certSIGN®

EU Digital Identity
Wallet

certSIGN

TRY IT NOW!

EU Digital Identity

Wallet

Agenda

1. European Digital Identity Wallet (EUDIW) Framework
2. How to use EUDIW in financial sector
3. EUDIW pilot for education

certSIGN®

Agenda

1. European Digital Identity Wallet (EUDIW) Framework
2. How to use EUDIW in financial sector
3. EUDIW pilot for education

certSIGN®

eIDAS Regulation

Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC

- Electronic Signature
- Other trust services
- Electronic identification

Regulation (EU) 2024/1183 of the European Parliament and of the Council of 11 April 2024 amending Regulation (EU) No 910/2014 as regards establishing the European Digital Identity Framework

- Digital Identity
- EUDIW – European Digital Identity Wallet
- Identity Attributes
- Electronic Attestation of Attributes (EAA)
- New trust services

certSIGN®

EUDIW entry into force

Issuance — **December 2026**

Usage by

- public services — **December 2026**
- transport, energy, banking, financial services, social security, health, drinking water, postal services, digital infrastructure, education or telecommunications — **December 2027**
- very large online platforms

certSIGN®

EUDIW & Financial sector

AML Regulation (Regulation (EU) 2024/1624 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing)

- Secure remote or electronic identification and verification of prospective and existing customers
- Facilitate the remote performance of customer due diligence
- Use the identification solutions as set out in Regulation (EU) No 910/2014

10 July 2027

certSIGN®

Where to use EUDIW?

- European Digital Identity Wallet for Natural Persons
- European Digital Identity Wallet for Legal Persons

- Present identity attributes
- Authentication
- Create Qualified electronic signature/ seal
- Payments
- …

certSIGN®

Where to use EUDIW?, cont.

Bank / Insurances

- Strong customer authentication (EAA / 100x)
- Payments (QEAA / 100x)
- Proof of insurance (QEAA / 5x)
- Authentication call center (EAA / 5x)

Telecommunication

- Sim card application (PID, QEAA/ 0,3x)
- Authentication call center (3x)

Facility management / Rentals

- Access management(EAA / 200x)
- Physical access (EAA / 400x)

Public sector

- Municipality datacard (QEAA / 20x)
- Season tickets (EAA / 20x)
- Social pass (EAA / 20x)
- Leisure pass (EAA / 20x)
- Fishing license (QEAA / 10x)
- Instructions on infection protection (QEAA / 5x)
- Permission for street musicians (QEAA / 50x)
- Itinerant trade allowance (QEAA / 50x)
- Volunteering card (QEAA / 10x)

Commerce / retail sales

- Customer card (EAA / 50x)
- Discount voucher (EAA / 10x)
- Checkout/ payments (QEAA, 100x)
- Customer onboarding / registration (10x)
- Age verification (QEAA / 5x)
- Product warranty (EAA/ 10x)

Education

- Pupil IDs (EAA / 25x)
- Student IDs (EAA / 50x)
- E-Learning Certificates (EAA / 5x)
- Library card (EAA / 10x)

Traffic / Public transport

- Season tickets public transport (EAA / 200x)
- Ticket booking (EAA / 25x)
- Cars/ Scooter rental (PID, QEAA / 4x)

Logistic / Supply Chain

- Organisation Identity (ODI, QEAA / 50x)
- Masterdata management (ODI, QEAA, EAA, 50x)
- Supplier onboarding (QEAA, EAA, 50x)
- CO2 - evidence (EAA /, 20x)
- Product pass (EAA / 400x)

Work

- Employee identity card (EAA / 200x)
- Access Management(EAA / 400x)
- Passwordless login (EAA / 1.000x)
- Password reset (EAA / 3x)
- Proof of profession (QEAA / 10x)
- Qualifications / trainings (QEAA, EAA/ 5x)

Tourism

- Check-in (PID, QEAA / 5x)
- Cure & guest card((Q)EAA / 5x)
- Hotel-/ room card (EAA / 14x)
- customer card (EAA / 5x)
- Travel voucher (EAA / 3x)

Media / Social Media

- Passwordless login (EAA / 300x)
- Customer onboarding (EAA / 10x)
- Age verification (PID / 4x)

Leisure

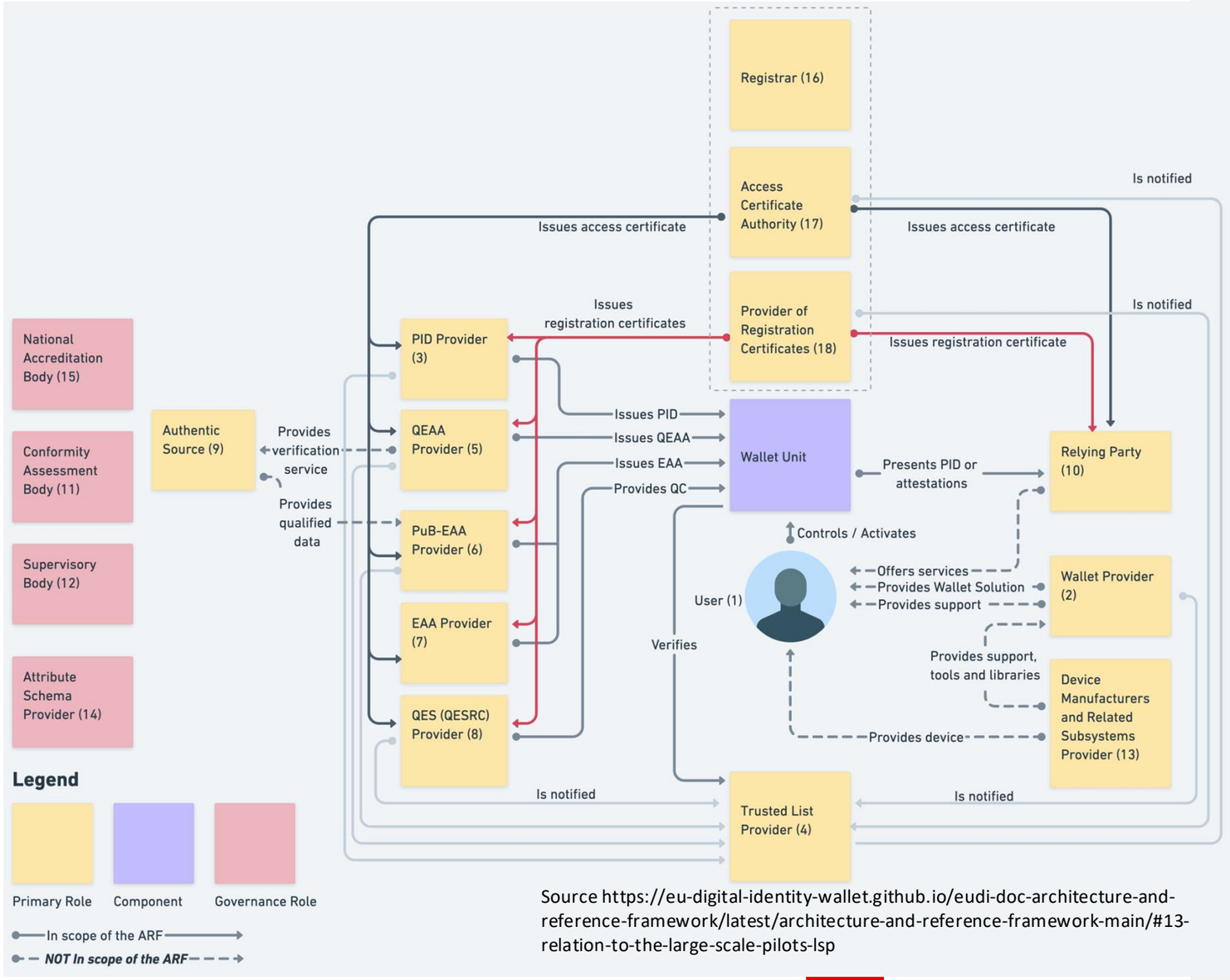
- Membership pass (EAA / 50x)
- Access management (EAA / 50x)
- Event tickets (EAA / 20x)
- Playing-/start allowance (EAA / 20x)

