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Digital ID/EU Public Services

Jun 15, 2023

Agenda

- eIDAS
- eIDAS review
- Large Scale Pilots
- Digital Credentials for Europe (DC4EU)
- Challenges for educational institutions

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eIDAS

eIDAS 1 limitations

- eIDAS 1: **inherent limitations** to the public sector; limited possibilities and complexity for online private providers to connect to the system; insufficient availability of notified eID solutions in all Member States; lack of flexibility to support a variety of use cases

- **Identity solutions falling outside the scope of eIDAS** (social media providers and financial institutions), raise privacy and data protection concerns, and do not have cross-border recognition

- eIDAS review started by end of 2021

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eIDAS review highlights (I)

- Extends **beyond identity,** introducing **electronic attestation of attributes (EAA)**

- **Public** and **private sector. Natural** and **legal persons**.

- **All MS** are mandated to issue European Digital Identity Wallet (EUDIW) including Personal Identification Data (PID)

- That these solutions are linked to a variety of attributes and allow for the targeted **sharing** of identity data **limited to the needs** of the specific service requested.

- The user shall be **in full control** of their identity(es) and data.

- The issuer shall **not collect information about the usage**

- Obligation of admission
    - by **public sector entities** and by **private providers** (in the areas of transport, energy, banking and financial services, social security, health, drinking water, postal services, digital infrastructure, **education** or telecommunications).
    - by **very large online platforms that require authentication**.

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eIDAS review highlights (II)

- **Cross border recognition principle**:
  - A qualified electronic attestation of attributes issued in one Member State shall be recognised as a qualified electronic attestation of attributes in any other Member State.
  - An attestation of attributes issued by or on behalf of a public sector body responsible for an authentic source shall be recognised as an attestation of attributes issued by or on behalf of a public sector body responsible for an authentic source in all Member States.

- Member States shall **ensure** that, **at least for the attributes listed in Annex VI,** wherever these attributes rely on authentic sources within the public sector, measures are taken to allow qualified providers of electronic attestations of attributes to **verify** by electronic means at the request of the user, the **authenticity** of the attribute directly against the relevant authentic source at national level or via designated intermediaries recognised at national level in accordance with national or Union law.

- **Annex VI attributes**: Address; Age; Gender; Civil status; Family composition; Nationality; Educational qualifications, titles and licenses; Professional qualifications, titles and licenses; Public permits and licenses; Financial and company data.

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- Architecture Reference Framework (ARF)
  - Set of actors, roles, processes and procedures to define a trust framework for a sectorial domain
  - 3 key roles (for HEIs): authentic source, issuer of electronic attestations of attributes, issuer of qualified electronic attestations of attributes

- European Digital Identity Wallet
  - Personal Identification Data
  - Electronic Attestations of Attributes
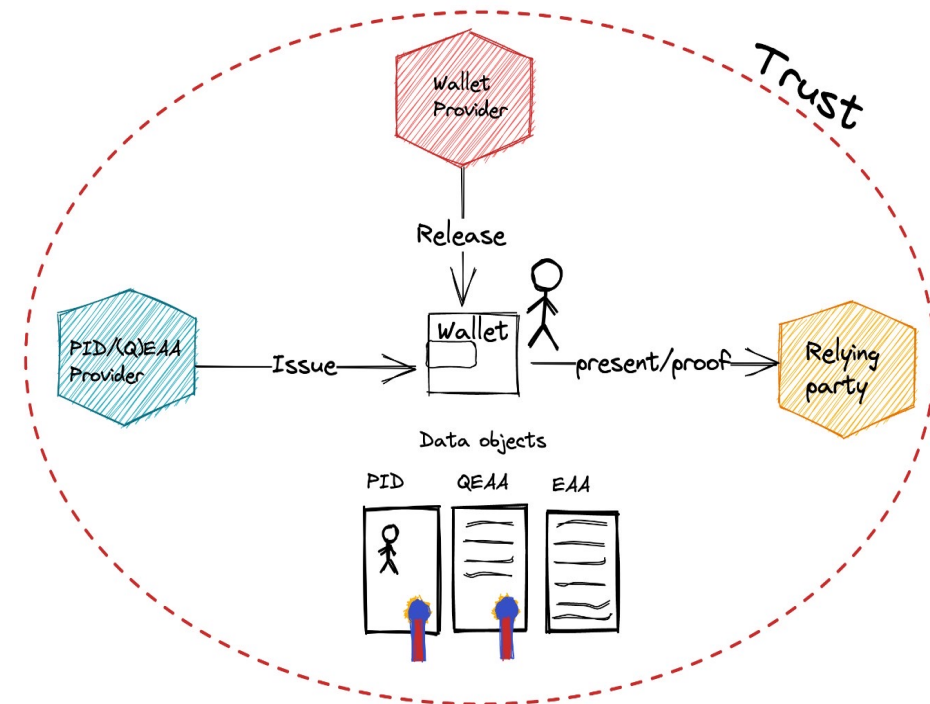
What really matters are the trust frameworks

- Governance trust model for education and professional qualifications
  - One jurisdiction
  - Several jurisdiction domains
  - How existing trust frameworks will be mapped on a Decentralized paradigm? (e.g. MyAcademicID)
- How different types of educational institutions are recognized as such in each MS?
- What unique schemes will be used to ensure real cross-border interoperability?
- What security procedures/schemes apply?
- What quality assurance regimes apply?
- How existing regulation must be evolved?

