



The European Digital Identity (EUDI) Wallet: Enabling the ecosystem for interoperability of trust

Unlocking the full power of identity to enable people, economy and society to thrive

Identity for Good
Open Standards
Outreach
Industry Services
Community

Didier Trutt,
Chairman, Secure
Identity Alliance

www.secureidentityalliance.org



Unlocking the ID Ecosystem with OSIA

A universal interoperability framework for innovation, competition, and sustainability

Who we are

60 Private and Public Company, Government, IGO, NGO, Foundations, Academic Members & Affiliated Members





Advocacy – Policy - Application



We collaborate

- ✓ **Enable** and develop meaningful dialogue between civil society, governments, intergovernmental organisations and industry
- ✓ **Advance** positive ID policy, promoting the foundational role of ID for rights protection, social inclusion & economic development
- ✓ **Build** capacity and knowledge and share best practice
- ✓ **Promote** innovation and ensure a level playing field across the identity ecosystem, and develop open identity standards
- ✓ **Contribute** key insight and expertise into issues across the secure identity lifecycle
- ✓ **Develop** our respected community of thought leaders



We believe in open standards

SIA is an ITU A5 Qualified Organisation



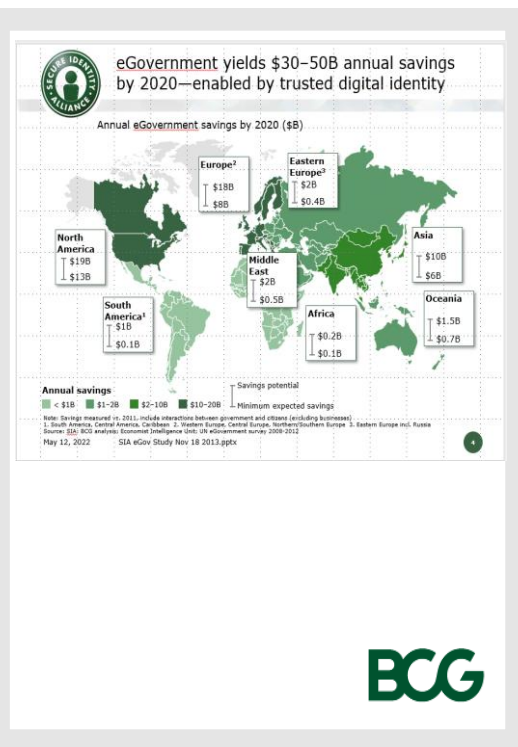
We are committed to a strict code of conduct

Join an active and supportive community of government, academia and industry experts!

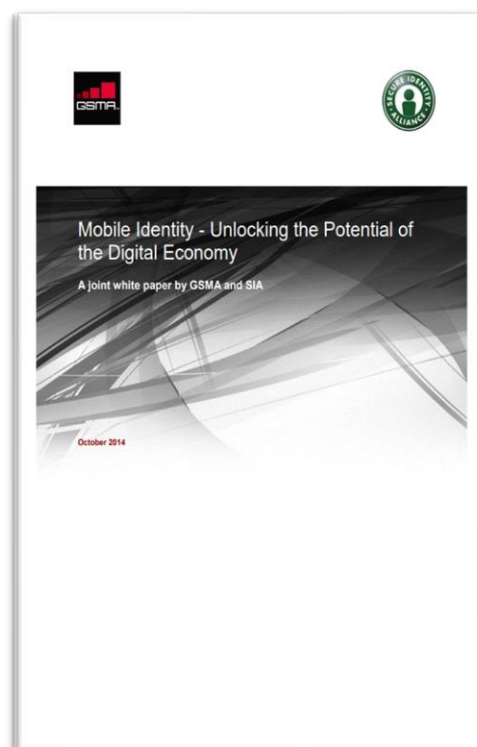
DOCUMENT SECURITY	DIGITAL IDENTITY	BORDER	BIOMETRICS
Guiding the design, manufacturing, issuance and verification of convenient and cost-effective secure documents.	Driving the development and adoption of secure, trusted, effective and inclusive services.	Delivering best practices for seamless and secure borders.	Promoting the use of biometrics to enable secure, convenient and privacy-led identification for citizens.



