulations that define ownership of the data**
- Need for changes in legislations
- Different recognition of qualifications

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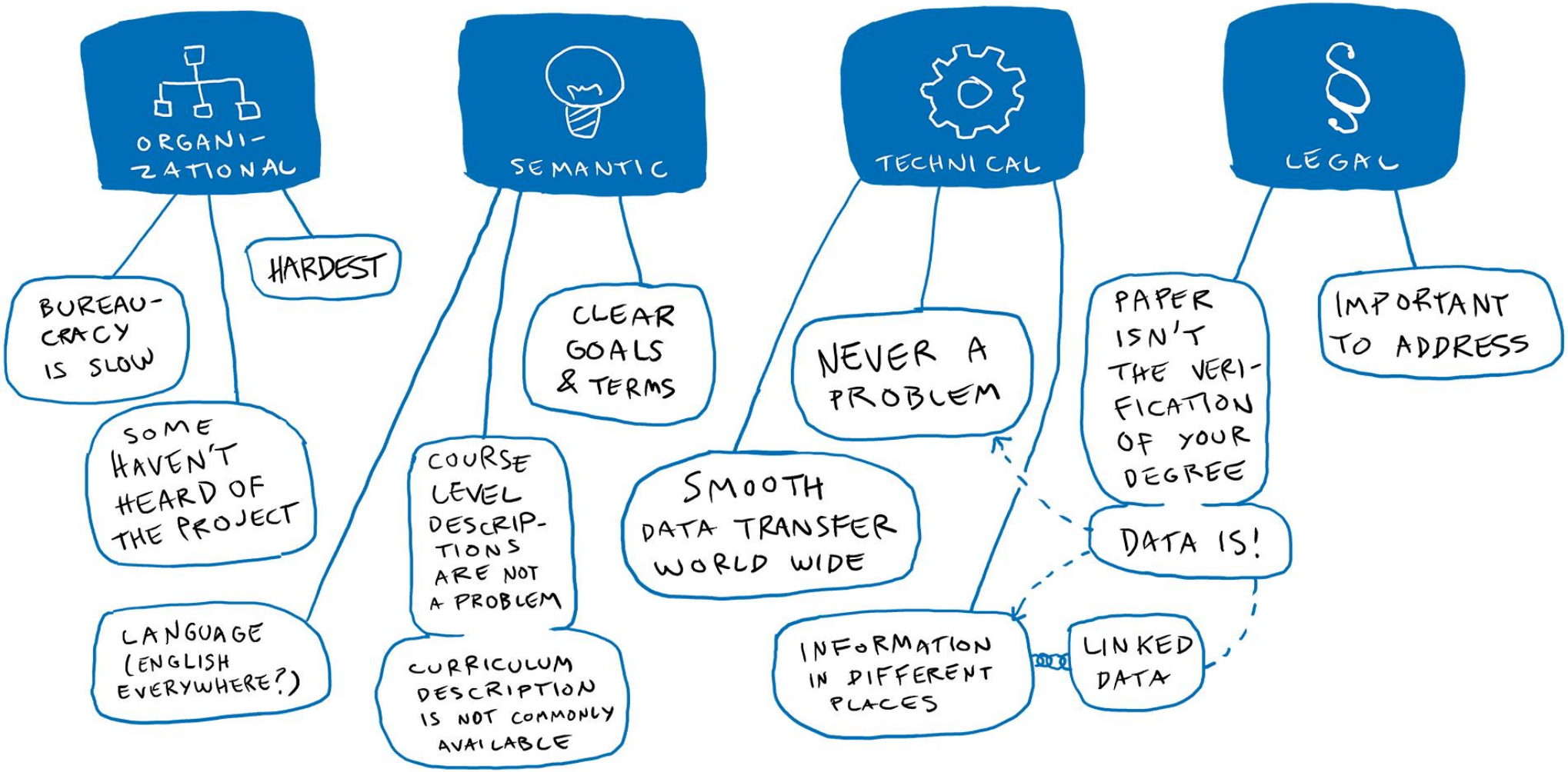
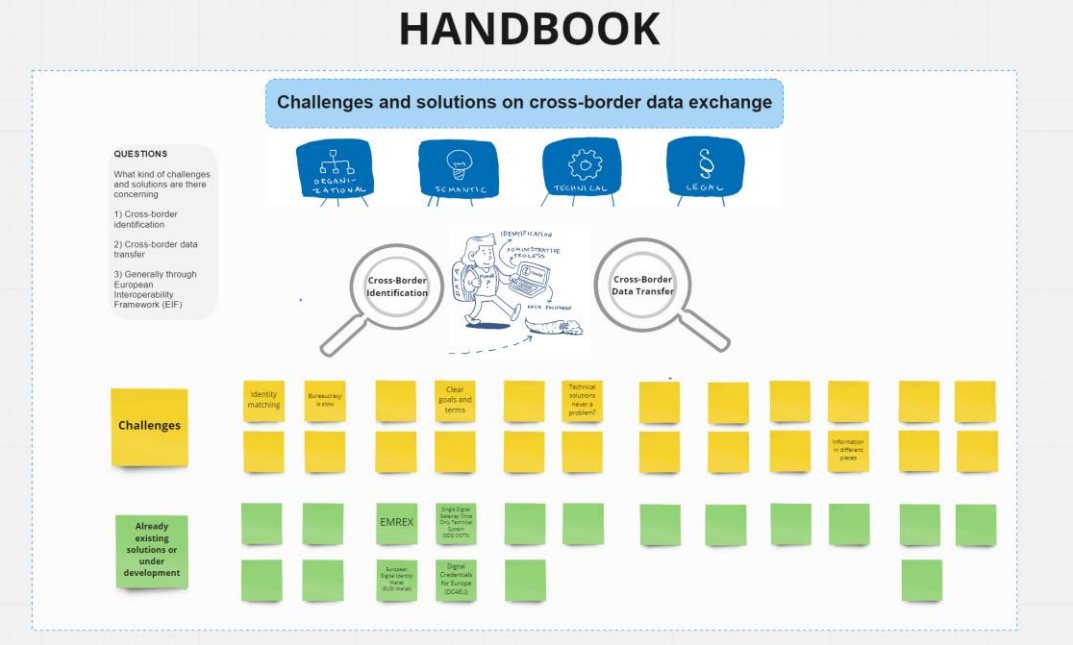


