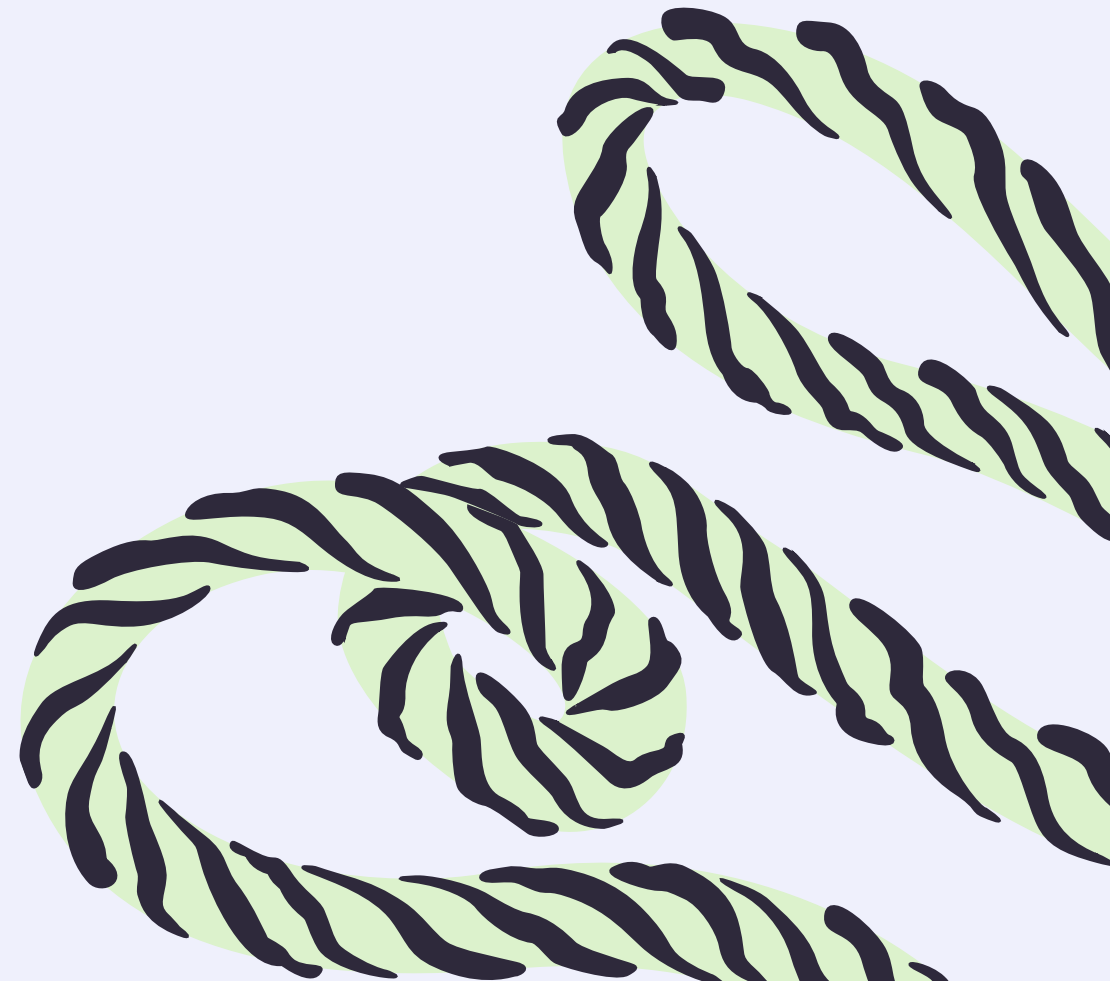




# The European Digital Identity Wallet: An EU challenge

ENISA Cybersecurity Certification Conference

18<sup>th</sup> April 2024, Brussels



# Imagine life in Europe in 2030

A secure, simplified, reliable and fast digital society

- ★ Digital access knows **no age limits**
- ★ Collaborating and converging **innovative infrastructures**
- ★ **Lightning-speed** internet, anywhere you go
- ★ **Safe and secure** digital world
- ★ Seamless **EU-wide access** to digital public services



Introducing you to



EU Digital Identity  
**Wallet**

The personal digital wallet for EU citizens, residents &  
businesses, the EU Digital Identity Wallet.