SLA perspective on Digital ID



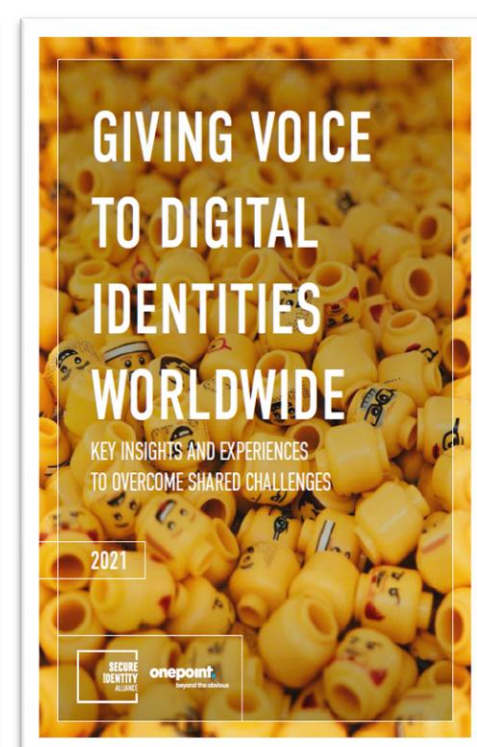
2013



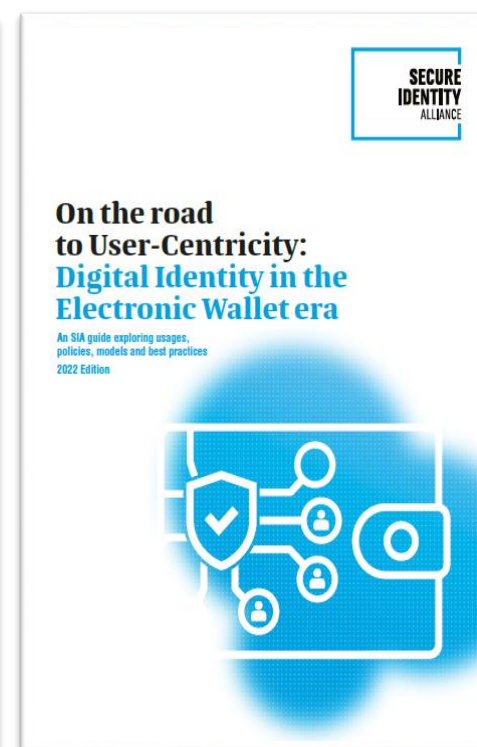
2014



2016



2021



2022

A major technology uptake

SECURE IDENTITY ALLIANCE

Vision 2020: Trusted digital identity is a key enabler of everyday life

8 Maintain personal information
Update central govt. database with new home address

7 Digitally sign contract
Sign contract online using trusted digital identity

6 Receive entitlement
Get immediate cash reduction at super-market checkout

5 Use as mobile key
Unlock car from carsharing pool using trusted digital identity on mobile device

4 Edit tax report online
View tax report on tablet and send clarifying questions

3 Vote online
Electronically vote in city mayor election

2 Consult physician online
Sign into secure video chat to remotely consult a physician

1 Communicate securely
Use secure digital mailbox for communication with government

Trusted digital identity as center-piece of everyday life

Source: SIA; BCG analysis

SIA eGov Study Nov 18 2013.pptx

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A shift in circumstance

- **Mobility has taken the world**
- **Covid has accelerated and extended use cases**
- **Digital world has no border and digitalisation breaks silos but...**
- **Sovereignty and enhanced privacy* are needed, and**
- **Digital accountability too => trust in digital world**
- **Inclusion agenda and needs**
- **Sectoral needs ie. KYC for regulated services, Health etc.**
- **Cloud-computing trend**
- **Ergonomics/ Contextual intelligence development**
- **Offline functionality still required!**



A shift in convenience

- **Redesigned around user and usage experience**
- **Works online and offline**
- **Brings additional security, sovereignty and privacy benefits**
- **Greater variety of architectures – No ‘one size fits all’**
- **New standards, protocols and data models**



Governments' responsibility

- **The roads to build a Digital ID Wallet approach and the consequences on the intermediations between services and users are very important.**
- **Governments are camping increasing responsibility in structuring a trust anchor, the level of exigencies, legal liability and interoperability!**



Government-driven (eg. EU Approach)




National Private Sector (eg. Retail)



OEM (eg. Apple, Google)

The EU Vision – From eIDAS 1 towards eIDAS 2



“Every time an App or website asks us to create a new digital identity or to easily log on, via a big platform, we have no idea what happens to our data in reality. That is why the Commission will propose a secure European e-identity. **One that we trust and that any citizen can use anywhere in Europe to do anything from paying your taxes to renting a bicycle. A technology where we can control ourselves what data and how data is used.**“

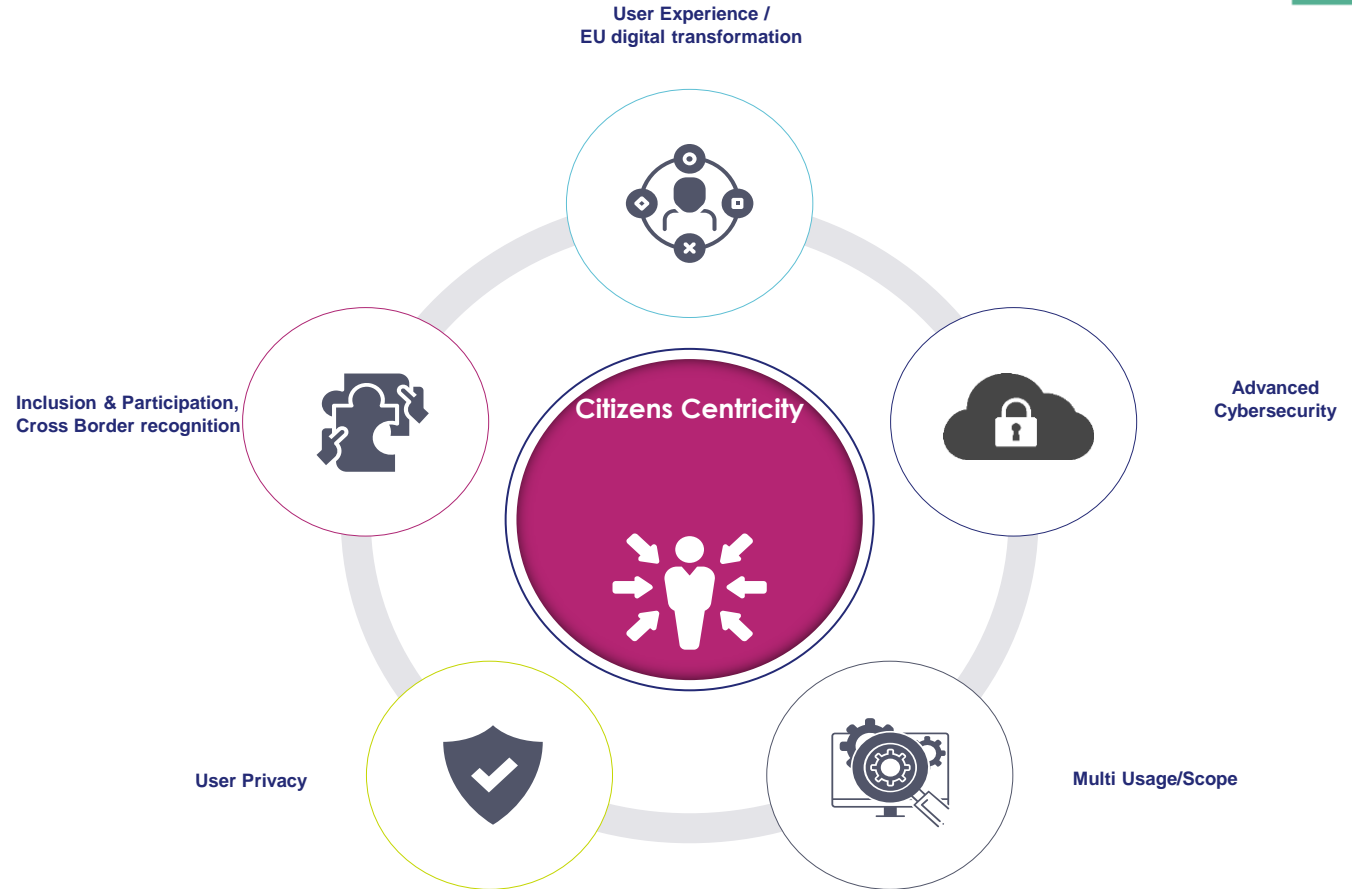
Ursula von der Leyen, President of the European Commission
Source: State of the Union speech addressed on 16 September 2020