- **Authentication** to public / private services (including SCA for payments)
- **KYC/Onboarding** (banks/telecom/utilities/…).
- **Attributes sharing** (PID, diplomas, mobile driving license - mDL, IBAN, power of attorney, etc.).

certSIGN®

European digital identity framework

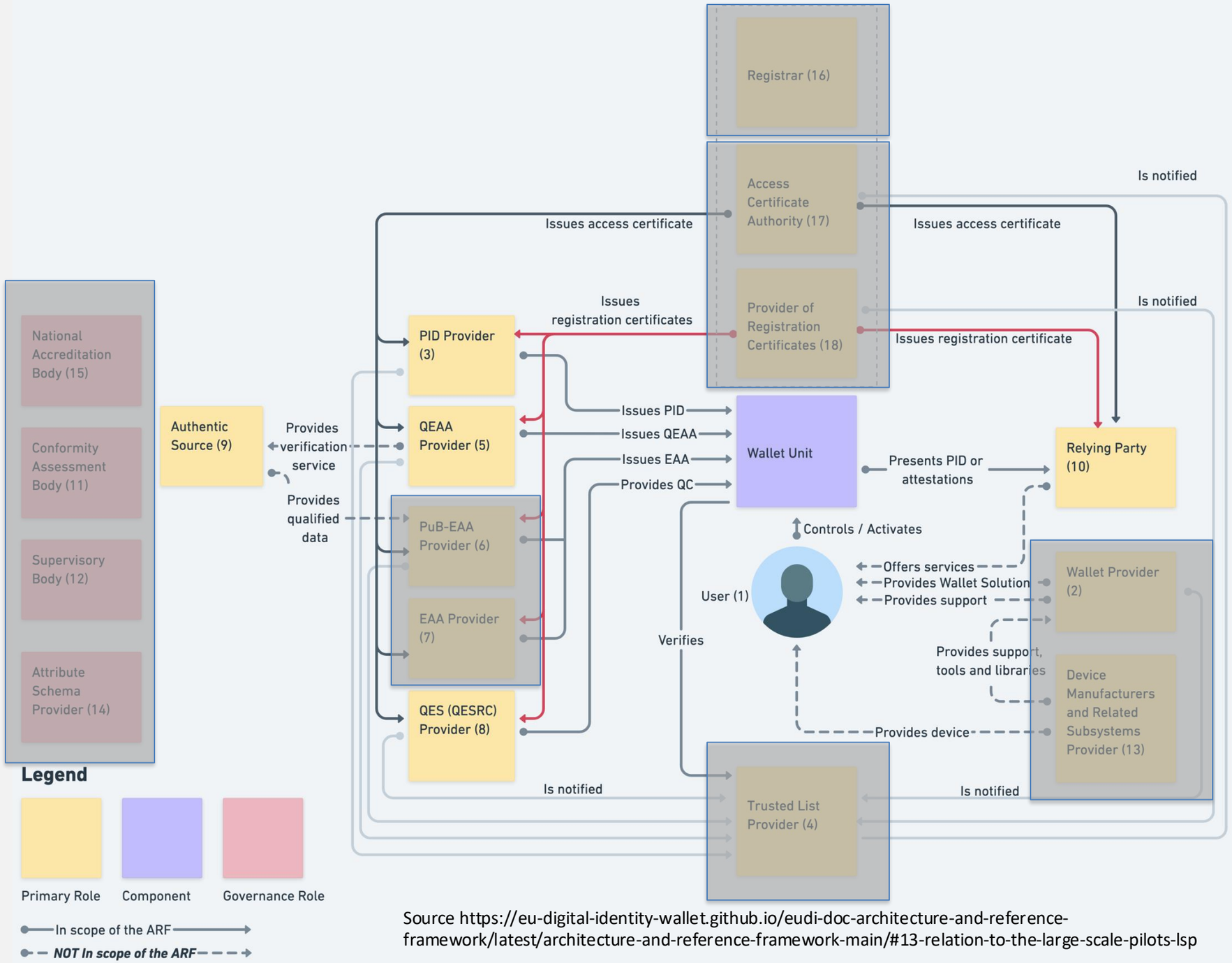
- **Legal**: eIDAS Regulation and Implementing Acts
- **Technical**:
  - Architecture and Reference Framework (ARF)s
  - Standards:
    - ETSI (European Telecommunications Standards Institute)
    - CEN (European Committee for Standardization)
    - CSC (Cloud Signature Consortium)
    - OpenID
    - ...
  - Reference implementation for EUDIW
- **Pilot projects – how to use EUDIW**
  - Large Scale Pilots (LSP) - finalised
    - DC4EU
    - EWC
    - POTENTIAL
    - NOBID
  - Large Scale Pilots (LSP) - current
    - WeBUILD
    - Aptitude



Source https://eu-digital-identity-wallet.github.io/eudi-doc-architecture-and-reference-framework/latest/architecture-and-reference-framework-main/#13-relation-to-the-large-scale-pilots-lsp

certSIGN®

Wallet ecosystem – working environment



Source https://eu-digital-identity-wallet.github.io/eudi-doc-architecture-and-reference-framework/latest/architecture-and-reference-framework-main/#13-relation-to-the-large-scale-pilots-lsp

certSIGN:

- Created the core infrastructure to allow running a pilot with third parties
- Wallet: reference wallet and a private wallet
- PID: certME identity solution from certSIGN
- QEEA, QES: certSIGN
- To be onboarded:
  - Authentic sources
  - Relying parties

certSIGN®

Agenda

1. European Digital Identity Wallet (EUDIW) Framework
2. How to use EUDIW in financial sector
3. EUDIW pilot for education

