# The eIDAS-Wallet in 2024:
# A "Blue Wonder" for eID- and Trust Service Providers?

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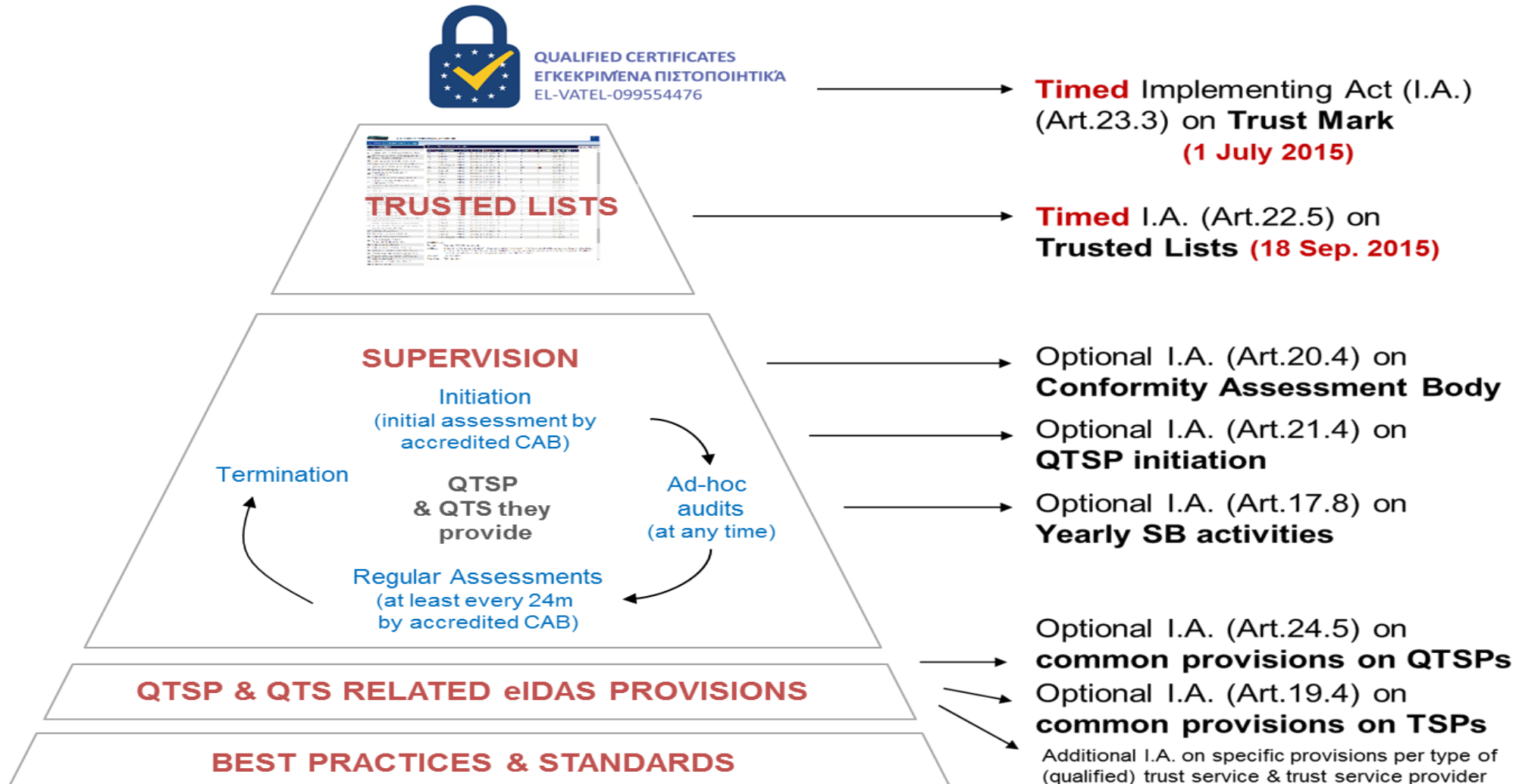
BARCELONA „TECH-DAYS", 14TH OF FEBRUARY 2023

# Vision 2014:
## eIDAS Chapter III: Harmonized Trust Services „all" over Europe



eRegistered Delivery

eSignature

Timestamps

eIDAS

Crossborder eID

eSeals

Website-Auth

# Working well since 2016:
# Harmonized Trust Services „all" over Europe



QUALIFIED CERTIFICATES
ЕГКЕКРИМ́ЕNA ΠΙΣΤΟΠΟΙΗΤΙΚΆ
EL-VATEL-099554476

**TRUSTED LISTS**

**SUPERVISION**

Initiation
(initial assessment by accredited CAB)

Termination

QTSP
& QTS they
provide

Ad-hoc
audits
(at any time)

Regular Assessments
(at least every 24m
by accredited CAB)

**QTSP & QTS RELATED eIDAS PROVISIONS**

**BEST PRACTICES & STANDARDS**

**Timed** Implementing Act (I.A.)
(Art.23.3) on **Trust Mark**
**(1 July 2015)**

**Timed** I.A. (Art.22.5) on
**Trusted Lists (18 Sep. 2015)**

Optional I.A. (Art.20.4) on
**Conformity Assessment Body**

Optional I.A. (Art.21.4) on
**QTSP initiation**

Optional I.A. (Art.17.8) on
**Yearly SB activities**

Optional I.A. (Art.24.5) on
**common provisions on QTSPs**

Optional I.A. (Art.19.4) on
**common provisions on TSPs**

Additional I.A. on specific provisions per type of
(qualified) trust service & trust service provider

Quelle: European Comission

# Vision 2020 eIDAS 2.0



«The Commission will soon 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. »

(State of the Union - 16 September 2020)

« The European Council calls for the development of **an EU-wide framework for secure public electronic identification (e-ID)**, including interoperable digital signatures, to provide people with **control over their online identity and data** as well as to enable **access to public, private and cross-border digital services**.»