- What technical conditions must be in place?
- How data must be curated?
- What are the conditions for an educational institution to be an authentic source?
- What type of agreements/contracts must be in place for an authentic source to contract a provider of EAAs?
- What are the conditions for an educational institution to be a provider of EAAs?
- What are the conditions for an educational institution to be a provider of QEAAs?
- What are the legal and technical conditions for verifiable credentials?

(non exhaustive list)

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eIDAS review: an iterative process

Legislative Process

- Negotiation of the proposal for the revision of the **eIDAS regulation** underpinning the EUDI Framework

Wallet Technical Specifications

- Member States and the Commission are in the process of establishing a **common toolbox** consisting of an **architecture and reference framework,** common standards and specifications and guidelines and best practices for the EUDIW

Large-scale Pilots

- **Grants** under the Digital Europe Programme for l**arge-scale pilots around use-cases** for the EUDIW including mobile driver licences, ePayments, eHealth and educational/professional qualifications

Wallet Reference Implementation

- Procurement of a **reference implementation** of the EUDIW based on the technical specifications agreed by the toolbox.

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Large Scale Pilots

20 countries

56 public and 80+ private entities

Use cases:

Electronic Government services, Bank Account opening, SIM registration, mobile driving licence, Remote Qualified Electronic Signature and ePrescription.

22 countries

36 public and 40+ private entities

Use cases:

Educational credentials and professional qualifications, Portable Document A1 (PDA1), European Health Insurance Card (EHIC).

19 countries

18 public and 40+ private entities

Use cases:

Digital Travel Credentials, Payments, Legal persons

8 countries

6 private and 15 private entities

Use cases:

payments use-cases at both a cross-country and cross-sector level with partners coming from both private and public sector

Total budget: >90 Million (50% EU contribution), >250 Participants,

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Digital Credentials for Europe (DC4EU) is a multinational **consortium**, lead by the Spanish Ministry of Economic Affairs and Digital Transformation and conformed by **80 organizations** from **22 countries** (20 EU Member States + Norway and Ukraine).

The **aim** of the proposal is to develop **large-scale piloting projects** of the **EUDI reference wallet** addressing two use cases in compliance with the EU toolbox process.

The work of the consortium will be carried out during a **two-year period** and will be guided by the **iterative releases** of the EUDI reference wallet.

Total budget = 19.216.899,94 €* distributed from the European Commission in the form of 2 payments

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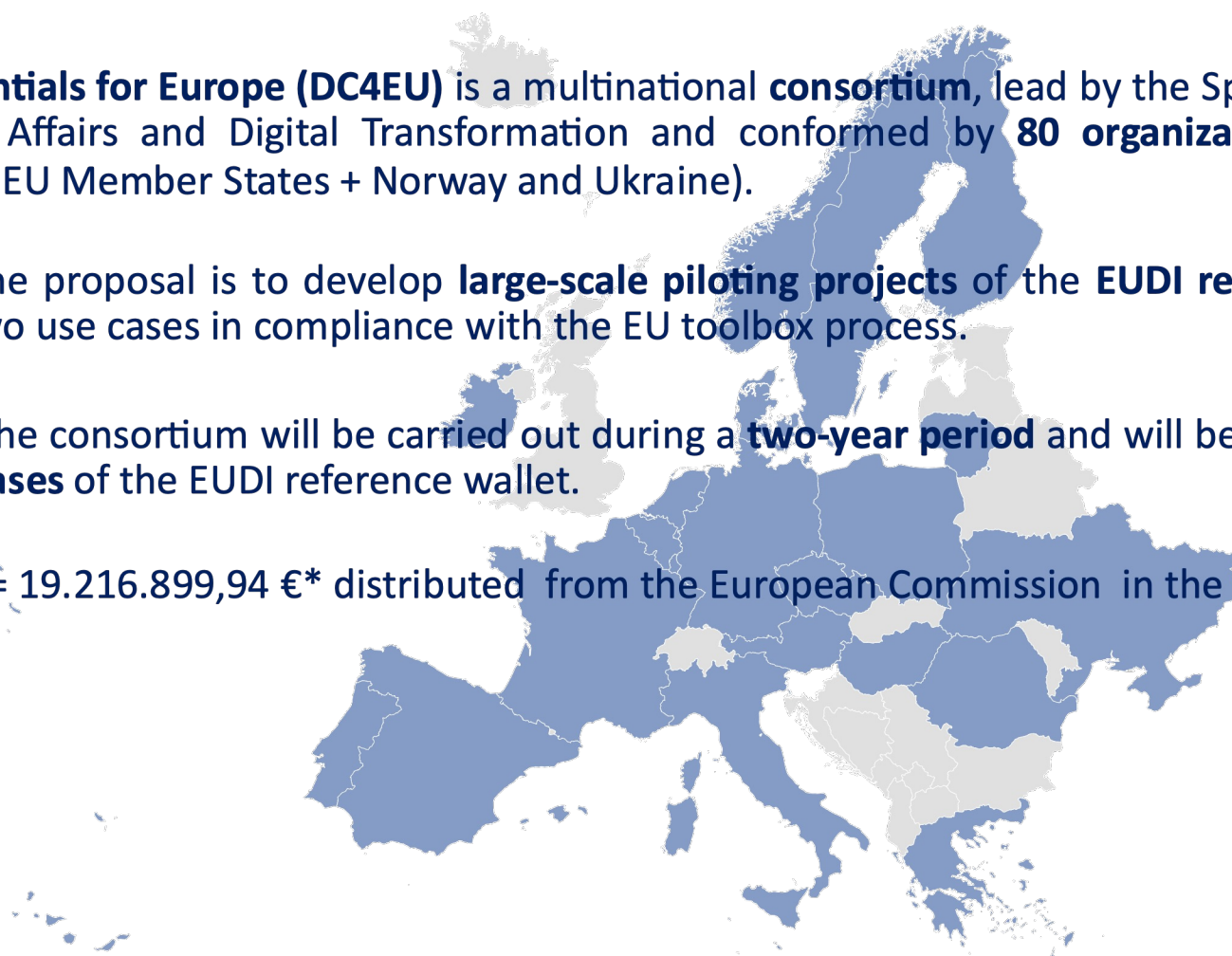
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DC4EU foundation