certSIGN®

Wallet ecosystem – working environment, snapshot

PID

Authentic source

QEAA Provider

QTSP QES

EU Digital Identity Wallet

- PID
- Identity attributes
- Qualified certificate(s)
- …

Relying Party

certSIGN®

PID

Authentic source

QEAA Provider

QTSP QES

EU Digital Identity Wallet

- PID
- Identity attributes
- Qualified certificate(s)
- …

Relying Party

certSIGN®

PID

Authentic source

QEAA Provider

QTSP QES

EU Digital Identity Wallet

- PID
- Identity attributes
- Qualified certificate(s)
- …

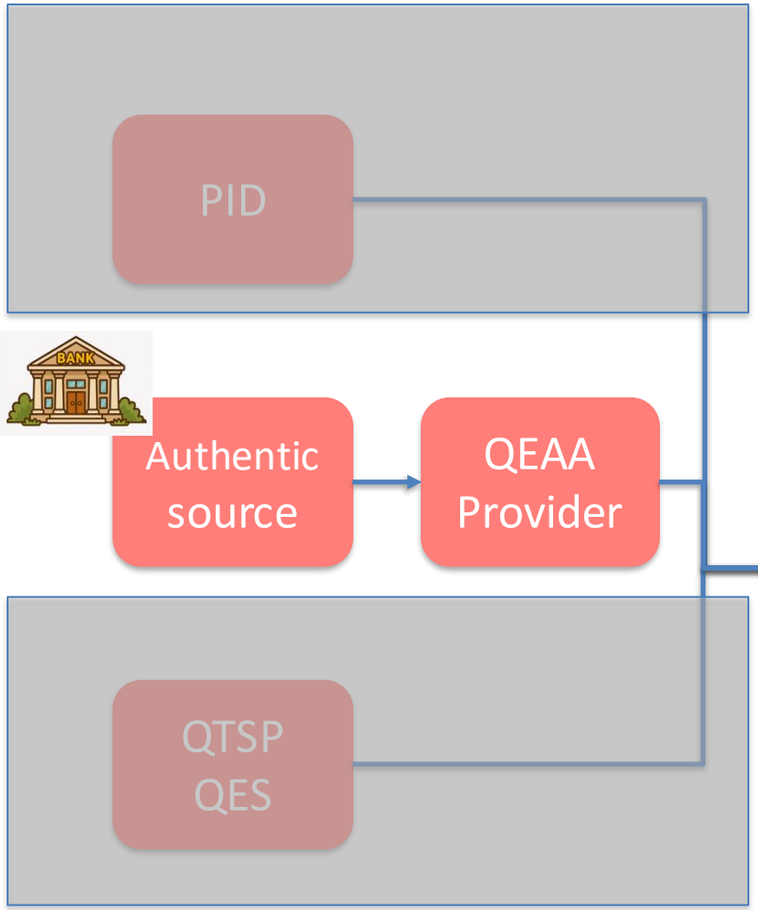
Relying Party

1. Install wallet and obtain PID

- Wallet App
- PID Provider

One time configuration!

certSIGN®



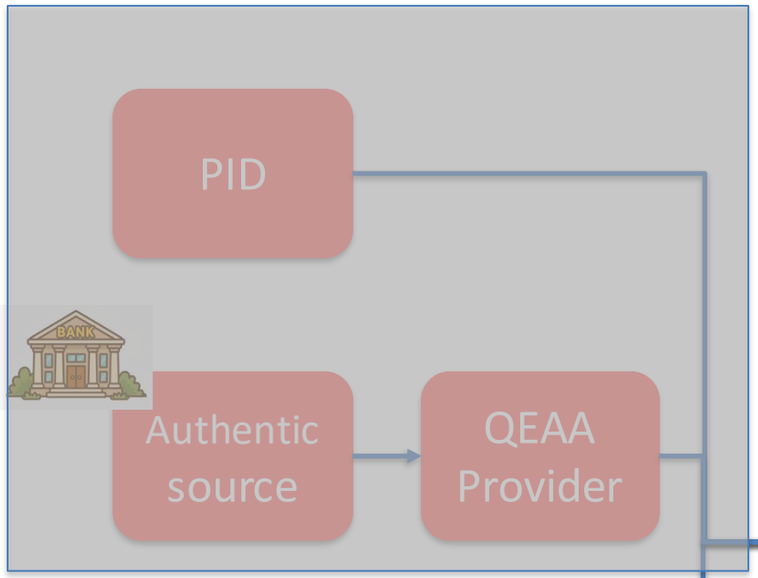
EU Digital Identity Wallet

- PID
- Identity attributes
- Qualified certificate(s)
- …

Relying Party

1. Install wallet and obtain PID	2. Bank Account Opening
• Wallet App • PID Provider One time configuration!	• Banking application • KYC • Open account and issue IBAN

certSIGN®



EU Digital Identity Wallet

- PID
- Identity attributes
- Qualified certificate(s)
- …

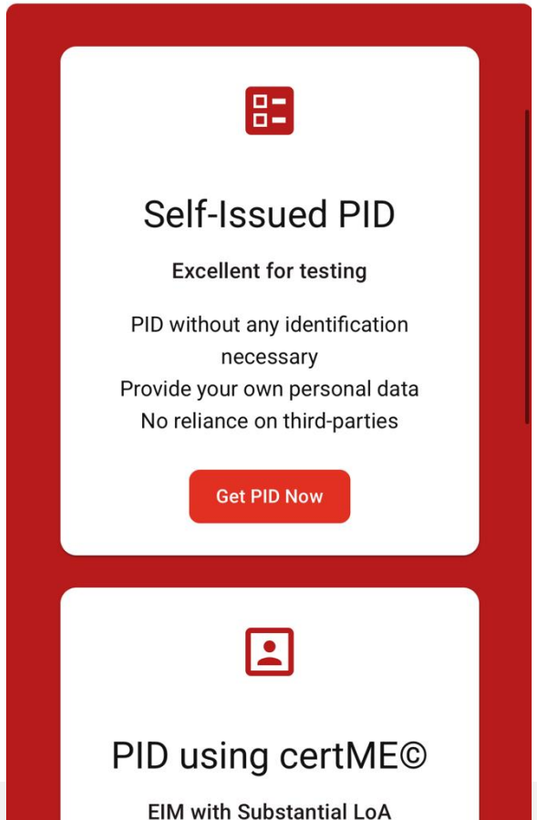
Relying Party

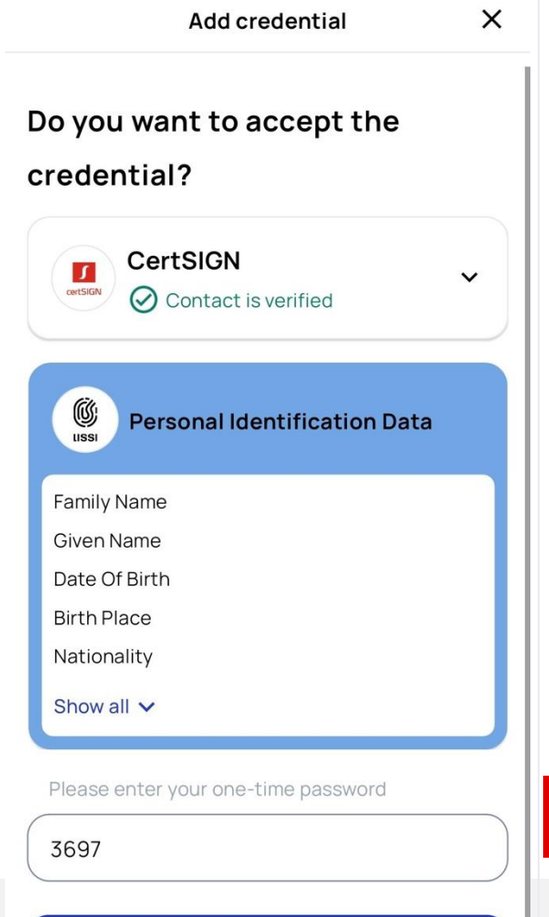
1. Install wallet and obtain PID	2. Bank Account Opening	3. Apply for a loan
• Wallet App • PID Provider One time configuration!	• Banking application • KYC • Open account and issue IBAN	• Banking application • Qualified electronic signature

certSIGN®

1. Install wallet and obtain PID (Personal Identification Data)

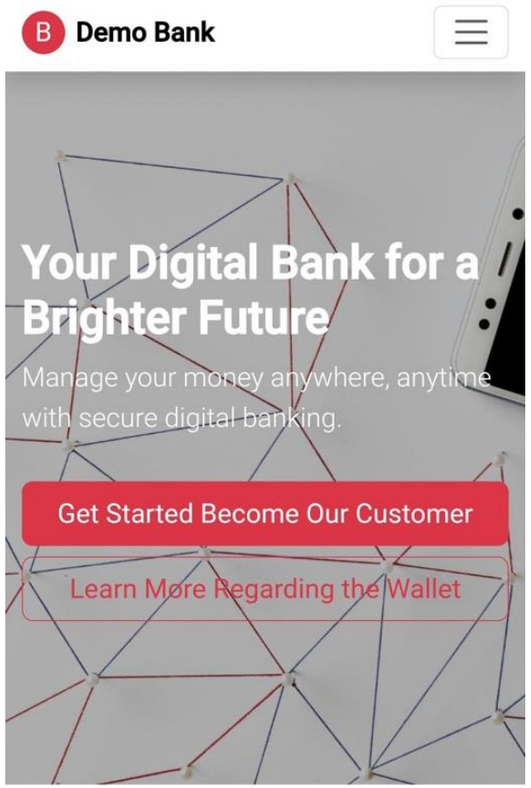
Get your first EU Digital Identity Wallet