(European Council Conclusions - 2 October 2020)

# European Digital Identity – 3 Pillars

**Strengthen the national eIDs system under eIDAS**

- Improve effectiveness and efficiency of mutual recognition of national eID and impose their mandatory notification on Member States

**Private Sector as Provider of identity-linked services**

- Private providers to offer digital identity-linked services by following the (improved) rules applicable for qualified trust services (anchored in national eIDs).

**User Controlled Digital Identity - Personal Wallet**

- European secure "digital wallet" trusted app on mobile/smartphone allowing the storage and use, under the sole control of the user, of identity data based on common standards

# The EUDI Wallet at a glance

# EUDIW Actors
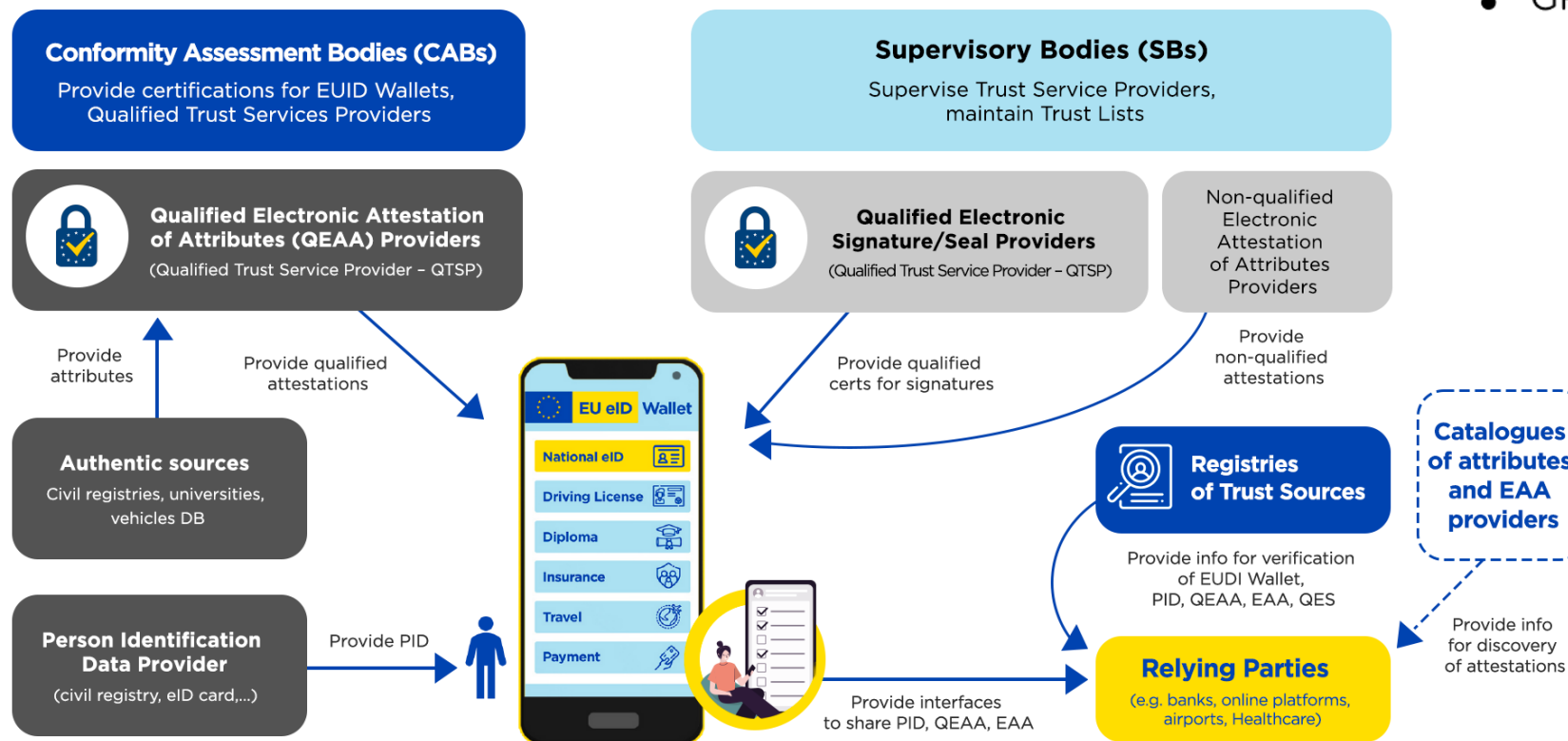
# EUDIW Key Principles

The European Digital Identity Wallet will be issued in a harmonised framework based on common standards

**Harmonization based on common standards and technical framework, certification and conformity assessment**

- Ensuring secure, trusted and seamless access to services (by Very Large Online Platforms
- Ensuring that users can identify and request, obtain, store and combine attributes
- Ensuring means for a qualified electronic signature for users