# Your Data, Your Story.

What is EU Digital Identity Wallet?

Identification is how we prove who we are; think of your passport or driver's license. With more and more private and public services becoming digital; a **safe, reliable, and privacy enhancing** means of digital identification is needed for **everyone in Europe**.

The EU Digital Identity Wallet

- is the **European Commission's response** to the challenges of digital identification.
- will allow you to **securely identify yourself** online when accessing a wide range of public and private services,
- will let you **store, present and share electronic attestations** (which include everything from university diplomas to train tickets).
- will let you **sign digital documents** swiftly and easily
- will be made available in **every EU Member State for all citizens, residents and businesses**.

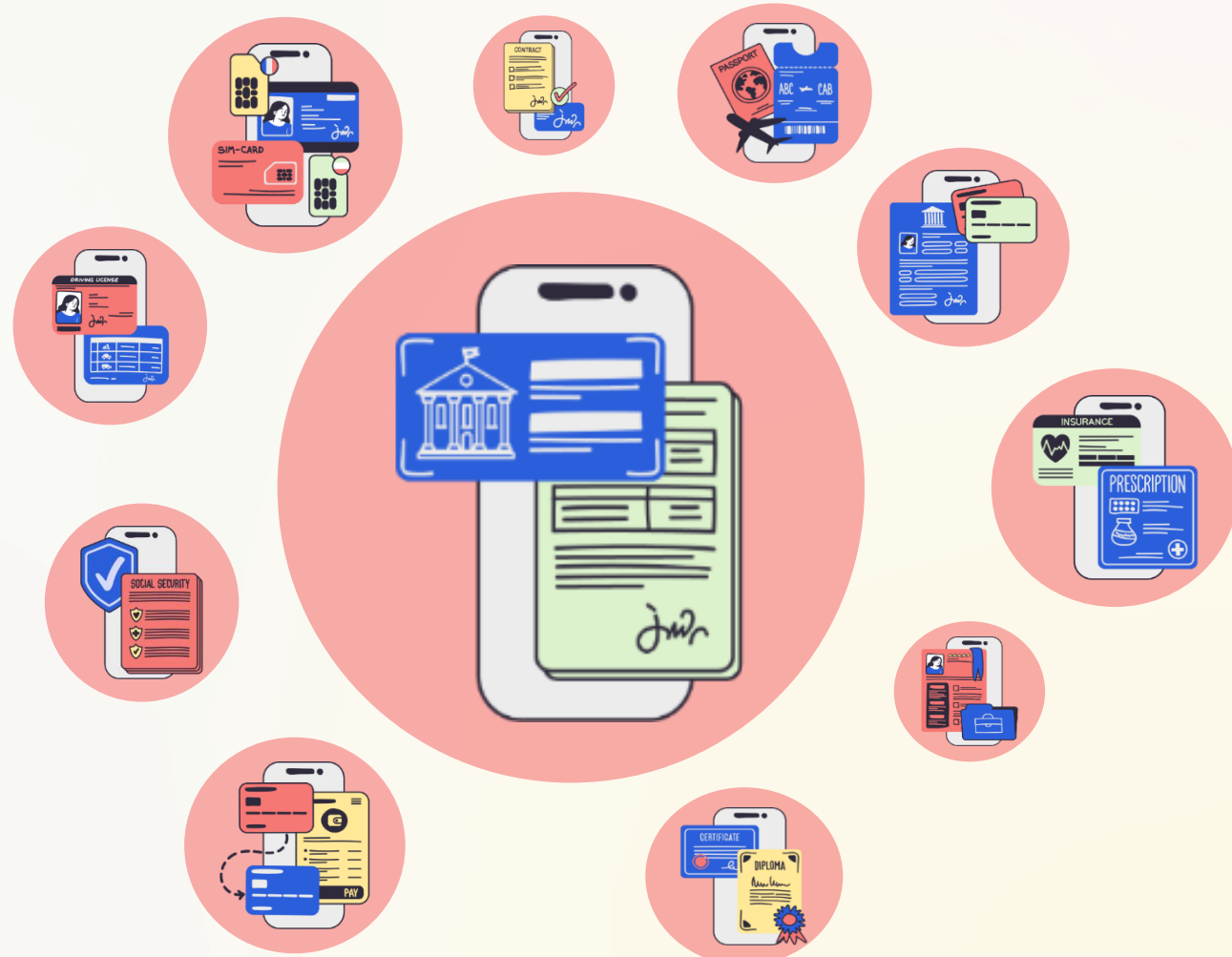


# What can you do with the EU Digital Identity Wallet?

The EU Digital Identity Wallet will simplify your life and ensure your data stays secure and private. It will also improve security and flexibility for governments and businesses when carrying out transactions online. Discover some examples of how it can radically simplify your day-to-day life in the following areas:

## ACCESS GOVERNMENTAL SERVICES

Access digital public services (nationally and across borders) by using your wallet to securely identify and authenticate yourself.