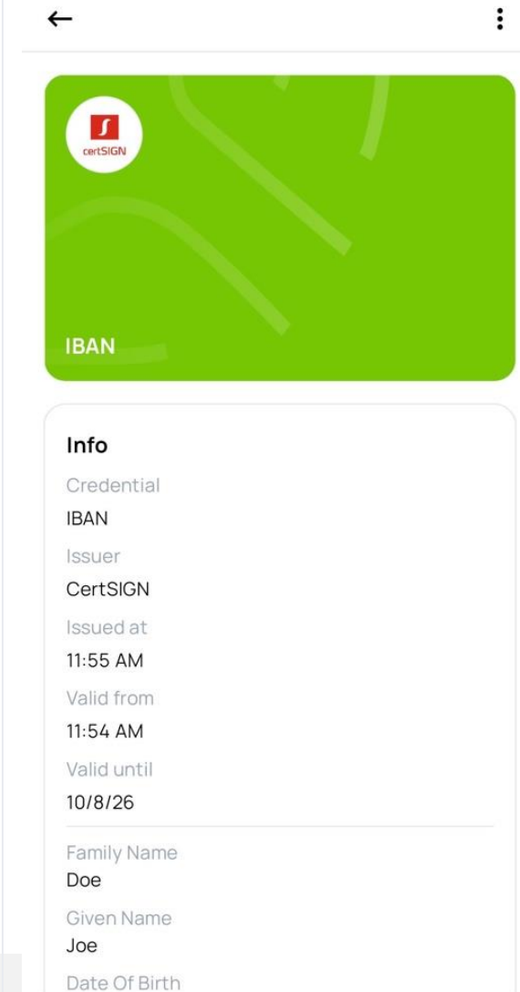


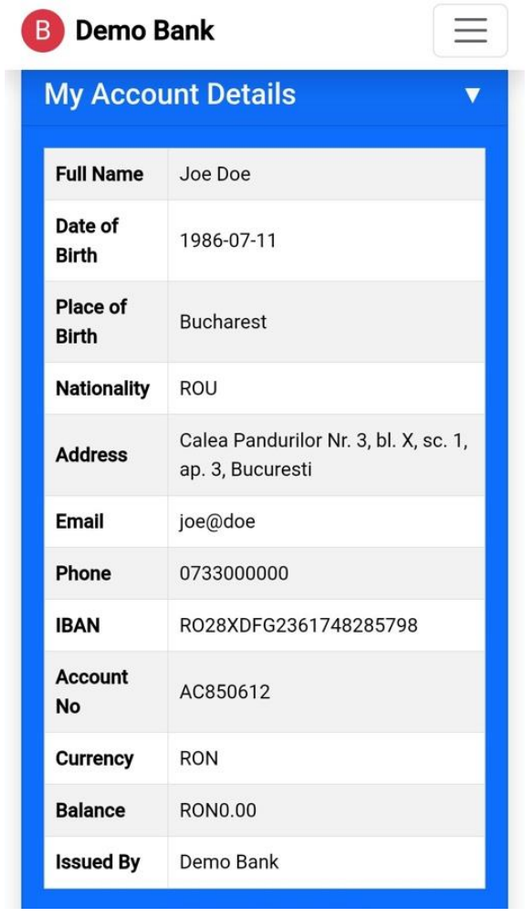


certSIGN®

2. Bank Account Opening







EU Digital Identity Wallet

Identification with PID

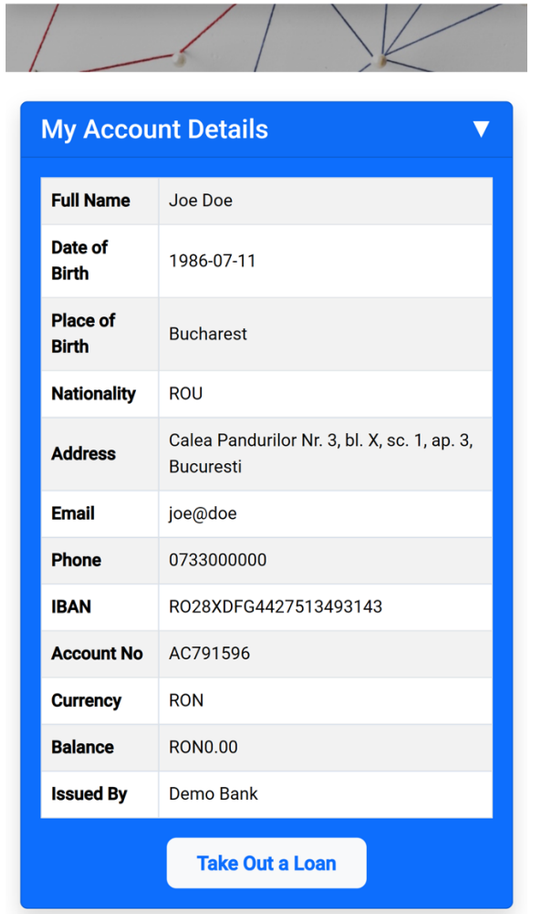
Add financial attributes (i.e. IBAN)