**Obligation for each Member State to issue a (own?) wallet**

- Free of Charge
- Assurance level High
- Under a notified scheme

# eIDAS 2.0 Trust Services: „we are all in"

**Definition Trust Services eIDAS 2.0**

- Scope (Art 3 a): This Regulation does not apply to the provision of trust services that are used <u>exclusively within closed systems</u> resulting from national law or from agreements between a defined set of participants.
- Definition (16): 'Trust Service' means an electronic service <u>normally provided against payment</u> which consists of the creation, verification, and validation of electronic signatures, electronic seals or electronic time stamps, electronic registered delivery services, electronic attestation of attributes and certificates related to those services
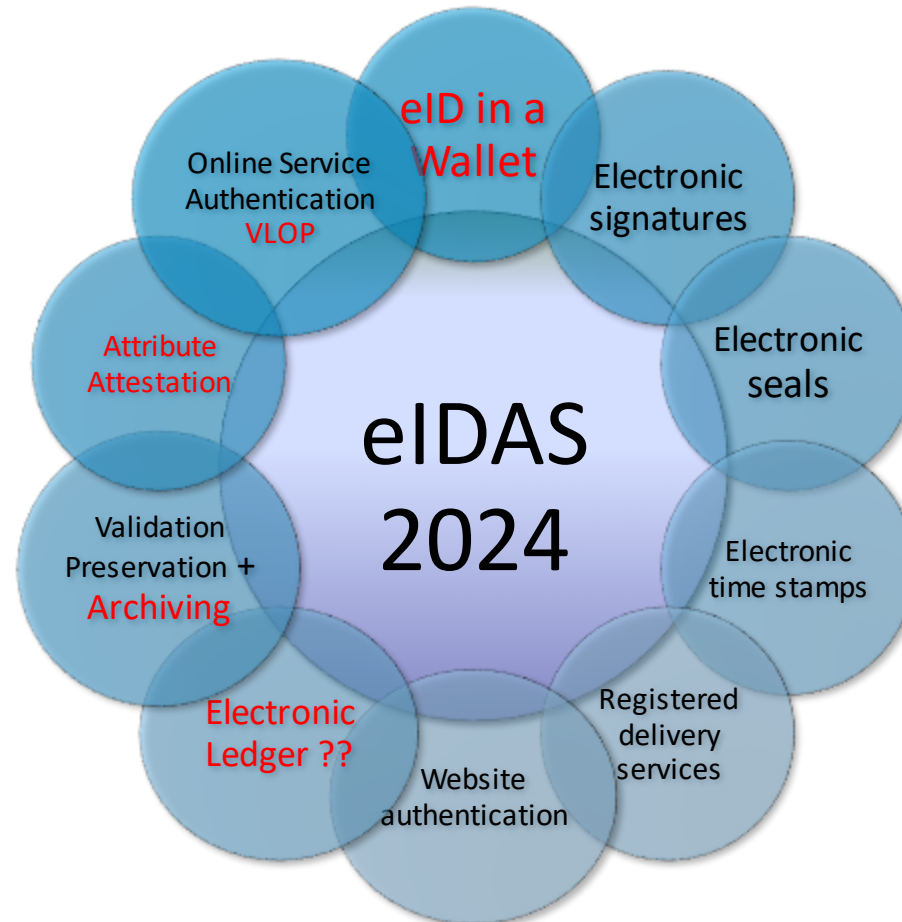
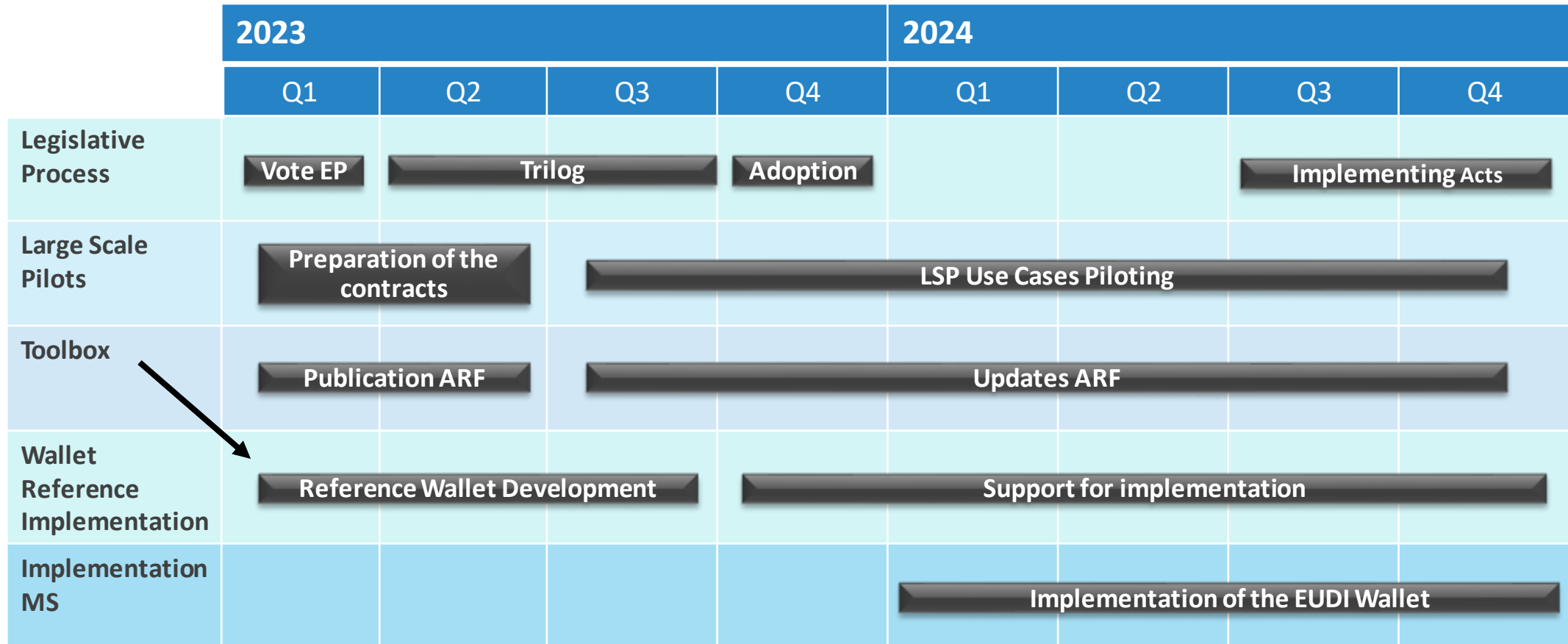**Strengthening Trust Services eIDAS 2.0**

- Harmonisation of remote identity verification (on level „high"!)
- Recognition of QWACs - Ensuring the protection of consumers, article 45 has introduced an obligation on the providers of web browsers to accept QWACs and <u>display identity information</u> about the entity behind a website in the browser environment.
- Alignment with the rules applicable to Network and Information Security (NIS/2)

# New Services under eIDAS 2



eID in a Wallet

Online Service Authentication VLOP

Electronic signatures

Attribute Attestation

Electronic seals

eIDAS 2024

Validation Preservation + Archiving

Electronic time stamps

Electronic Ledger ??