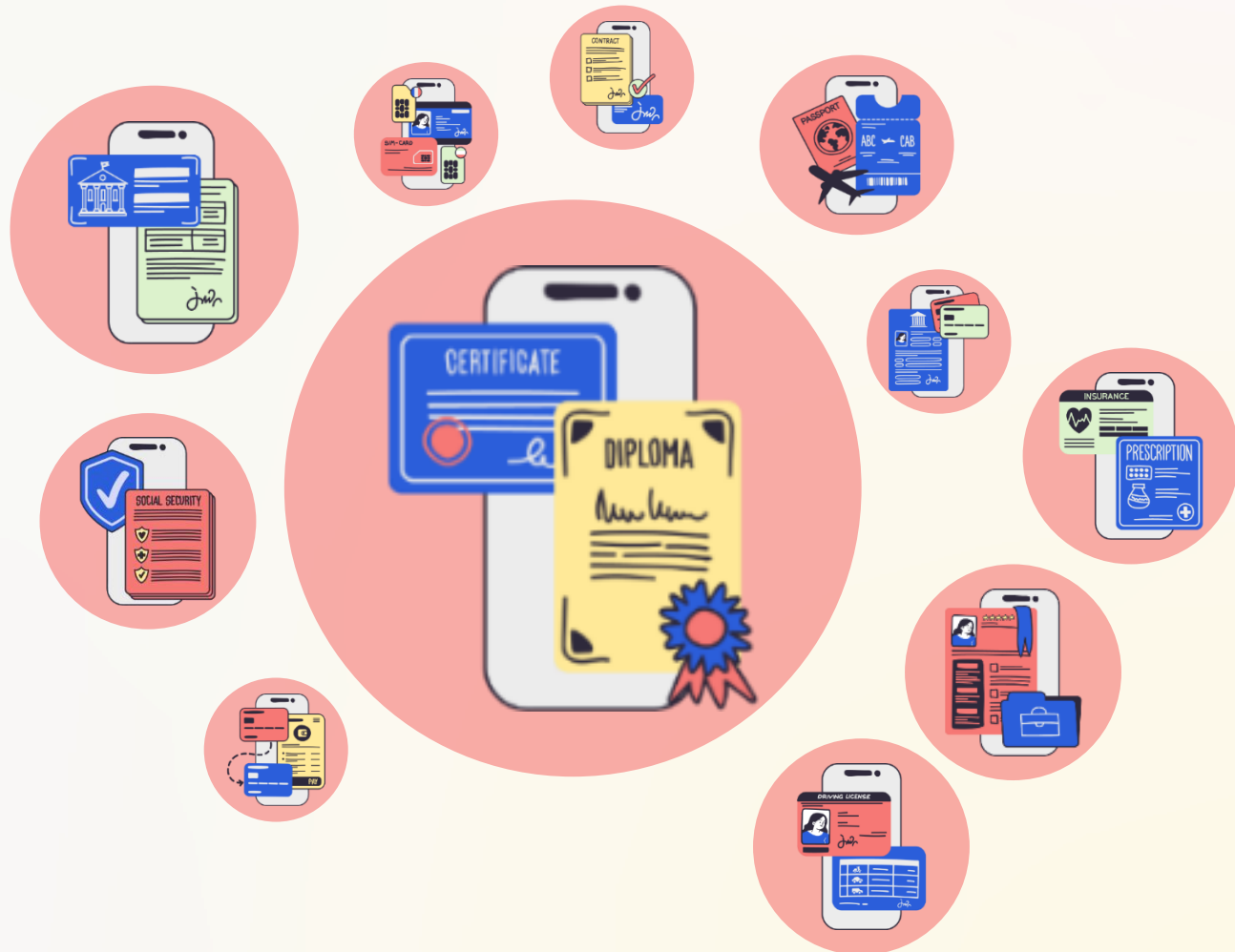


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## EDUCATION

Never lose the diploma you worked so hard for again. Easily store and share all your education credentials.