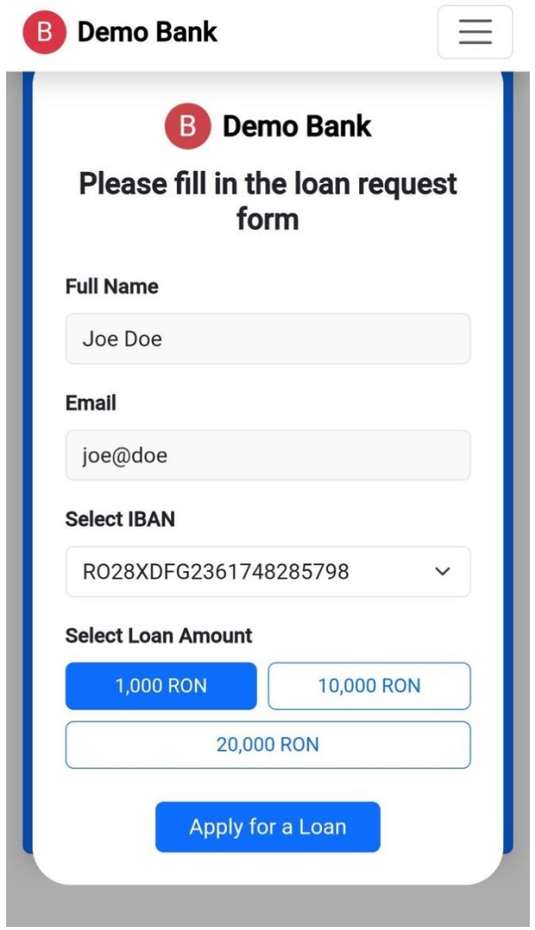
certSIGN®

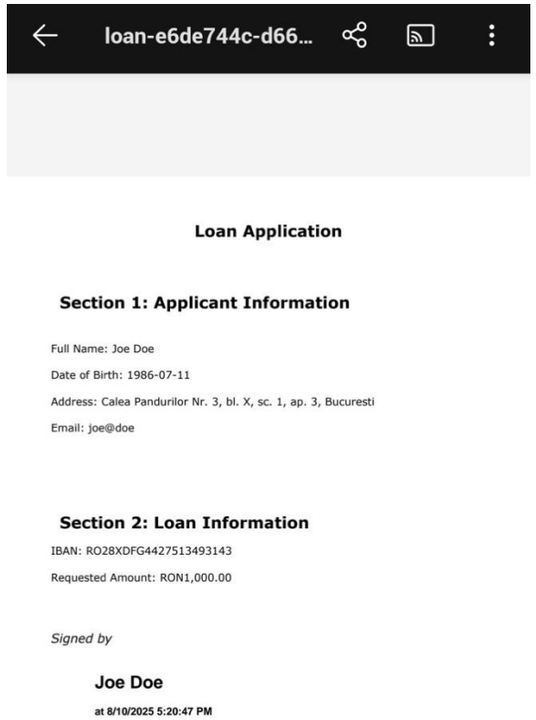
3. Apply for a loan

Qualified electronic signature

EU Digital Identity Wallet







certSIGN®

Conclusions

- Test environment available now
- Pilot program with certSIGN
  - ARF Compliant wallets
  - APIs for integration
  - Authentic source issuing attributes
  - Customizable deployment scenarios:
    - Intermediate relying party
    - Relying party

Try

EU Digital Identity Wallet

now!

certSIGN®

Specialised solutions for regulated organisations to implement EUDI Wallets

Before working with certSIGN

- No clear roadmap to EUDI Wallet compliance
- Complex and fragmented regulatory landscape
- High internal effort for integration and testing
- Constantly changing EU requirements
- Limited access to proven expertise
- Uncertainty around long-term scalability

After working with certSIGN

+ Aligned roadmap tailored to regulations
+ Quick setup via API Connectors
+ Built-in eIDAS & ARF compliance
+ Ready-to-use flows reduce project effort
+ Trusted experts from EU pilot teams
+ Scalable setup for cross-border use cases

certSIGN®

Agenda

1. European Digital Identity Wallet (EUDIW) Framework
2. How to use EUDIW in financial sector
3. EUDIW pilot for education

certSIGN®

EU approach for using EUDIW in education – DC4EU

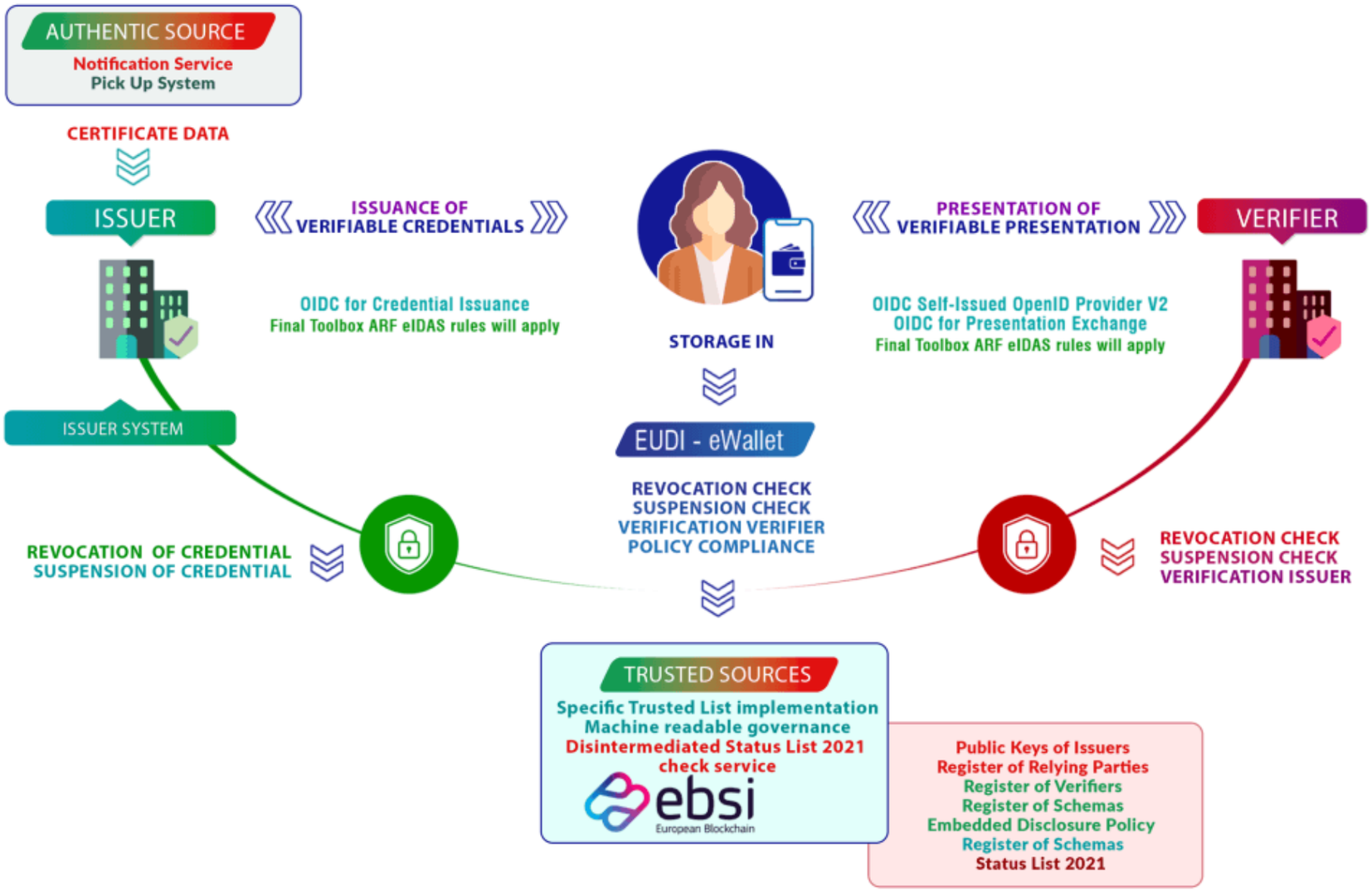
certSIGN®

Digital Credentials For European Union – DC4EU

- DC4EU aims to apply the European Union's eIDAS trust framework focusing on the education and social security fields.
- The Consortium
  - Over 80 relevant institutions
    - 43 public organizations
    - 49 private entities
  - 22 countries
- **Education domain**: DC4EU investigates the issuance of educational credentials and professional qualifications in the education sector

certSIGN®

DC4EU – The Education Domain



certSIGN contribution:

- Architecture
- On-boarding procedures
- Deployment of PKI and trusted lists

Source https://www.dc4eu.eu/outputs/

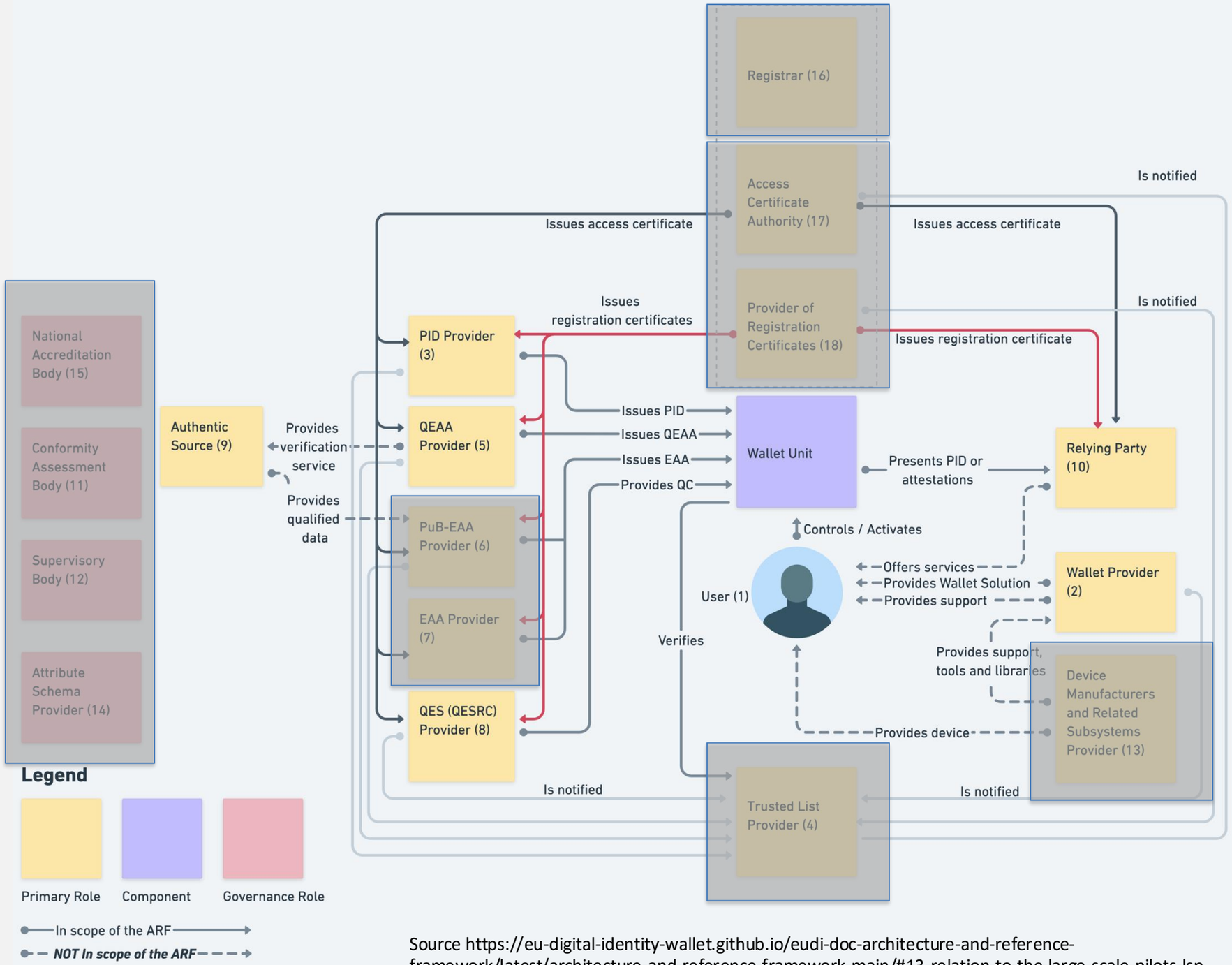
certSIGN®

certSIGN's experience from a Large Scale Pilot

1. Fluid legal and technical ecosystem
    1. eIDAS and implementing acts not ready
    2. ARF under construction
    3. Standards under construction
2. Difficult to run pilots without clear benefits for participants.
3. Outcome of the project interesting as research (combination of EBSI and PKI) but were not directly applicable in real life deployments, compliant with eIDAS Requirements
    1. Last mile PKI deployment to pilot the results
4. Grow step by step: build small components than can be used. Extend later.

certSIGN®

Wallet ecosystem – working environment



Source https://eu-digital-identity-wallet.github.io/eudi-doc-architecture-and-reference-framework/latest/architecture-and-reference-framework-main/#13-relation-to-the-large-scale-pilots-lsp

- Create the core infrastructure to allow running a pilot with third parties
- Wallet: reference wallet and a private wallet
- PID: certME identity solution from certSIGN
- QEEA, QES: certSIGN
- To be onboarded:
  - Authentic sources
  - Relying parties

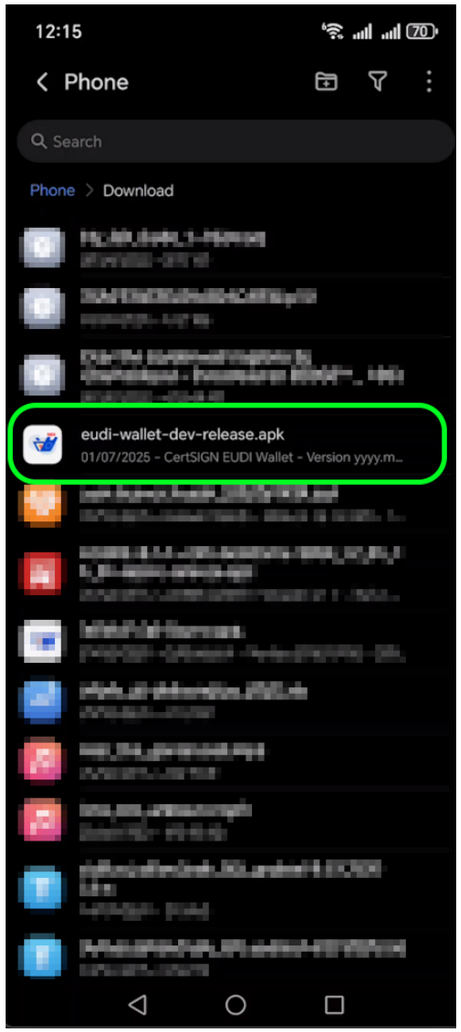
certSIGN®

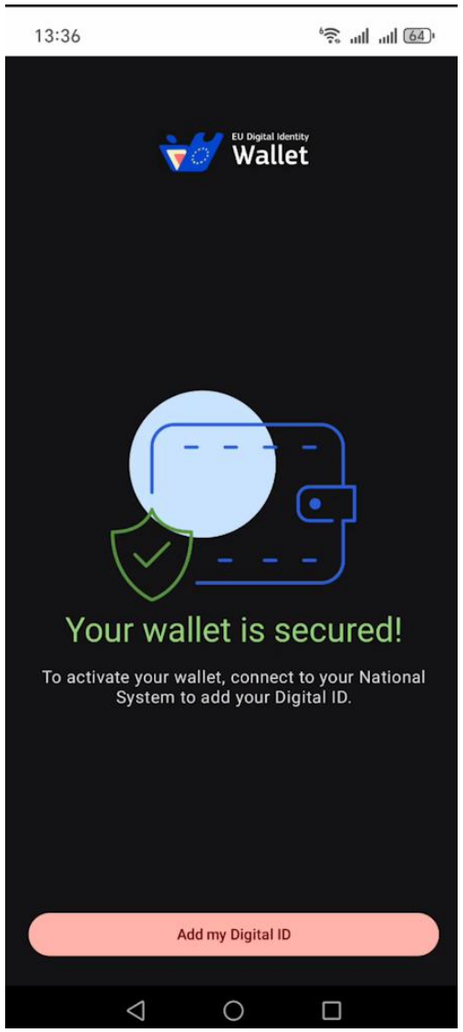
Onboarding actors – how to convince third parties to join?