Registered delivery services

Website authentication

# eIDAS 2.0 –„wonderful" Timeline

| | 2023 | | | | 2024 | | | |
|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| **Legislative Process** | Vote EP | Trilog | | Adoption | | | Implementing Acts | |
| **Large Scale Pilots** | Preparation of the contracts | | LSP Use Cases Piloting | | | | | |
| **Toolbox** | Publication ARF | | Updates ARF | | | | | |
| **Wallet Reference Implementation** | Reference Wallet Development | | | Support for implementation | | | | |
| **Implementation MS** | | | | | Implementation of the EUDI Wallet | | | |

# Technical Implementation – ARF 1.0

- ARF version 1.0 is available........2.0 will follow

- There is consensus on the interfaces - ISO/IEC 23220 (not yet published) will be the decisive standard.

- There is not one technology → LSPs have freedom to use different technologies

- ARF is primarily an orientation for the reference implementation of the wallet, not for the LSPs

- Tendency that there will be several wallets

- More 'constraints' and specification expected following reference implementation and LSPs

# Interfaces in scope of ISO/IEC 23220 series
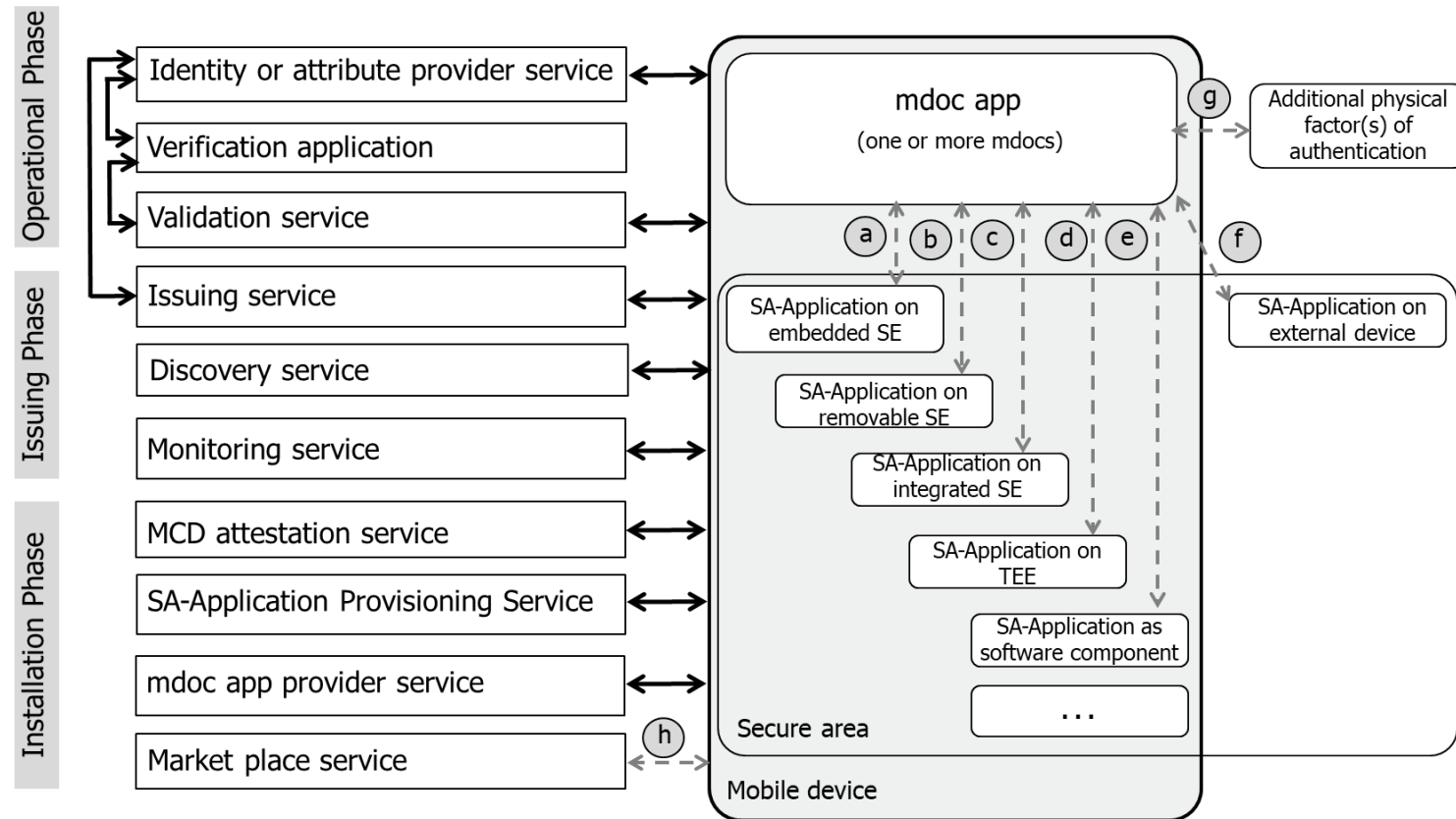


Source: ISO/IEC
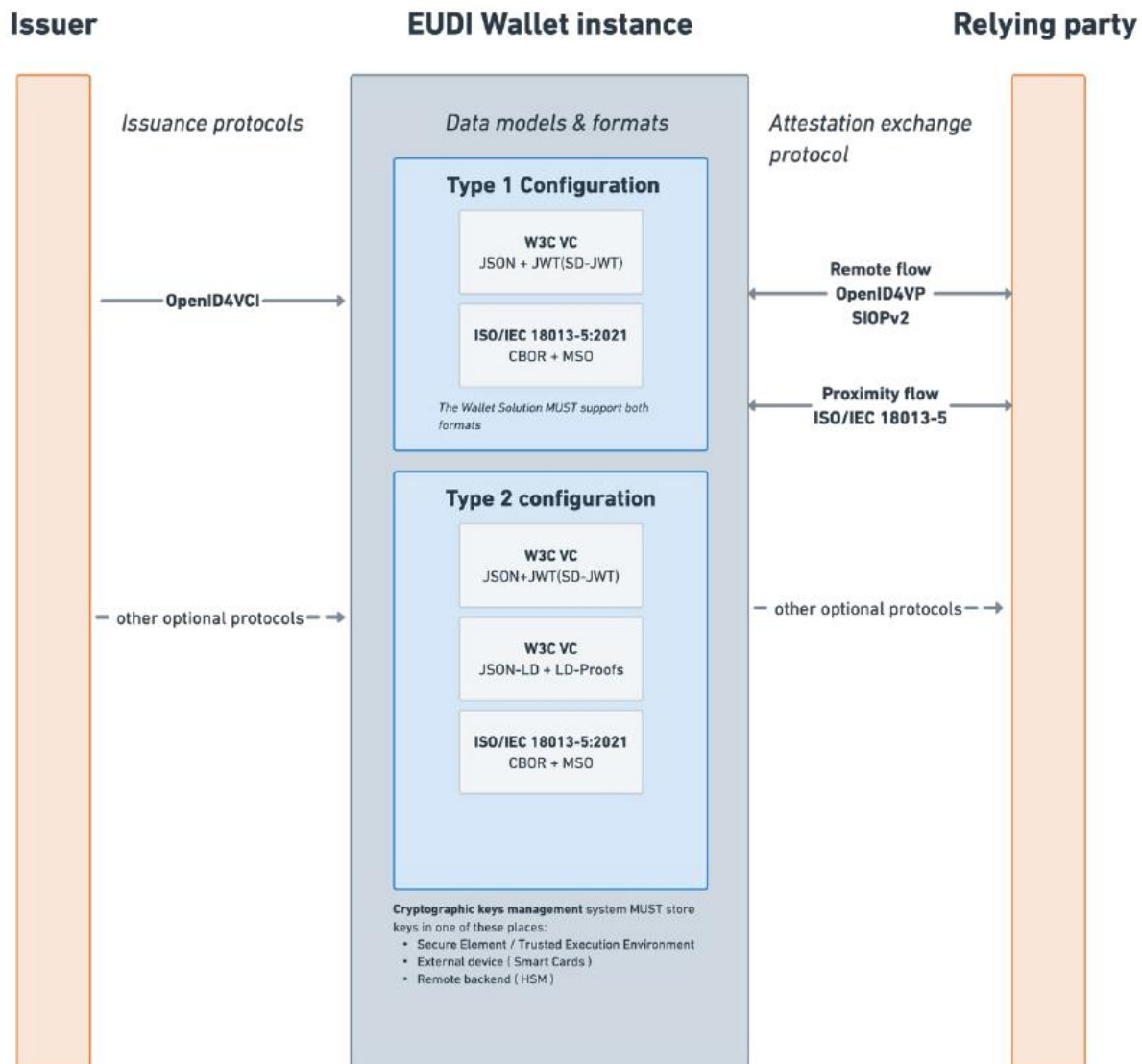
# The reference implementation of the EUDI Wallet

Source: EU Commission, ARF 1.0

# eIDAS 2: ANNEX VI minimum list of Attributes

Further to Article 45d, Member States shall ensure that measures are taken to allow <u>qualified providers</u> of electronic attestations of attributes to verify by electronic means at the request of the user, the authenticity of the following attributes against the <u>relevant authentic source</u> at national level or via designated intermediaries recognised at national level, in accordance with national or Union law and in cases where these attributes rely on authentic sources within the public sector:

1. Adress
2. Age
3. Gender
4. Civil status
5. Family Composition
6. Nationality
7. Educational qualifications, titles and licenses
8. Professional qualifications, titles and licenses
9. Public permits and licenses
10. Financial and company data