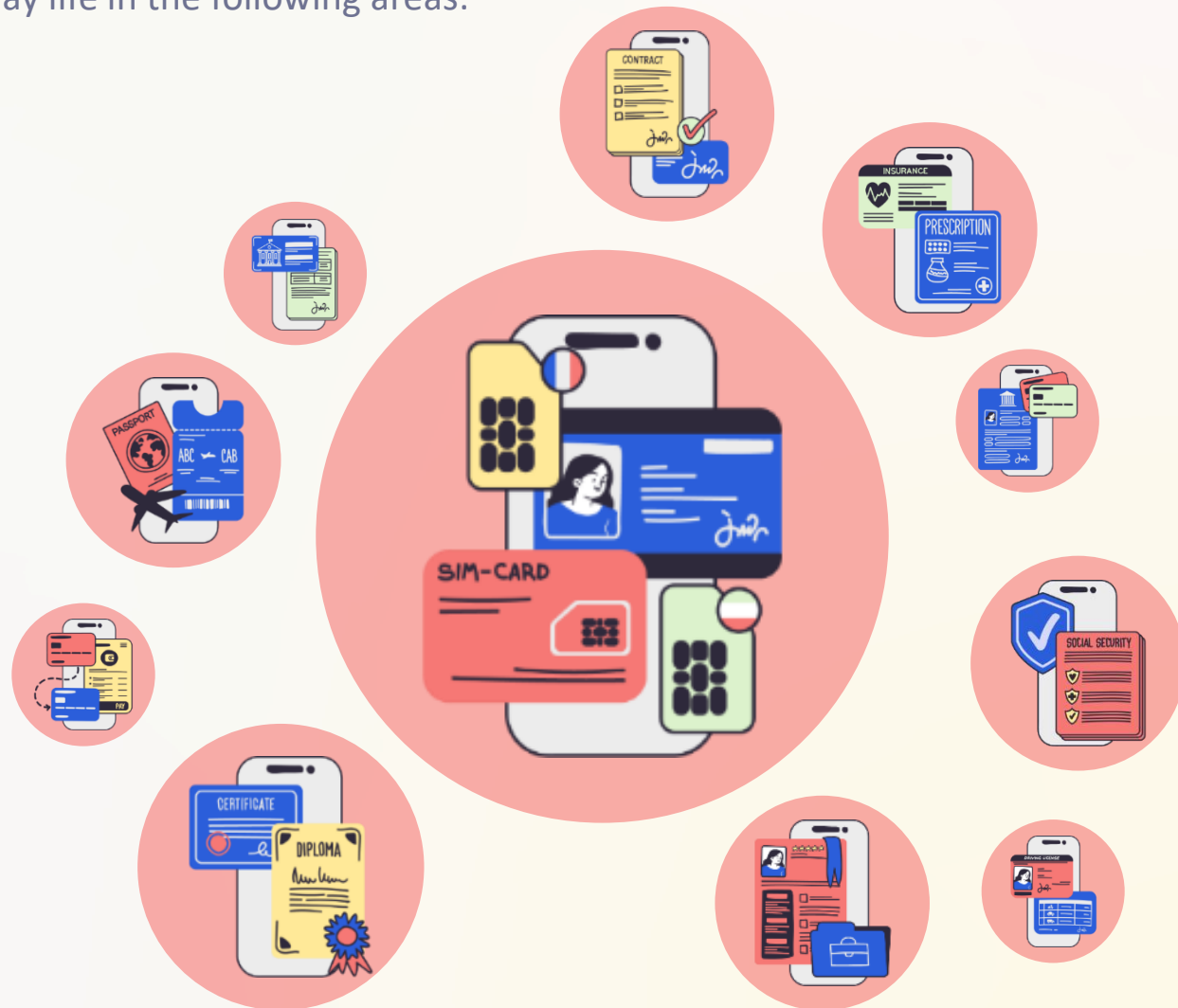


# What can you do with the EU Digital Identity Wallet?

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## REGISTER SIM

Registering a new prepaid SIM card just got easier. Your wallet lets you quickly identify yourself.





# The Benefits

How will citizens, governments and relying parties benefit from the wallet? Securely store and share your digital identity — discover the many ways EU Digital Identity Wallet will benefit both individuals and organizations.