Verifiable credentials, European self-sovereign identity framework, electronic ledger (as defined by EBSI)

The **EUID wallet is a hybrid solution** to bridge both worlds (**centralized / federated / distributed & decentralized**).

Enhanced data lifecycle due to **verifiable credentials usage.**

Using EBSI as trusted registry (trusted source) to support governance, actors, roles, etc.

ADVANTAGES

- **Enhanced privacy**

- **Trust service providers cannot receive Information about the use of atributes**

- **Easy way to store ID atributes**

- **Easy mechanism to create trust in relying parties**

- **More resistant to correlation and data exploitation**

- **Trusting Information outside the own business domain**

- **Allows management of multiple citizens identities**

- **Enhance security**

- **Sustainability**

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DC4EU domains

Social Security

- ✓ **PDA1 (Portable documents A1)**
- ✓ **EHIC (European Health Insurance Card)**

Education

- ✓ **Educational credentials to support lifelong learning**
- ✓ **Non-foundational IDs**
- ✓ **Professional qualifications**

Link between Educational and Social Security:

student's onboarding journey will link to EHIC's onboarding.

DC4EU impact (education)

- Request secondary degree to apply to tertiary education

- Request PID and Bachelor to be issued with professional qualification accreditation

- Request bachelor degree to apply to Master education

- TVET

- Request transcript to move from secondary school to secondary school

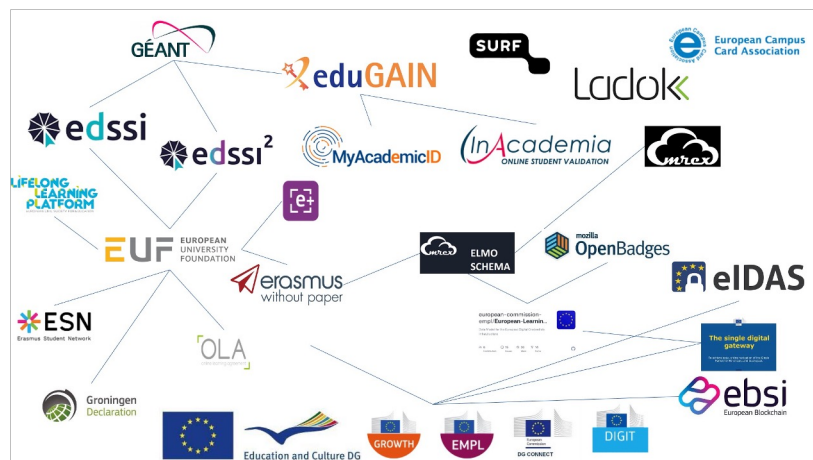- Request micro credentials issuance

- European Student IDentifier

- MyAcademicID

- InAcademia

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DC4EU impact (education)

EUDI Wallet

- ELMO to ELM converter
- Open Badges to ELM converter
- eduGAIN gateway
- EMREX gateway
- Erasmus gateway
- eIDAS gateway
- Europass & EDC alignment

Challenges for universities (educational institutions)

1. Universities as authentic sources and issuers of (Qualified) Electronic Attestations of Attributes ⇔ The autonomous university

2. Universities as authentic sources ⇔ Must give access to certified issuers of (Qualified) Electronic Attestations of Attributes

3. NRENs on behalf of universities ⇔ The perfect alliance?
   a) NREN as an authentic source on behalf of the universities
   b) NREN as a trusted issuer of electronic attestations of attributes on behalf of the universities
   c) NREN as a qualified trusted issuer of electronic attestations of attributes on behalf of the universities
   d) …

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