# Regulatory Landscape



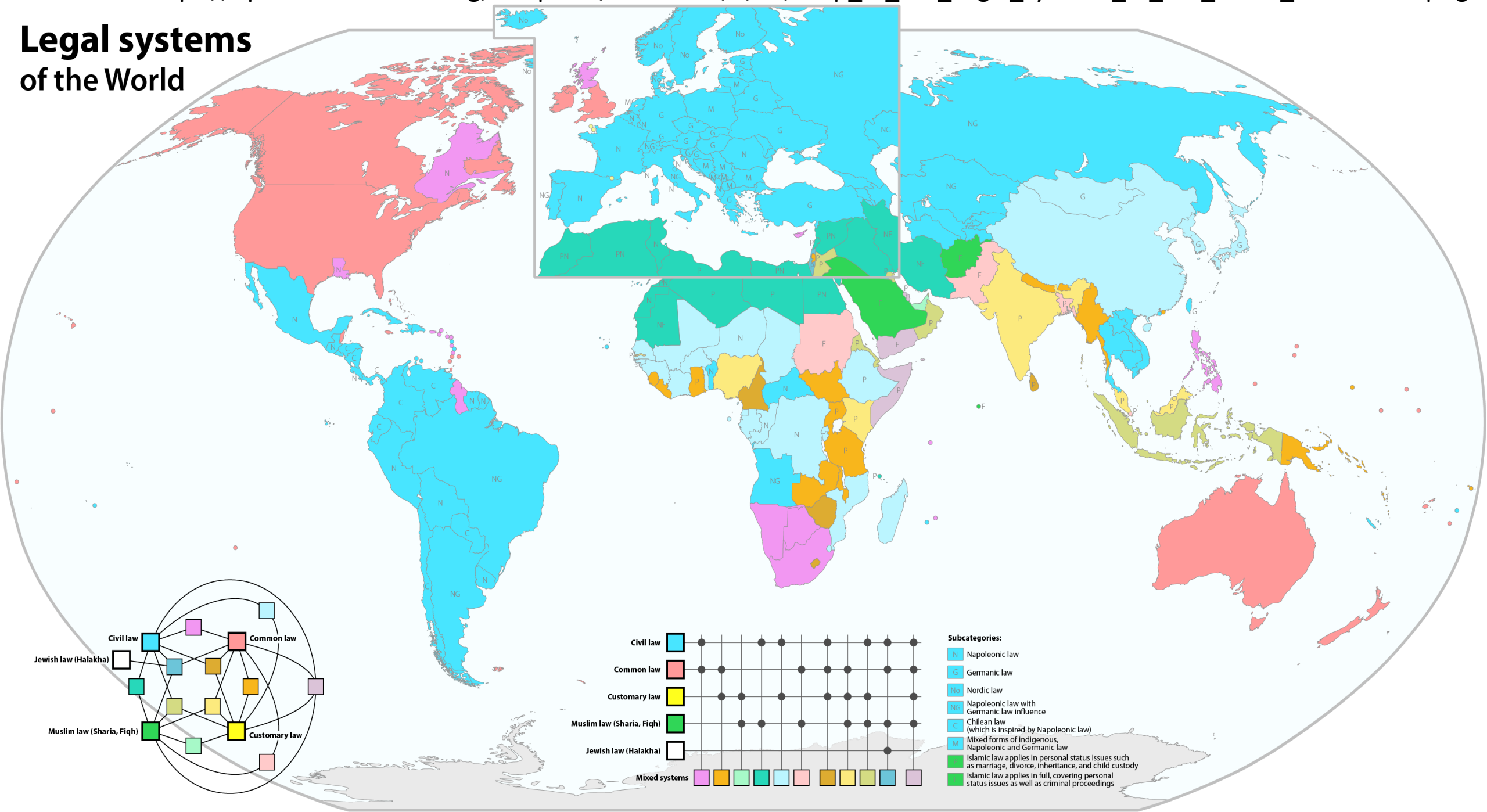eIDAS · DSA · DMA · DORA · NIS2
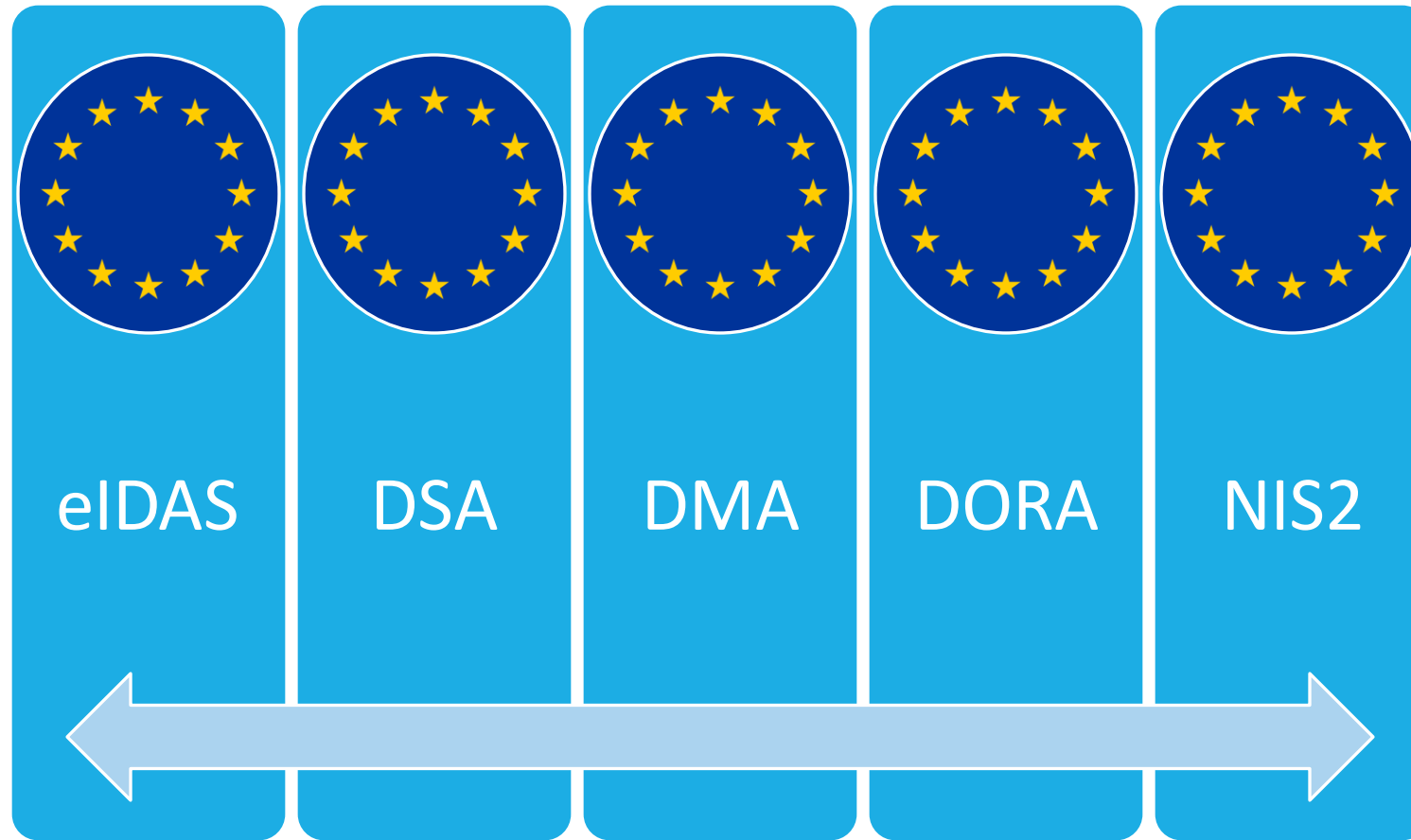
# eIDAS 2024 Thesis

