

EMREX in your wallet

Tor Fridell,

EMREX user group Executive committee



The digital decade of EU

European Commission ambition for 2030:

- 100% of Union citizens have access to a secure electronic identification recognized throughout the Union, enabling users' full control over identity transactions and shared personal data
- Creation of a European Digital identity
 - Free to be used by all citizens
 - Accepted everywhere, by public and private sector
 - Secure and privacy oriented
- Decision to specify EUDI Wallet (eIDAs 2)
 - Personal identification data
 - Qualified Electronic Attestations of Attributes such as education credentials, professional certifications, driving license etc.
 - User centric, "self sovereign identity"
 - Standards based
 - Architecture and Reference Framework (ARF)
 - Verifiable Credentials (VC)



Means to achieve goal

4 large scale pilots

- Potential
 - Government services, bank account, SIM-registration, driving license
- DC4EU
 - Educational and professional qualifications
 - Social security
 - Health insurance card
- EWC
 - Travel credentials
 - Payments
 - Legal persons
- NOBID
 - Payments cross-country and cross-sector

Total budget 90 Million €



DC4EU

- 2 year project, budget \approx 20 million €
- Spanish lead consortium
- Consists of 43 Public stakeholders and 50 private entities from 22 states
- The project Kicked off April 1st 2023



DC4EU

- **Main objectives**

- Test interoperability and scalability in the national domain and multiple cross-border contexts
- Provide feedback to the European Commission (EC) and MSs for iterative updates
- Comprehensive wallet testing using Qualified Electronic Attestations of Attributes (QEAA), Electronic Attestations of Attributes (EAA) and credentials, and their national and cross-border functionalities in a pre-production environment.
- The European Digital Identity Wallet (EUDIW) will be a fundamental element of hybridization for cross-sectoral and cross-border use cases



DC4EU use cases

- Educational credentials formal qualifications issuance: Primary, secondary, tertiary education
 - Request secondary degree to apply to tertiary education
 - Request bachelor degree to apply to Master education
 - Request transcript to move from secondary school to secondary school
 - Request microcredentials/Transcript of Records issuance
- Professional qualifications
 - Doctor, engineer, TVET
- Social security
- Health insurance

Get on with it!

Time to introduce EMREX



What is EMREX

- A network where a student/former student can access their assessment data, and share these data with a third party, like another university.
- Transcript of records, Diplomas and Diploma Supplement
- Both as machine readable data and as pdf
- User driven, student centered, adheres to Digital Data Sovereignty, "own your own data"
- Open network – result owner grants access
- Open source code
- Building block: uses local infrastructure, integrates in other services and processes



EMREX use cases

- Erasmus mobility
- Admission
- Recruitment systems
- Lifelong learning portfolios (like Europass)
- Professional licenses
- Automation of processes (like recognition)
- Exchange of data within European Universities Alliances.



EMREX Characteristics

- User driven, student centered
- “Own your own data”
- Standard driven
- Open network: everyone can participate
- Distributed network
- GDPR-compliant by design

This means:

EMREX is very similar to OOTS (SDG-regulation)

EMREX is similar to the notion of EUDI wallet



Easy choice...

- The future eID in Europe is based on EUDI wallet
- EUDI wallet supports many of EMREX use cases
- EMREX-network already exists and can easily be connected to the wallet ecosystem
- The wallet would immediately get access to a user base via the EMREX nodes
- The EMREX network would benefit of an increased user base via the wallet