72% of users want to know how their data is used when they use social media accounts.

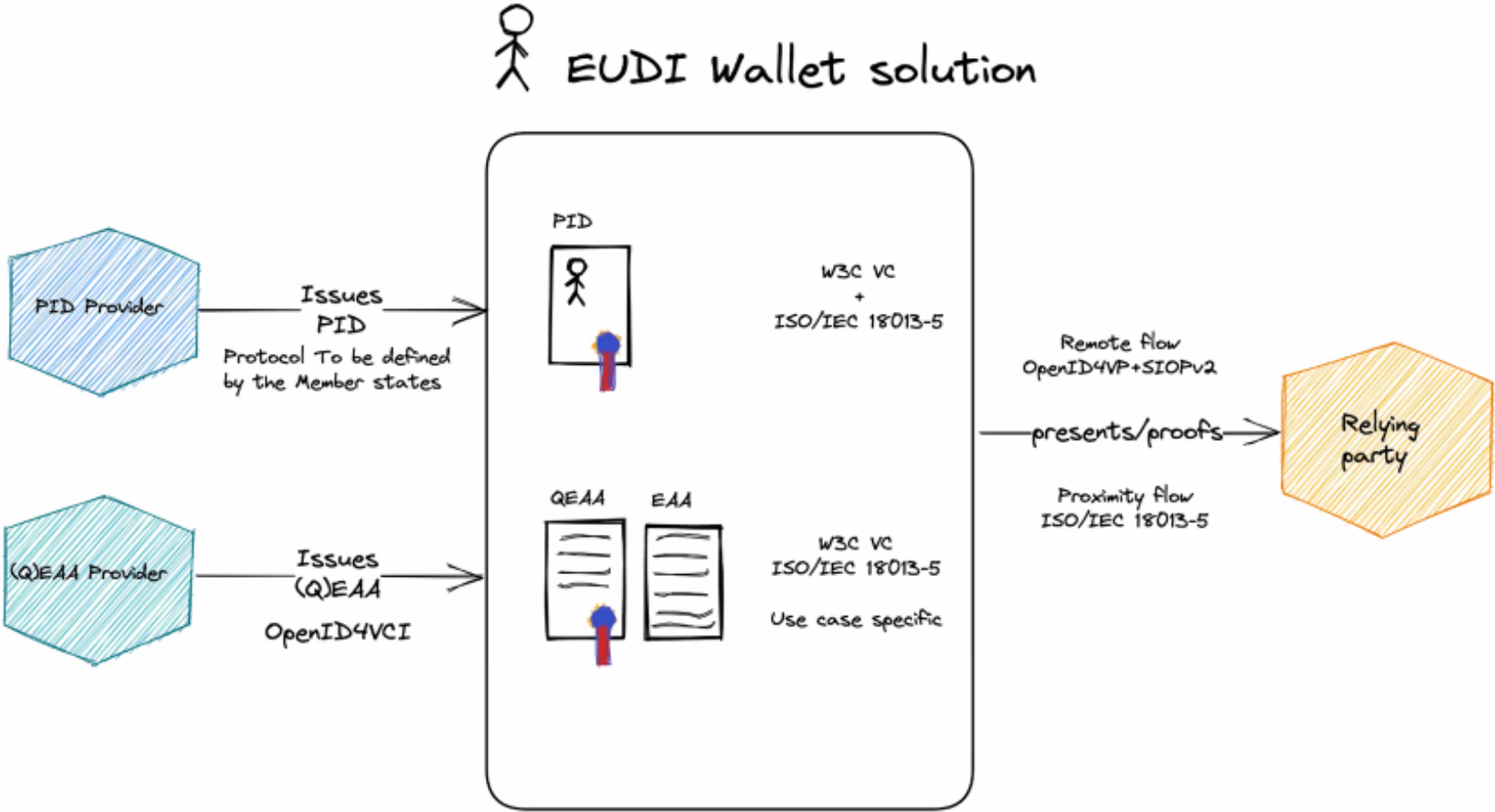
63% of EU citizens want a secure single digital ID for all online services

Source: Eurobarometer survey

The EU Digital ID Wallet



The EU Digital ID at a glance



The EU Digital ID 3 key principles

**Free to be used
by all citizens**



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

**Accepted
everywhere**



Recognized by private and public providers for all transactions that require authentication.