1. Legal and technical complexity require a „real Blue Wonder" to implement eIDAS 2 successfully until 2025

2. The eIDAS 2 Certification scheme is now ruled by the member states

3. The commercial business of identification of natural and legal persons will become poor……

4. New burden for TSP (NIS 2, Liability, identification) will demotivate TSP

5. Only Estonia has a success story for government driven eID with broad user acceptance

6. VLOPS like Google, Apple, Microsoft….and TikTok act much faster and user centric

7. But Attribute Attestation is an interesting new market

# Thank you for your attention!

Legal systems
of the World

Civil law

Common law

Jewish law (Halakha)

Muslim law (Sharia, Fiqh)

Customary law

Civil law

Common law

Customary law

Muslim law (Sharia, Fiqh)

Jewish law (Halakha)

Mixed systems

Subcategories:

N  Napoleonic law

G  Germanic law

No  Nordic law

NG  Napoleonic law with Germanic law influence

C  Chilean law (which is inspired by Napoleonic law)

M  Mixed forms of indigenous, Napoleonic and Germanic law

Islamic law applies in personal status issues such as marriage, divorce, inheritance, and child custody

Islamic law applies in full, covering personal status issues as well as criminal proceedings

# Person Identification Data (PID)

| Mandatory eIDAS Attributes | Optional eIDAS Attributes | Possible additional optional attributes |
|---|---|---|
| Current Family Name | Family Name at Birth | Nationality/Citizenship* |
| Current First Names | First Names at Birth | AgeOver18 and the more generic AgeOver_NN |
| Date of Birth | Place of Birth | Optional attributes used at national level, e.g. tax number, social security number etc. |
| Unique Identifier | Current Address | |
| | Gender | |

Source: EU Commission, ARF

# EUDI Wallet Roles

1. End Users of EUDI Wallets
2. EUDI Wallet providers
3. Person Identification Data Providers
4. Trusted List Providers
5. Qualified Electronic Attestation of Attributes (QEAA) providers
6. Non-qualified Electronic Attestation of Attributes (EAA) providers
7. Qualified and non-qualified certificate for electronic signature/seal providers
8. Providers of other Trust Services
9. Authentic Sources
10. Relying Parties
11. Conformity Assessment Bodies (CAB)
12. Supervisory bodies
13. Device manufacturers and related subsystems providers
14. Catalog of schemas and attributes for the Electronic Attestation of Attribute providers
15. National Accreditation Bodies
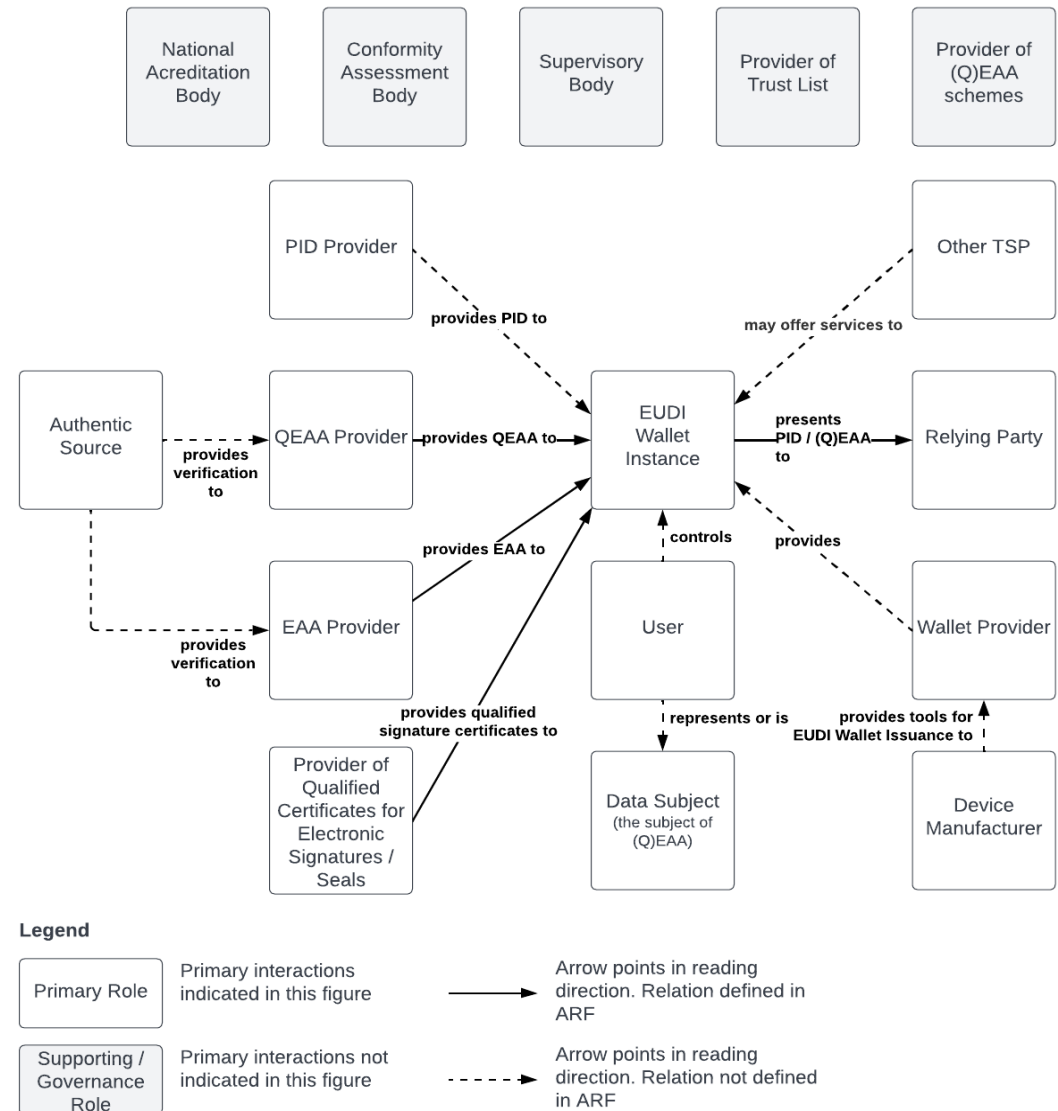