## Citizens



Protect personal data  
Simplify paperwork and admin  
Access public and private services across borders

## Governments



Improve access to digital services  
Enhance fraud prevention improves security

## Relying Parties



Improve security and privacy  
Reduce cost of authentication  
Avoid relying on competing big platforms

## Society

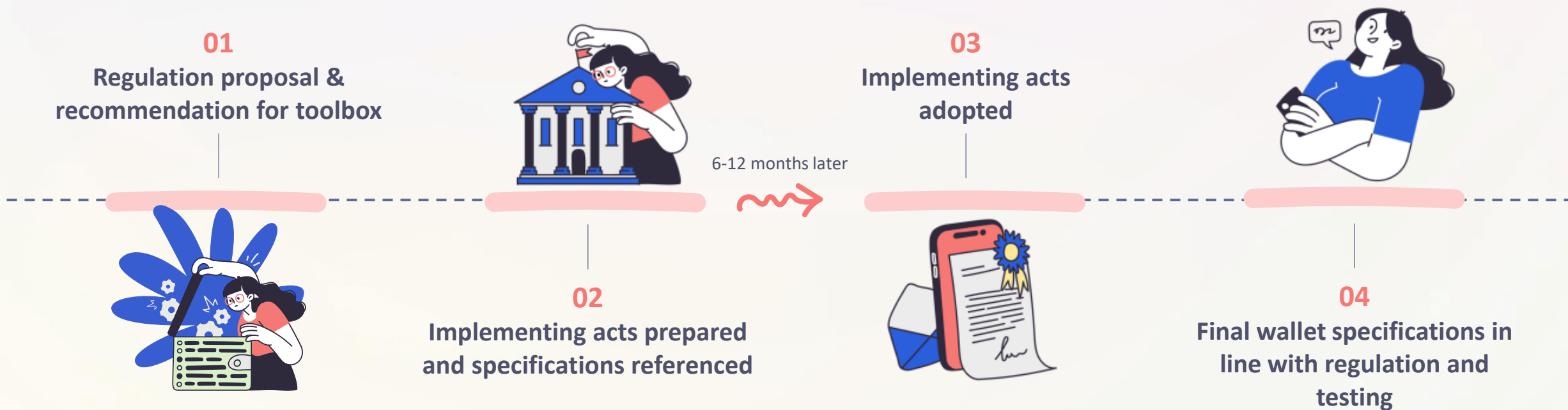


Increased online transactions  
Resource reallocation  
New business opportunities  
Economic growth