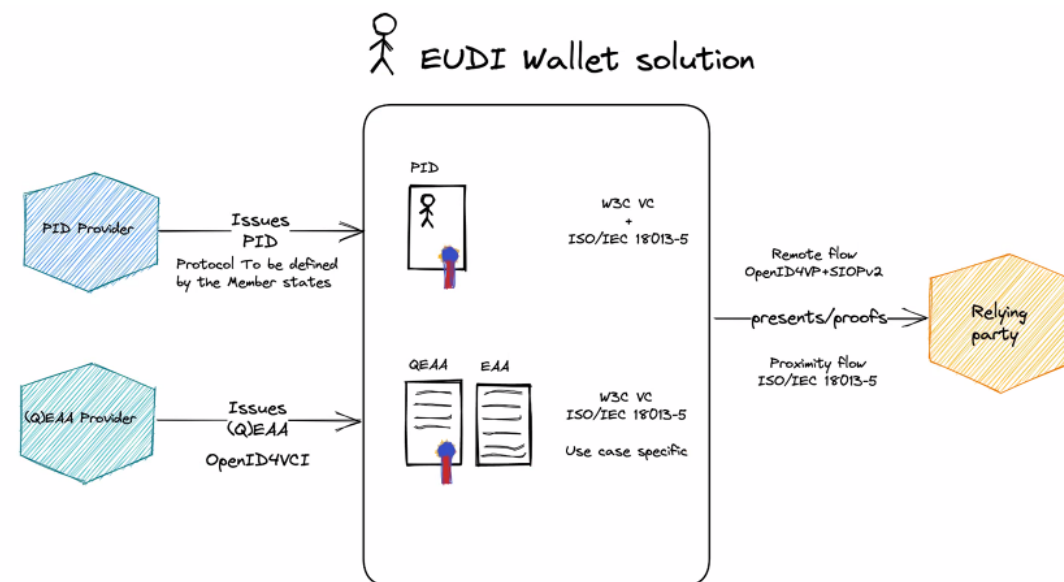
**Secure and
privacy oriented**



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

The European Digital Wallet program

- Each member state to issue a digital wallet under a notified eID scheme:
- Built on common standards
- Following compulsory certification for a high level of assurance
- Proposing a « Union Toolbox » defining the digital identity framework
 - One goal: boost the European Economy with digital identity as the foundation of the digital program



New Mandate from EU to Member States

Wallet **ISSUANCE**

EU request Each Member State **must**

- **Notify at least one Wallet based on eID high**
- **Enable verification of minimal ID attribute(s) through sources**

(ie. address, age, gender, civil status, family composition, nationality, educational qualifications, professional qualifications, public permits & licences, financial & company data, etc...)

- **All EU wallets (public and/or private) must be notified to the EU Com**



Wallet **ACCEPTANCE**

EU ID Wallet shall be accepted by:

- **Public services**
- **Private services** expecting SCA
 - *transport, energy, banking and financial services, social security, health, utility companies, postal services, digital infrastructure, education, telecommunications ...*
- **Very large online platforms** (ie. GAFAs)
- **Others** : voluntary code of conduct
 - Commission review 18 months later.

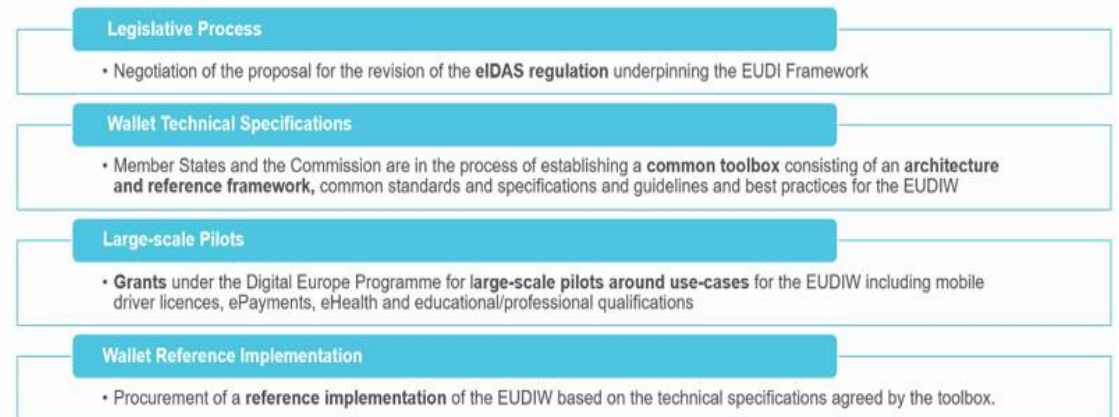
INTEROPERABILITY & SECURITY

The Commission aims at uniform implementation

- **Delegated / Implementing acts** rather than directives
- **Security certification** replaces peer review
- **Unification of technical implementations via toolbox**

An innovative co-elaboration process

- **Commission and member States: define the e-ID scheme, provide guidelines and define compulsory certification**
- **Member States: implement their own infrastructure on a common framework**
- **Industry: proposes a reference design to be reused.**
 - EU legislation is progressing in **parallel** with the selection and delivery of supporting technology.
 - Use cases are defined in **parallel** of the supporting technology



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



Wallet reference implementation

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

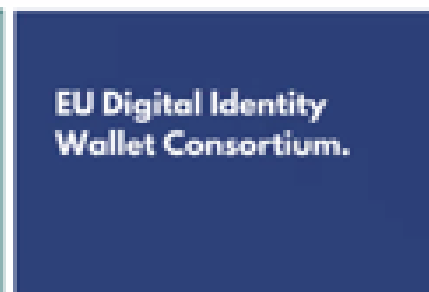
Four large scale pilots

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.