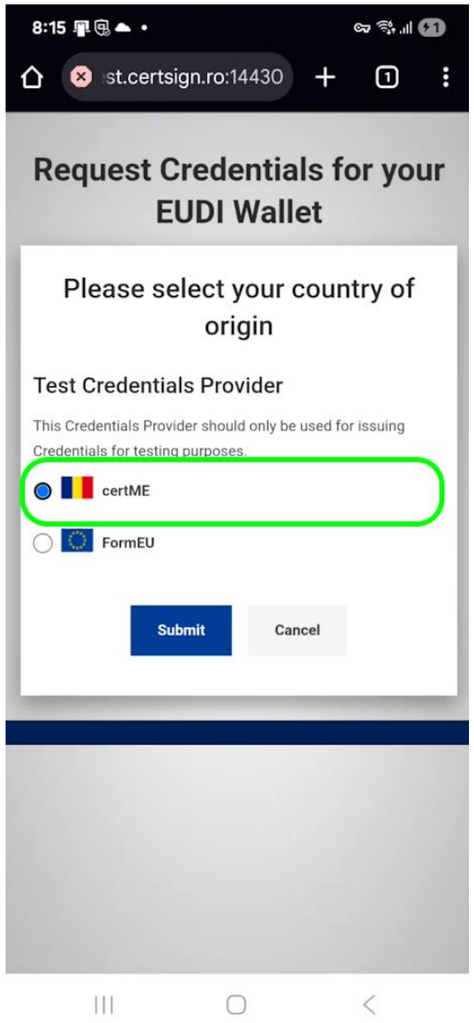
- What are the benefits?
  - Legal compliance is important but does not make a project sexy
  - Real use cases, to solve the pain
  - Competition / fame: “we are the first doing this!”
  - Curiosity
- Universities are a good candidate
  - Expertise from DC4EU
  - Real life use cases
    - Student onboarding
    - On-line authentication
    - Physical access to campus facilities
    - Access to medical services
    - Free public transport (on the roadmap)
  - Influence in local communities → More relying parties