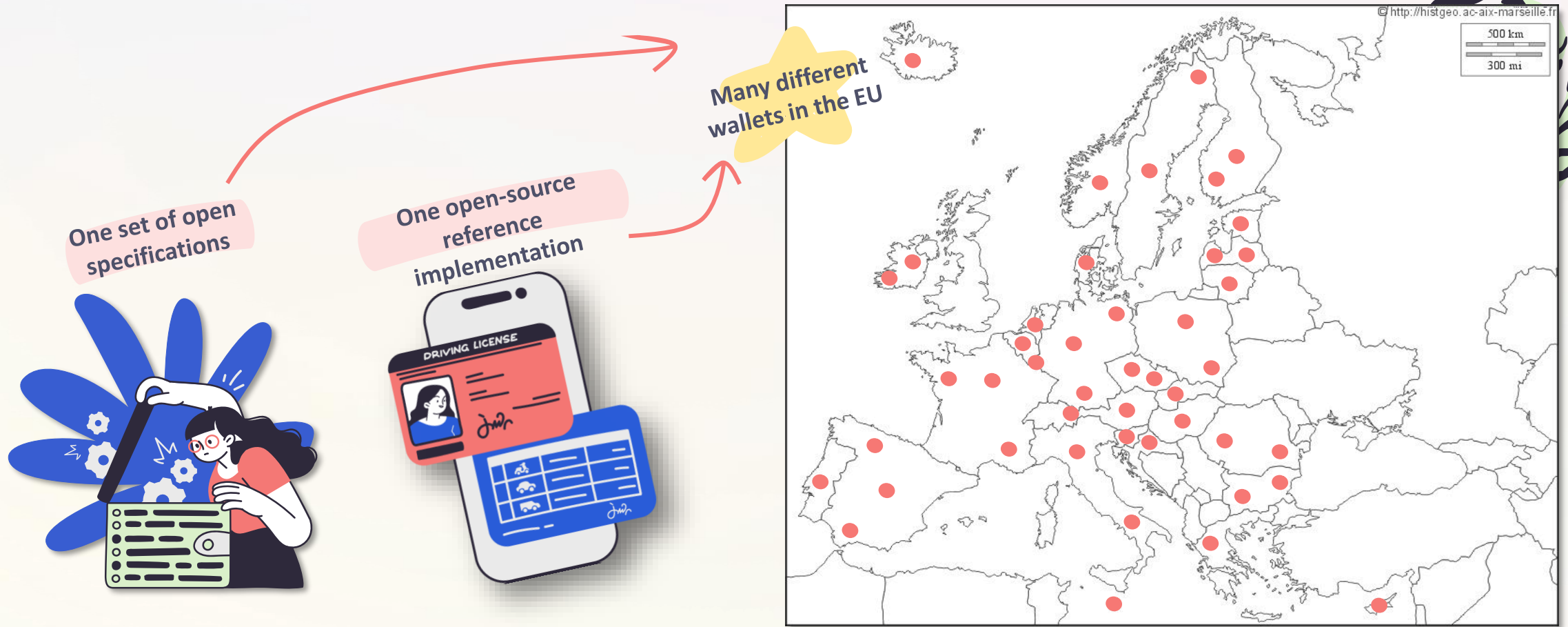
# Regulated

The whole initiative is based on a regulation & implementing acts which mandates the Member States to create a wallet by a given date.



# Open

There will be multiple EU Digital Identity Wallets, all built to a common set of open specifications by the European Commission and Member States. They will be interoperable, and both the reference implementation and all European Wallet Apps for consumer devices will be open source.



# Piloted

Piloted by Large Scale Pilots



A set of Nordic and Baltic countries who, together with Italy and Germany, who are developing a large-scale pilot for the payment use case in the EU Digital Wallet.

#  
PAYMENTS



Potential is a secure digital ID that will allow citizens to quickly and securely prove their identity as part of their online citizenship procedures.

# MOBILE DRIVING  
LICENSE

# ACCESS GOV SERVICES

# OPEN BANK  
ACCOUNT

# HEALTH

# CONTRACTS

# SIM REGISTRATION



The EWC aims to harness EU digital identity benefits for Digital Travel Credentials across Member States, building on the Reference Wallet Application for this specific use case.

#  
PAYMENTS

# TRAVEL

# ORGANISATION  
ID



DC4EU supports the education and social security sectors by integrating cutting-edge digital services across Europe within a cross-border trust framework.