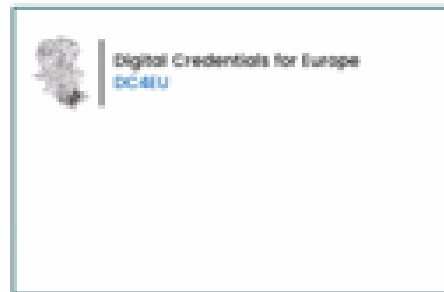


19 countries

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,



A new ecosystem

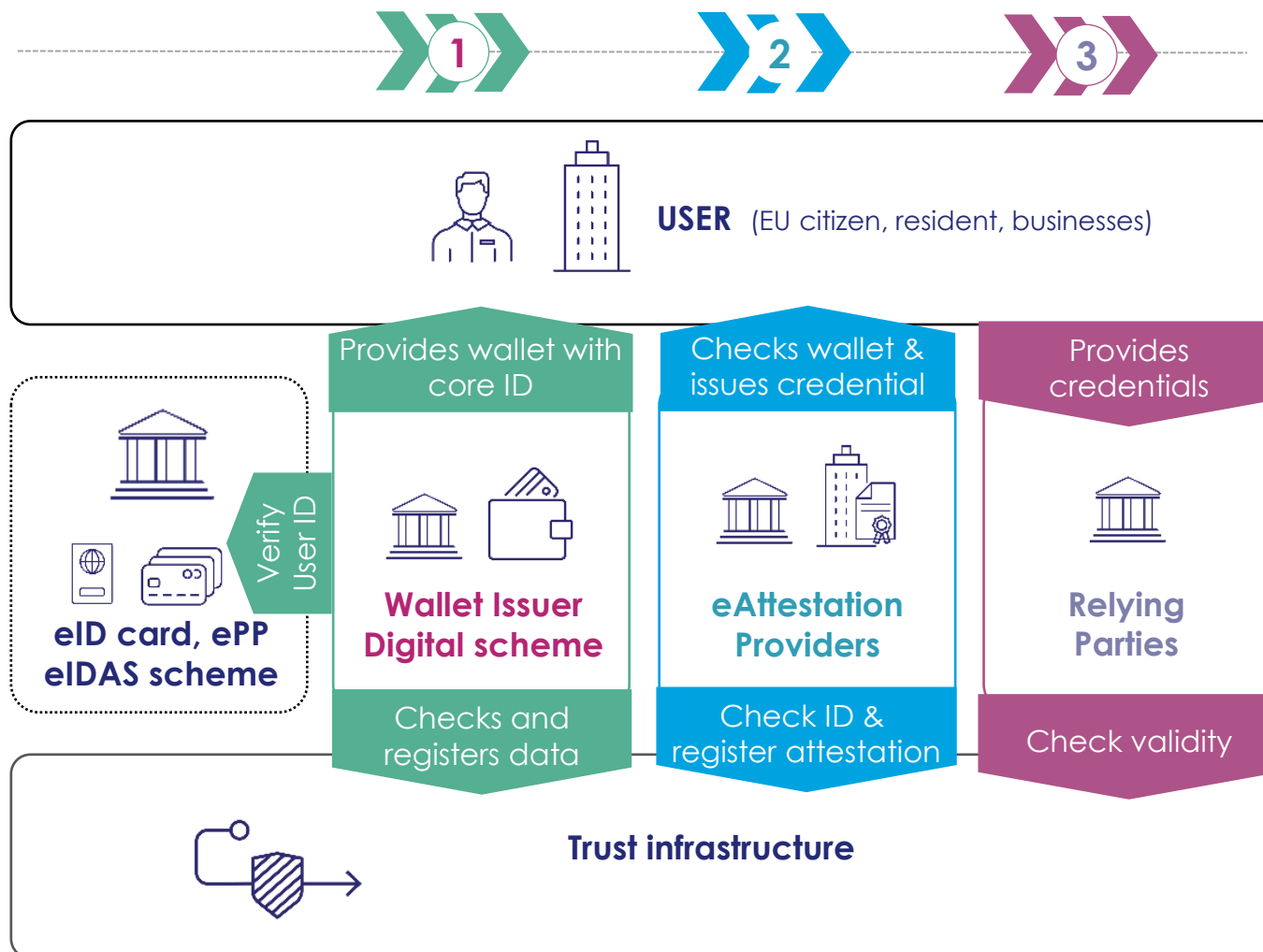


A USER CENTRIC APPROACH



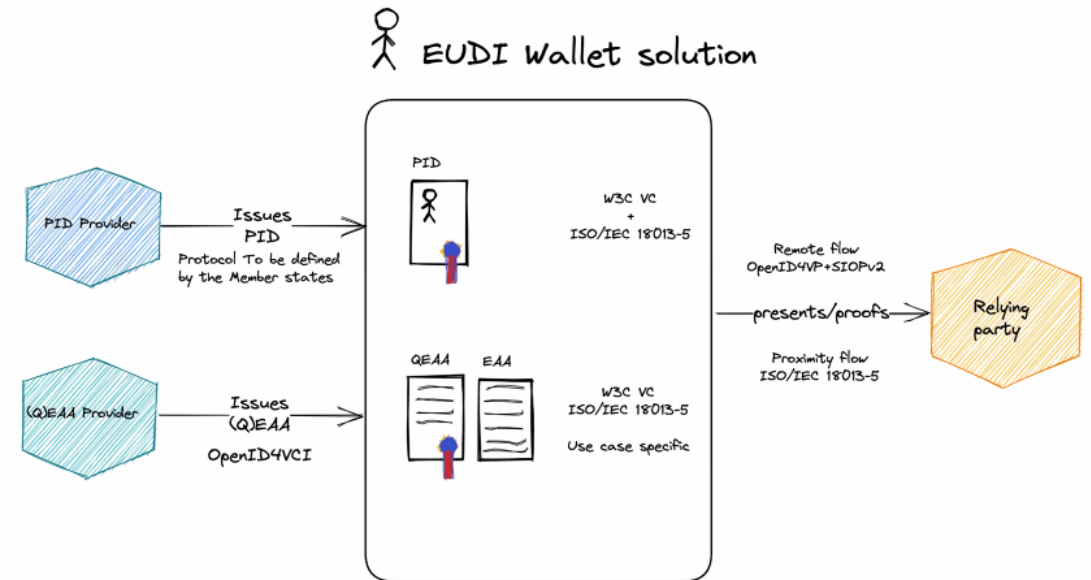
ENABLING THEM THROUGH THEIR WALLET TO

- Control their personal data
- Prove their identity
- Authenticate online,
- eSign documents
- Obtain digital evidence of identity attributes from providers of electronic attestation of attributes