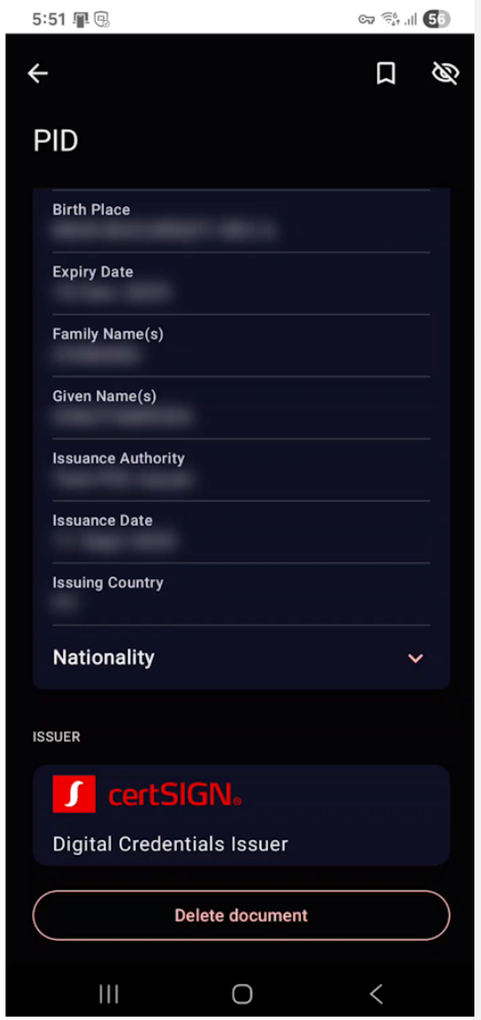
certSIGN®

How it works – set-up



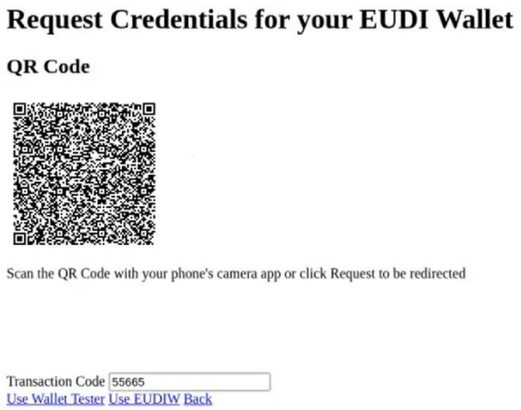


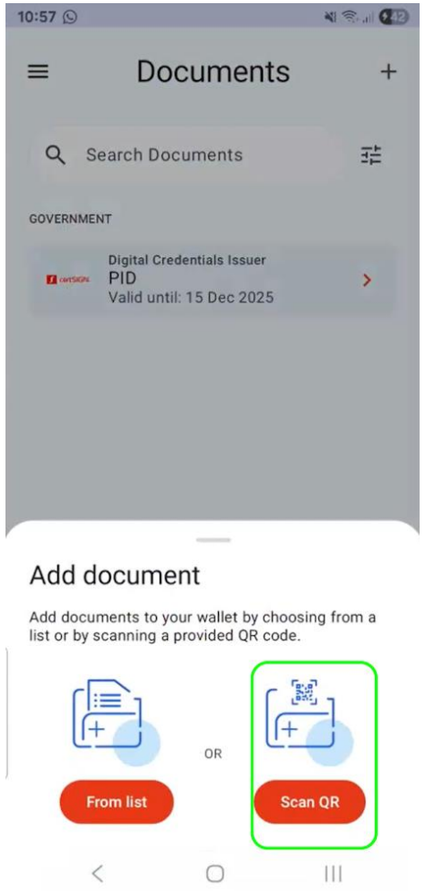


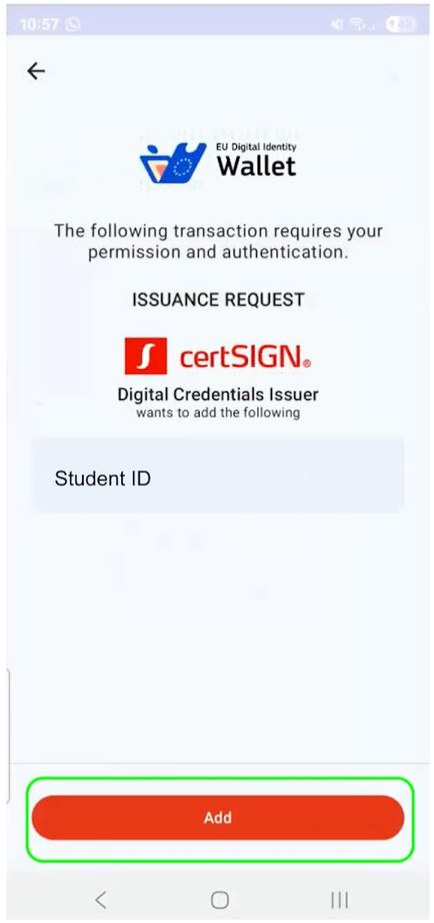


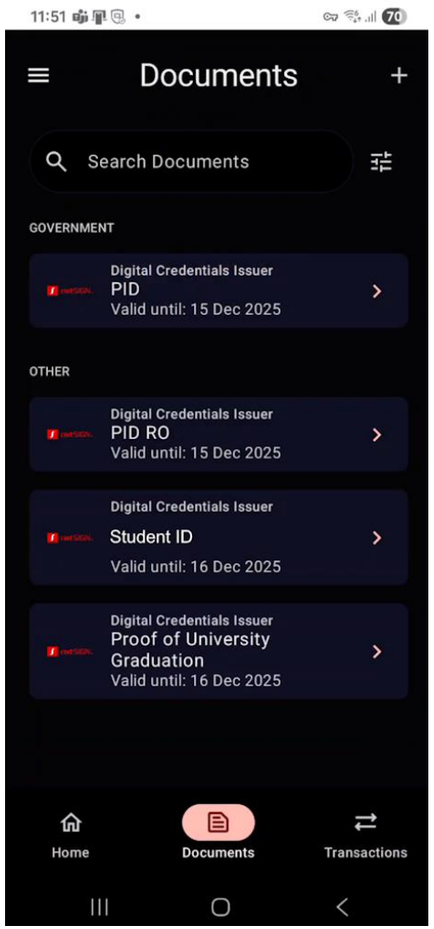
certSIGN®

How it works – obtain attributes



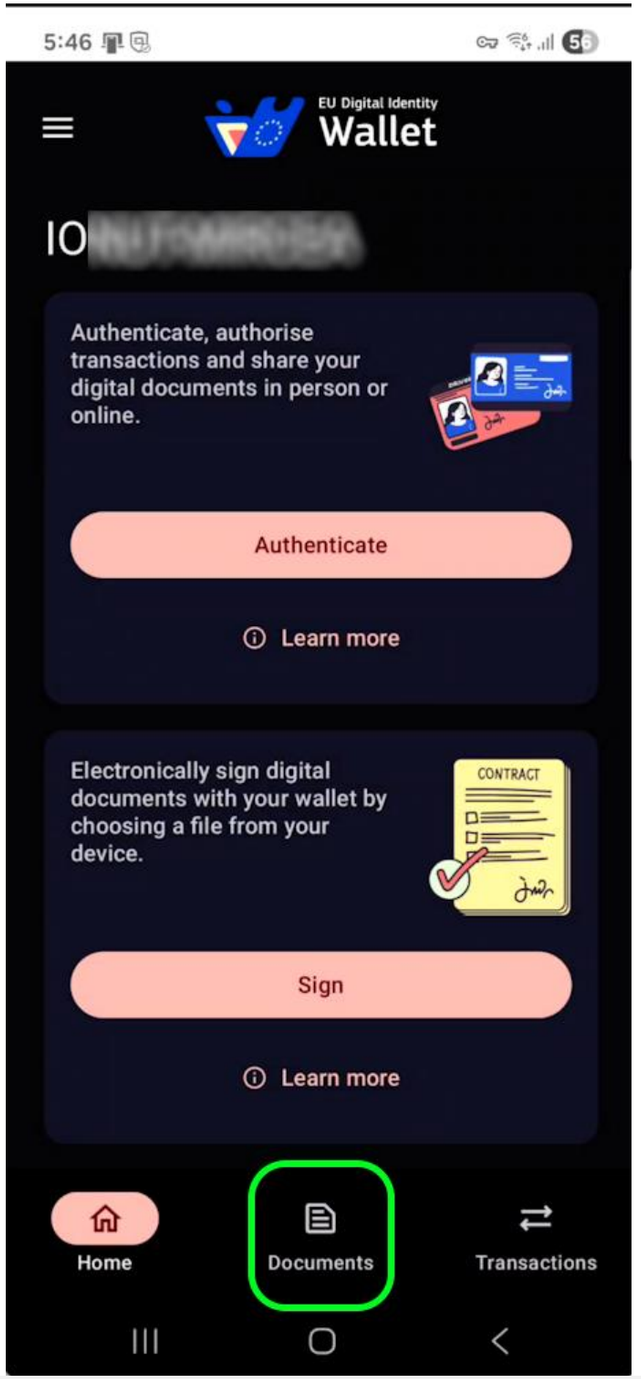






certSIGN®

Functional EDIW. Start using it!



certSIGN®

Challenges and next steps

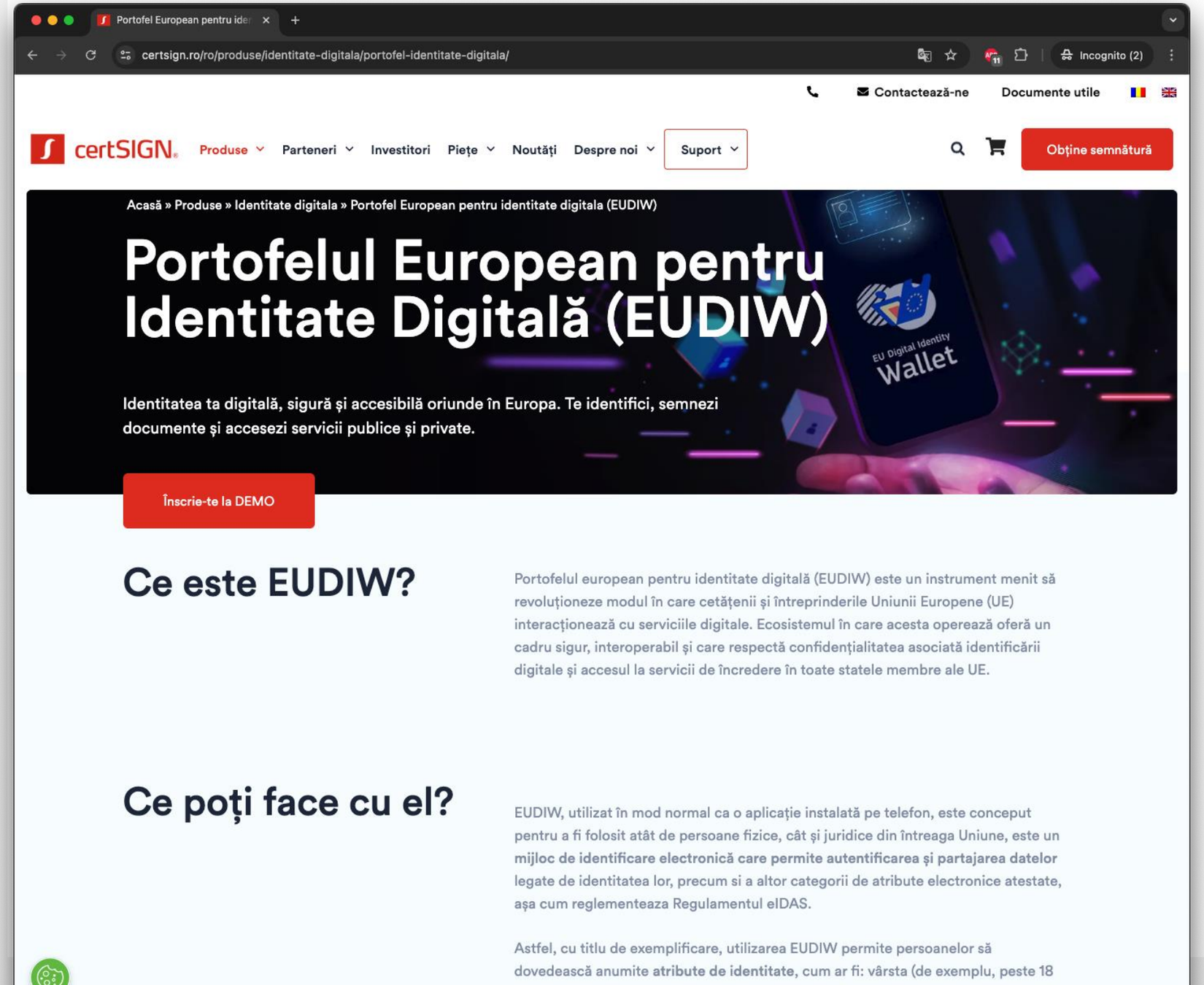
Challenges

- Deploy the infrastructure, make is work and stable
- Convince the actors
  - Slow start. From “Who else is doing it?” to “I want to be the first!”
- Identify relevant use cases
  - What we had in mind
  - What the Universities needed
- Demo environment, not “the real EUDIW”

Next steps

- Deploy the project for real students
- iOS version of the wallet
- Extend
  - Use cases
  - Functionalities
  - Integration with QTSP services

certSIGN



More about EUDIW?

https://www.certsign.ro/ro/produse/identitate-digitala/portofel-identitate-digitala/

certSIGN®

certSIGN

TRY IT NOW!

EU Digital Identity

Wallet