Handbook on Cross-Border Data Exchange (Miro)



What kind of challenges and solutions are there concerning

1) Cross-border identification
2) Cross-border data transfer
3) Other topics in the field of cross-border data exchange?

Achieving the World's Smoothest Cross-Border Mobility and Daily Life Through Digitalisation

WP 1 / 13.10.2022

INTERDEPENDENCIES & PREFERENCIES

CBDS-study

- 2 years running
- aiming at fluent student record data exchange
  - interdependencies (SDG, EUDI wallet, DC4EU...)
  - handbook
  - expandig good practices

EUROPEAN INTEROPERABILITY LANDSCAPE REPORT

EU: eDelivery = one & only
→ Nordic-Baltic needs to push it to make this a standard (ASAP)

"pretty well integrated on national level"

"student mobility is highly prioritised"

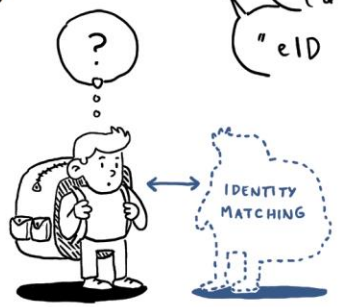
"we need proper systems (KOSKI)"

"First goal is ET send certificate" (estonian → english translation needed)

"VIRTA - achievement registry (database for KOSKI)"

"eID is in the making"

§ LEGAL ISSUES CAN TAKE YEARS
NATIONAL – EU – INTERNATIONAL
↓
– EU legislation being unified might speed things up a bit

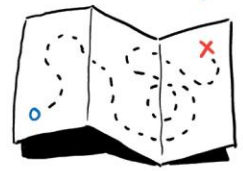


KEY TAKE-AWAYS

- similar challenges → coordination
- sharing status updates & info
- create clear goals
- identify common capabilities

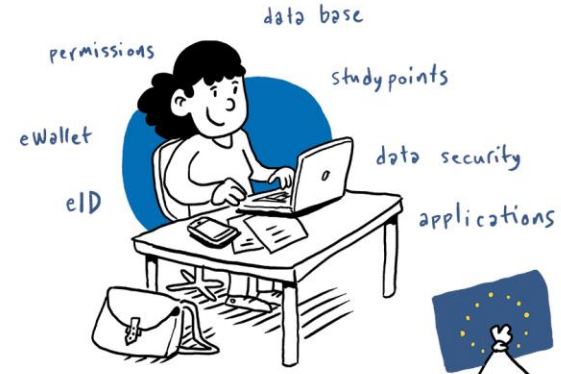
CROSS-BORDER DATA EXCHANGE

WHERE ARE WE NOW?



WE HAVE:
- banking solutions
- EU data strategy
- EMREX
- EUDI wallet
- DC4EU
- SDG OOTS → eDelivery

CHALLENGES:
- semantics
- language
- goals and terms



WHAT ARE THE PROBLEMS WE ARE TRYING TO SOLVE?
- who is the business owner?

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MARKERwizards

Next Steps

- We will continue investigating the expansion of already existing networks e.g. EMREX
- The feasibility of machine translation will be studied in 2022, and it will also be examined which machine translation tools could be useful in the translation of study record data e.g. learning outcomes (read more here).
- Cost-benefit analysis

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Thank you!