A common framework does not mean uniformization

- All Member States have different requirements and specific needs
 - Different technologies of implementations may be possible
- The EU common framework creates the conditions of a smooth harmonization.



Building a regional interoperability in Africa

Africa like any continent in the world is going digital

- Need for federation and interoperability of Digital ID

African countries are federating their effort to develop the Digital Economy:

- African Union Digital Transformation Strategy for Africa
- African Continental Free Trade Agreement, the African Union Digital Transformation Strategy for Africa, the Malabo Convention on Cyber Security & Personal Data Protection,
- AU + UNECA's Pan-African Trust Framework
- ECOWAS + WURI
- Multiple other local, regional and international initiatives and actors

Building a regional interoperability in Africa

Many African States have already key building blocks to support Digital Trust:

- Management of cybersecurity with deployment of State PKI (Public Key Infra)
- Most African States have developed ICT policies
- National Electronic Identity Cards are deployed in many countries
- Smartphones penetration is growing

African Regional Organizations could leverage the EUID initiative

- Re-use the common state of the art made by EU in terms of ID schemes and certification of components
- Mobilize ICT ecosystems to think globally regional usecases.
- Leapfrog and avoid mistakes (eIDAS 1)
- Adoption of international standards – important – interoperability with the rest of the world

OSIA's approach

A universal interoperability framework
as a set of open standards interfaces (APIs)

- ✓ developed by the identity industry
- ✓ in partnership with governments

Sovereignty of Choice

OSIA does not define the workflow between modules nor the architecture of any ID management solution

Technology Neutrality

OSIA does not mandate the technology/implementation of the modules, it focuses on the interface level

Privacy by Design

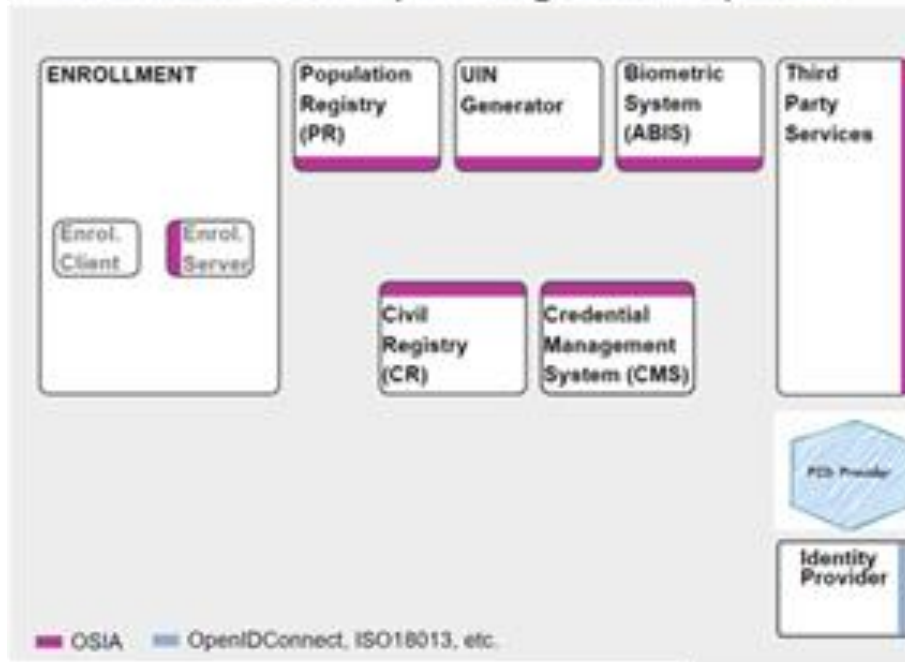
PbD impacts also the interfaces and OSIA implements a set of PbD principles

