



Digital Identity

for All Europeans



EUdID

European Digital Identity



#DigitalEU #EUdigitalidentity

Global Platform 26th of April 2023

European Digital Identity







Free to be used by all citizens

All EU citizens and businesses may use it for free on a voluntary basis Accepted everywhere

Recognised by private and public service providers for all transactions that require authentication

Secure and privacy oriented

Citizens can control and protect their identity, personal data and digital assets.



European Digital Identity

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 large-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.



Milestones

Legislative Process



Co-legislators negotiations

21st of March started, it's expected to be adopted by the end of the 2023



Wallet technical specification

A new update is working in progress in the eIDAS Expert Group

9th of February 2023 first release, next in April 2023





Development on going

First release in April/May 2023, second release August/September and third release December 2023

Large-scale Pilots



Signing contracts.

1st of April official launch of piloting projects



Use Cases

The wallet will allow users to



- Prove who they are when using Digital Public Services or opening an Bank account
- Controlling personal data when Logging into Social Networks













- Prove they possess a Driving Licence
- Obtain and present Medical Prescriptions
- Demonstrate their Social Security Status

- Sign contracts and other Declaration of intent or consent
- Authorise payments



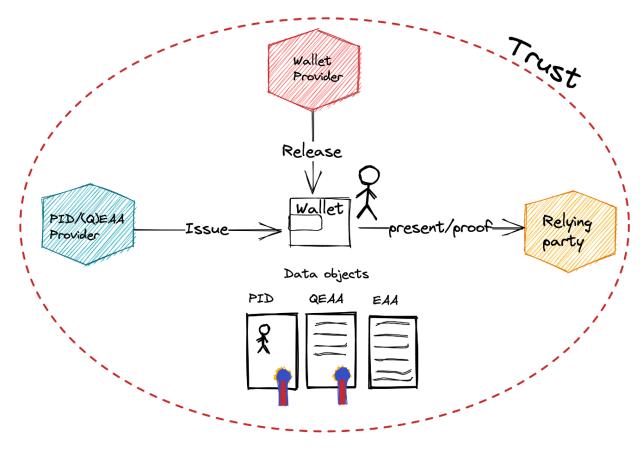
The Architecture and reference framework

- The first release of the ARF represents the initial consensus version containing the fundamental elements necessary for developing an EUDI Wallet prototype.
- The architecture is a moving target due to the legislative process still on going.
- The document is open and shared on <u>github</u> to collect feedback from stakeholders.
- New releases with additional specifications will come in short cycles based on the feedback received. The next one is expected in April.





The EUDI Wallet at glance



Personal Identification Data

Attributes used for identification:

- First & Family name
- Date of birth
- And others

Qualified Electronic Attestation of Attributes

- Digital travel credentials
- Education credentials (Diplomas, certifications, etc)
- Mobile Driving License

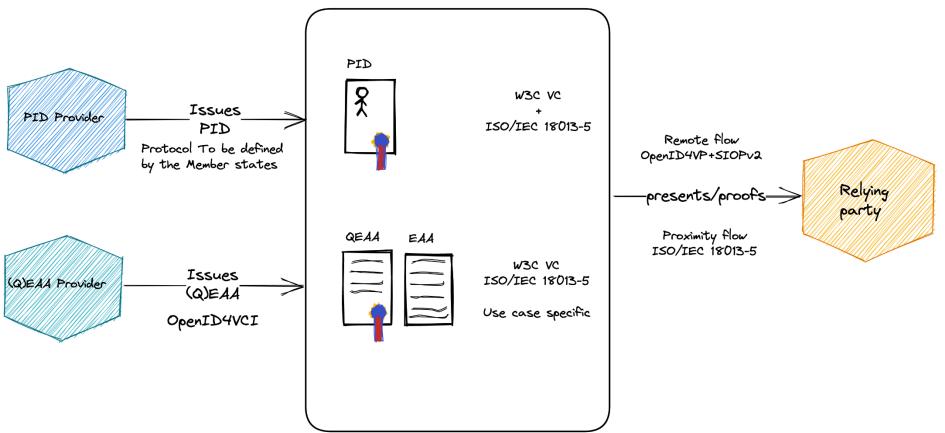
Electronic Attestation of Attributes

- Membership Card
- Event Tickets



The first release of the technical specification

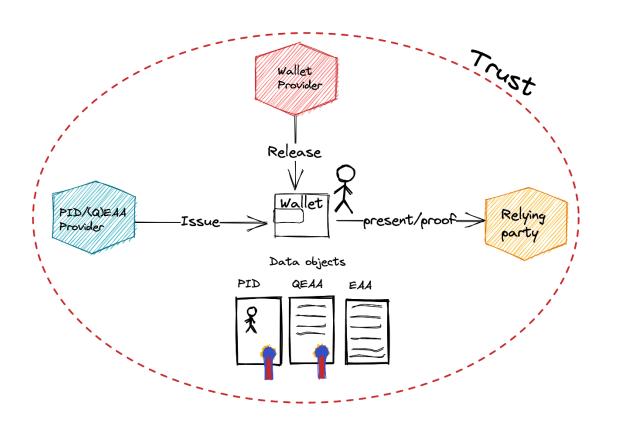
Comparison
 Comparison





Implementation Challenges

- Storing cryptographic material and functions certifiable at LoA 'High'
- Shared trust model / framework
- Standardization of (Q)EAA at EU level and beyond (DTC)
- User experience and broad adoption at citizen level





Reference Implementation

Objectives

- Building reference technical infrastructure to support interoperability and implementation of the EUDIW and its ecosystem
- Supporting Member States and other stakeholders in developing, implementing and scaling up the EUDI Framework
- Enabling large scale pilots by providing reference wallet and use-cases in national / stakeholder context

Scope

- Authentication (Q2 2023)
- Identification & mDL (Q3 2023)
- Subsequent releases (e.g. extended functionalities, feedback from pilots)

Outcome

 Open-Source reference wallet application and libraries tested, certified, ready to be used by Member States to implement the wallet.