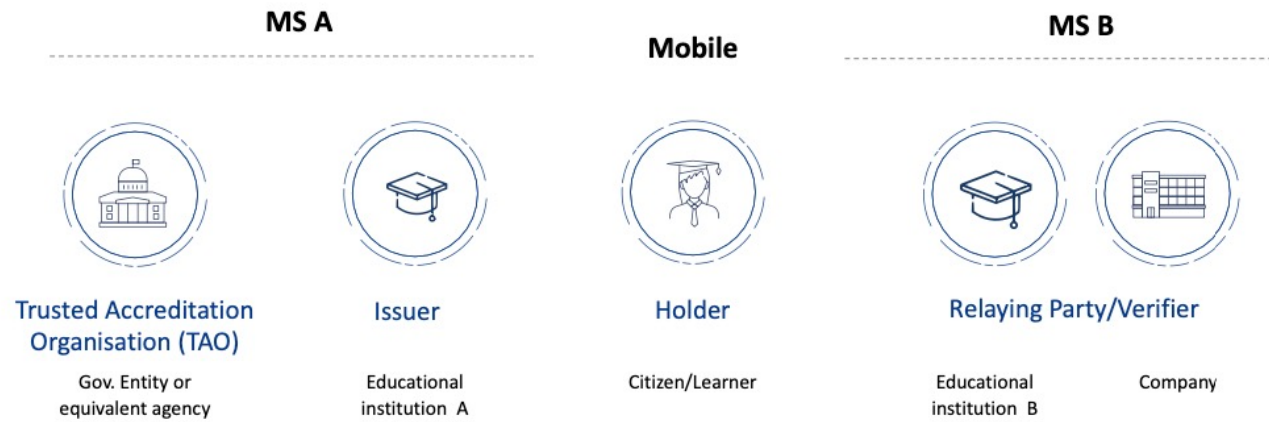
So...

- Strategic decision was taken by EMREX Executive Committee to aim for a wallet solution
- Large Scale Pilot project suitable way forward
- Some Emrexians joined the DC4EU-project
- Goal to connect EMREX to the wallet via a gateway



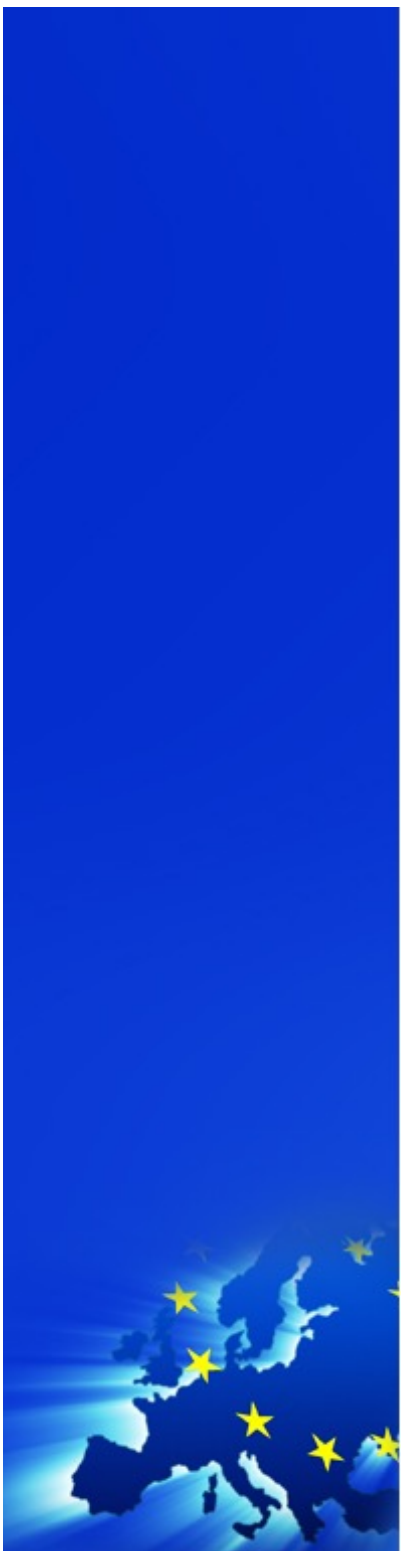
Simple wallet solution

Example on education domain



Important considerations

- Trust!
- Authentic sources
 - Qualified providers of electronic attestations of attributes
- Legal validity in all MS
 - Cross border recognition of information
 - Equivalence principle
 - Non discrimination principle
- Many parties involved
 - Issuers
 - Wallet providers
 - Relying party
 - Identity provider
 - Attestation provider
 - Accreditation bodies



Specific tasks in WP5

Relating to educational credentials

- ELMO to ELM converter
- eduGAIN gateway
- EDSSI gateway
- EMREX gateway
- EWP – OLA-connectivity
- OpenBadges to ELM converter
- Europass & EDC alignment



Final remarks

- If you join EMREX-network now you will have an entrance to the wallet (and an entrance to OOTS; Single Digital Gateway)



Tor Fridell

Chair of EMREX user Group Executive Committee

tor.fridell@liu.se

+46 708 861414