It's happening today

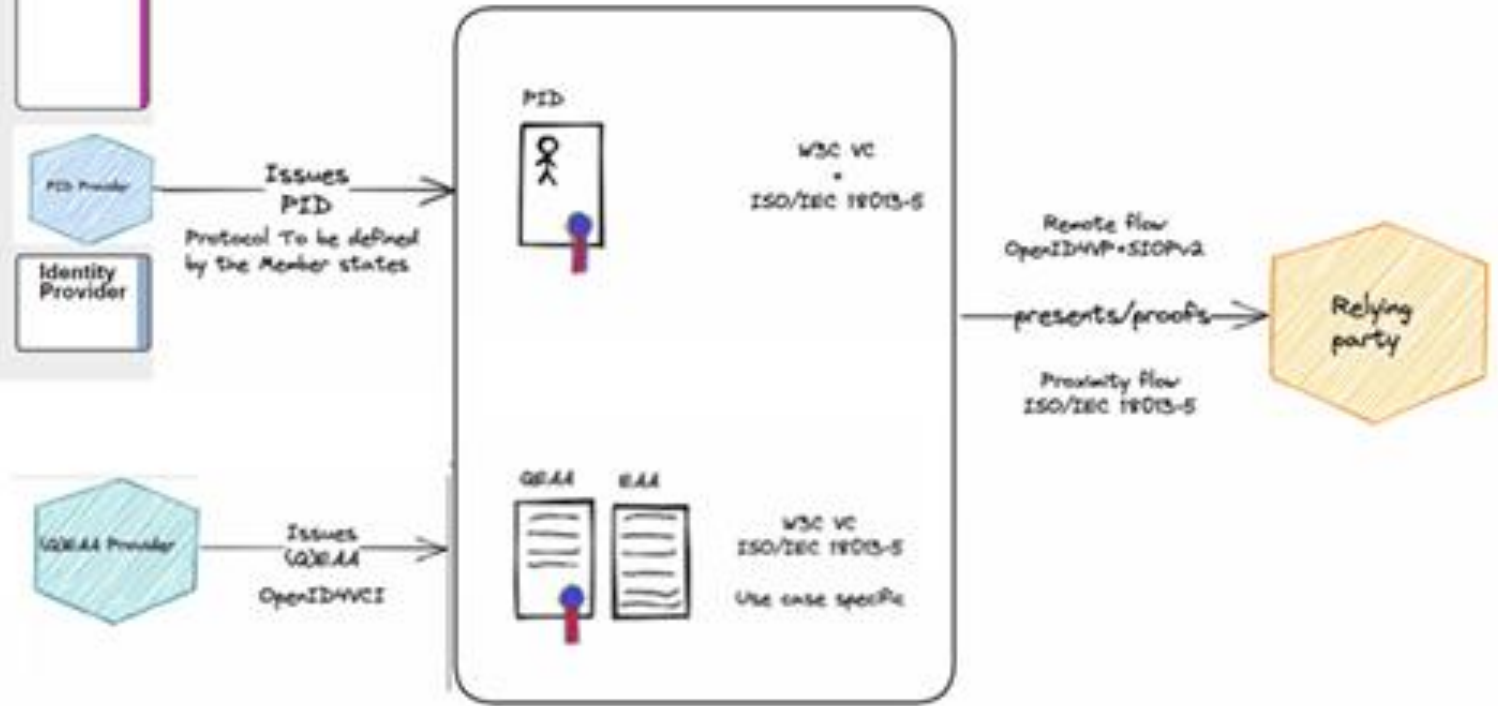


OSIA for PID

National Identity Management System



EUDI wallet solution





www.secureidentityalliance.org

The heritage and expertise of our members

Our members have over

30,000

scientists, experts & professionals

Our members have experience in over

190

countries

Our members have developed key ID related technologies covering over

85%

of world's population

Our members have participated in the development of over

1000

ID related standards

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.

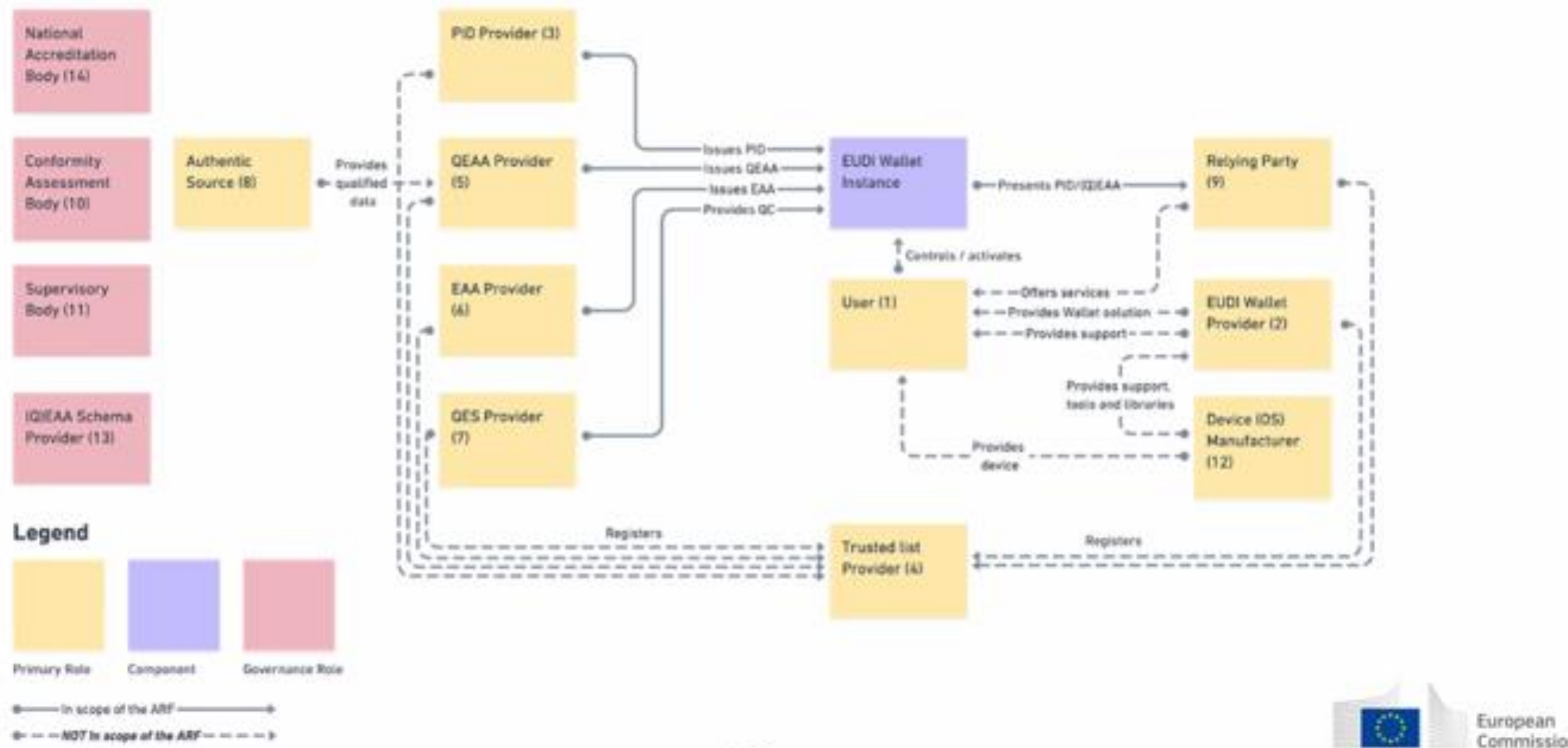


The Architecture and reference framework

- 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 [github](#) 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 ecosystem