Pilot Use-cases



Mobile Driving Licences (mDL) – Storage and presentation of mDLs in both online and physical interactions such as a driver providing their licence on the roadside



eSignatures – EUDI Wallet can be used to provide a secure digital signature when signing contracts online, eliminating the need for paper documents and physical signatures.



Opening a Bank Account – Wallet can be used to verify a user's identity when opening a bank account both cross-border and domestically. Reduces fraud & KYC costs.



Accessing government services – An EUDI Wallet can be used to securely access government services, such as applying for a passport or driver's licence, filing taxes, or applying for supports



SIM Registration – Wallet to prove their identity in pre- and post-paid SIM card contract registration and activation processes reducing fraud and costs for mobile network operator



ePrescription – Wallet can be be used to simplify the process of identifying one-self and providing details of prescription to a pharmacies in order to claim medicine



Pilot Use-cases



Payments – Wallet can be used to store payment credentials and facilitate the approval of payments in both account-to-account based transactions and card-based transactions



Travelling – Wallet can be used to store a user's passport, visa, and other travel documents as a Digital Travel Credential, allowing for quick and easy access when going through airport security and customs



Organisational Digital Identity – Wallet can be used by legal persons for interactions between business-togovernment or business-to-business such as in the context of taxes



Freedom of Movement – Wallet facilitates an EU citizen's movement around EU by storing and presenting social security documents such as European Health Insurance Card



Education/Professional Qualification – Wallet can be used to store and verify a user's educational qualification or professional certification, such as diplomas or degrees, making it easier to apply for jobs or further education.



Thank you



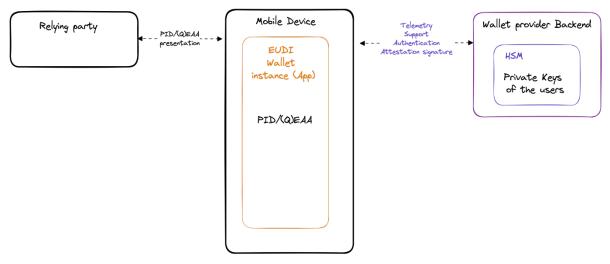
© European Union 2023

Unless otherwise noted the reuse of this presentation is authorised under the <u>CC BY 4.0</u> license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

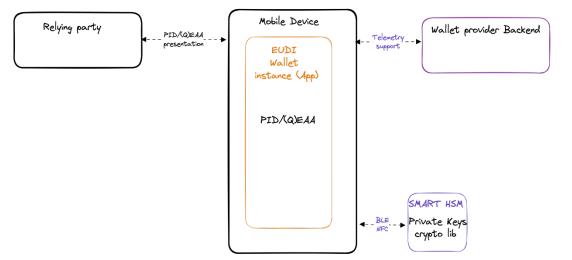


Wallet architectures

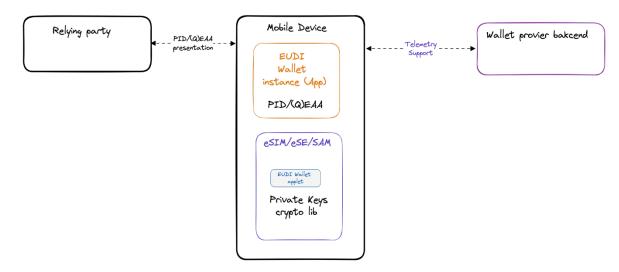
1 - EUDI Wallet solution - Remote HSM



2 - EUDI Wallet solution - external token



3 - EUDI Wallet solution - eSIM/eSE

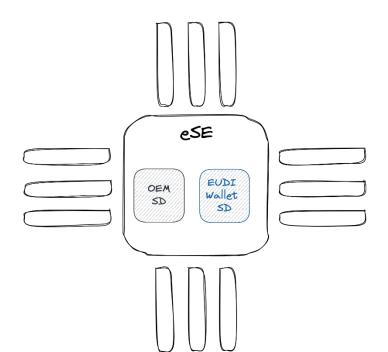




eSIM / eSE

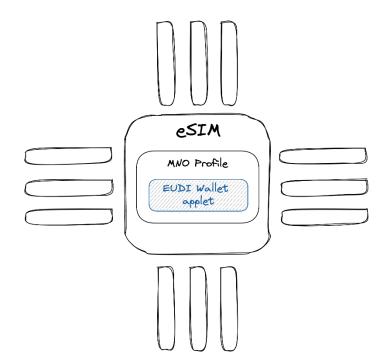
embedded Secure Element

- → provisioning not yet standardised
- → dependency from the OEM
- → available on the smartphone market



MNO-Profile

- → provisioning standardised by GSMA
- → dependency from the MNOs
- → issues with applets segregation
- → available on the smartphone market



SAM-SD 🏠

- → provisioning standardised
- → specific root of trust (not GSMA CI)
- → no dependency
- → segregation and multi domain
- → not yet available on the smartphone market