Source: EU Commission, ARF

# EUDI Wallet configurations conceptual model
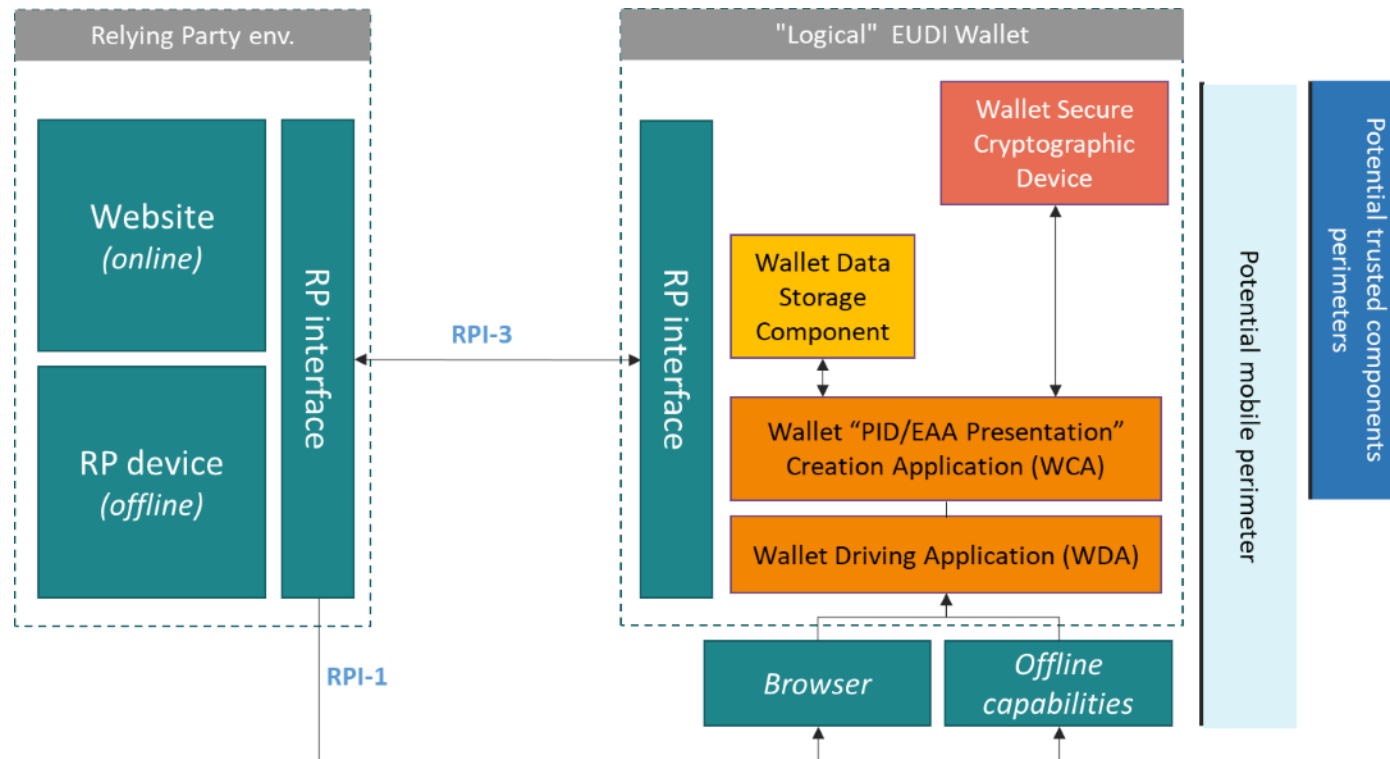


WCA: Creates the (verifiable) presentation of PID/QEAA to be shared with the RP, based on the inputs received by the WDA

WDA: Provides the input to the WCA, such as:
- Which PID/EAA to combine based on user selection
- Which specific attributes to present (and which not to present) based on user selection

The UI (or part of it) is part the WDA

Source: EU Commission, ARF