OSIA interfaces scope



OSIA GITHUB PAGE

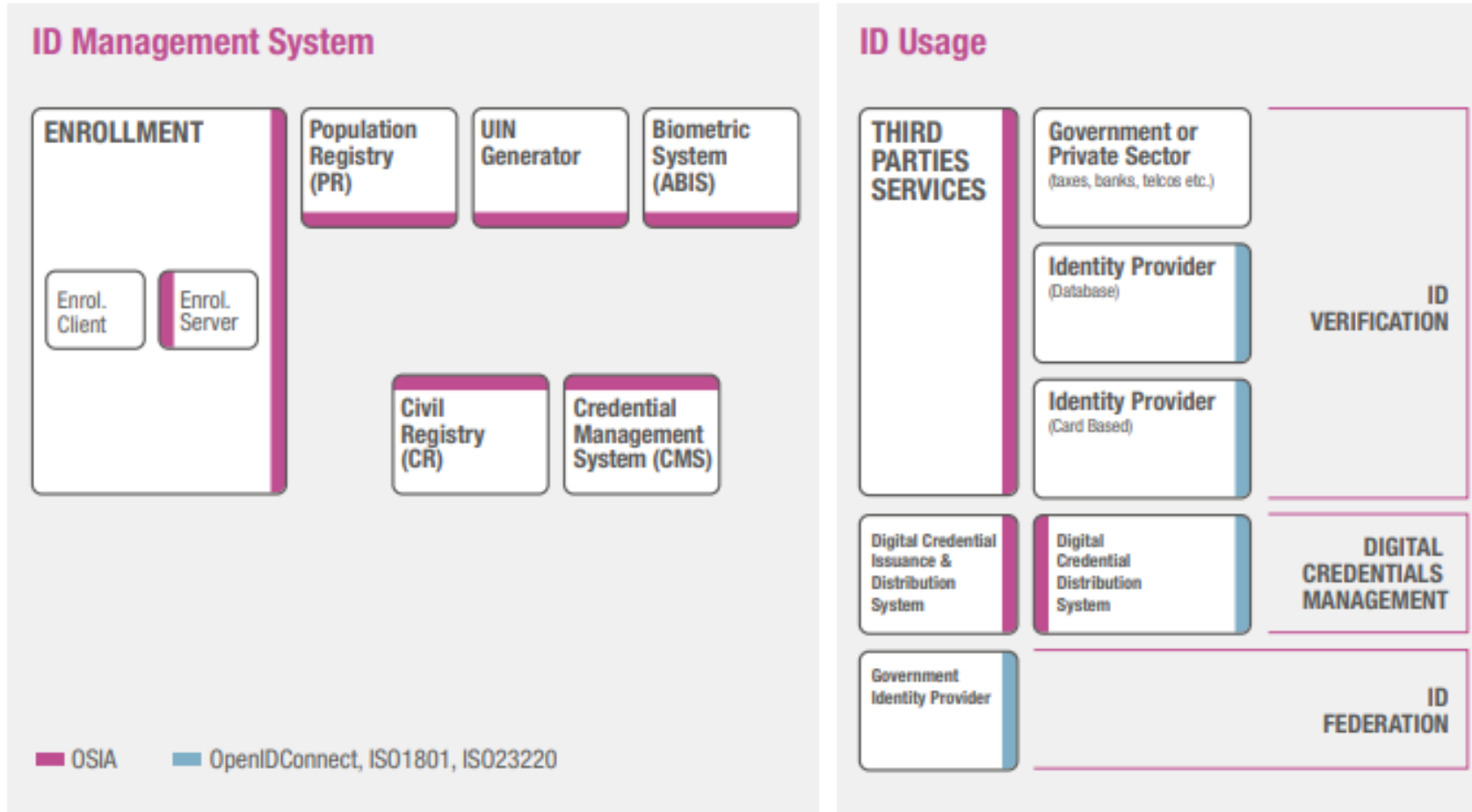
<https://github.com/SecureIdentityAlliance/osia>

OSIA DOCUMENT

<https://osia.readthedocs.io/en/latest/>

OSIA QUALIFICATION

<https://globalplatform.org/osia-qualification-program/>



Use-Cases targeted by eIDAS Expert Group

1. Basic use cases

- Online identification
- Electronic signatures

2. Proposed priority use cases

- Mobile driving license
- eHealth: Patient summary
- eHealth: ePrescription
- Digital Travel Credential
- Payment instruments
- Diplomas

3. Other use cases

Other potential use cases Identified

Possible Use Cases - Single Digital Gateway Regulation (Annex II)

- Registering a motor vehicle originating from or already registered in a Member State, in standard procedures
- Applying for a tertiary education study financing, such as study grants and loans from a public body or Institution
- Submitting an initial application for admission to public tertiary education institution
- Requesting academic recognition of diplomas, certificates or other proof of studies or courses
- Registering a change of address
- Claiming pension and pre-retirement benefits from compulsory schemes

Social Security

- European Health Insurance Card
- Portable Document A1

Private Sector

- Age verification
- Education: Microcredentials
- Hotel check-in
- Open a bank account
- IoT (e.g. car keys)
- Product authenticity checks