# EDUCATION

# SOCIAL SECURITY



# The EU Digital Identity Wallet timeline

The Large Scale Pilots are currently testing prototype wallets building on the specifications detailed in the Architecture and Reference Framework (ARF). After the legislation and specifications are finalised, each Member State will be obligated to offer at least one wallet to citizens, residents, and businesses.

2023

- Trilogue negotiations concluded on EU Digital Identity Wallet Regulation
- European Parliament ITRE Committee vote on the regulation, confirmed by vote in plenary
- Council and European Parliament approval of regulation

Regulation

2024

- Expected Adoption of EU Digital Identity Wallet Regulation
- Publication of the EU Digital Identity Regulation in the Official Journal
- Adoption and publication of the Wallet Implementing Acts

Implementing acts

Piloting

2025

- First Member States Wallets made available

Implementation by Member States

2026

- Wallets widely available in all Member States



# The EU Digital Identity Wallet certification

## Legal requirements (Article 5c)

**Mandatory certification** of the EU Digital Identity Wallet by accredited conformity assessment bodies

Certification against **level of assurance “high”** requirements as defined in the Regulation

Certification covers both **cybersecurity and non-cybersecurity** (functional, operational, interoperability) requirements

Certification is **valid for up to 5 years**, with a **2 years vulnerability assessment**

**Optional certification against** Regulation (EU) 2016/679.

## Cybersecurity certification

The EU Digital Identity Wallet certification scheme shall **reference available and relevant CSA certification schemes** in order to ensure **harmonization**

For now, only the **EUCC scheme** is available covering ICT products

## Transitory national certification schemes

For non-cybersecurity requirements and when cybersecurity certification schemes do not, or only partially, cover cybersecurity requirements, **Member States shall establish national certification schemes following the requirements set out in the revised Regulation implementing acts**

Member States shall **transmit their draft national certification schemes** to the European Digital Identity Cooperation Group which may issue opinions and recommendations.

# The eIDAS Expert Group

## Toolbox Expert Group

On 3 June 2021, the European Commission adopted a **Recommendation** calling on Member States to work towards the **development of a Toolbox including a technical Architecture and Reference Framework** (hereinafter the ARF), a set of common standards and technical specifications and a set of common guidelines and best practices.

The Toolbox Expert Group starting to work in **September 2021** involving all Member States discussing a non-paper on a high-level description of the EUDI Wallet ecosystem, proposed by the Commission.

That work resulted in the **Outline of the ARF**, adopted by the eIDAS Expert Group in February 2022 and published on Futurium for public feedback.

The eIDAS Expert Group has since further **developed the concepts and specifications for the European Digital Identity Framework**. The current ARF version **1.4.0** is based on the legal text agreed by the co-legislators.

## Certification subgroup

The certification of the EUDI Wallets is of the utmost importance in order to ensure security, trust and robustness of the EUDI Wallets.

In order to keep the ambitious deployment timeline proposed by the Commission, a **certification sub-group was created in July 2023** to support in **establishing the requirements for the EUDI Wallets certification**. The certification sub-group reports to the eIDAS Expert Group Toolbox.

Part of the subgroup tasks is to **assist DG CNECT to identify** the CSA certification schemes relevant for the Wallets certification and/or establish specifications, procedures and reference standards for their use under relevant identified certification schemes and/or establish a list of specifications, procedures and reference standards establishing common certification requirements not covered by relevant cybersecurity certification schemes pursuant to CSA for the purpose of the certification of the EUDI Wallet.

**ENISA** is supporting the work in this subgroup.



# Ongoing work of the Certification Subgroup

## Members

**15 Member States** have nominated experts with a strong expertise in the field of certification in order to define the European Digital Identity Wallets certificate on requirements.

## Meetings

Since July 2023, the Certification Subgroup met **9 times** discussing different deliverables:

- Open questions on EUDI Wallet certification,
- EUDI Wallet risk assessment

## HLTR

With ENISA's support the subgroup is currently defining **High level technical requirements** which will be used to draft Article 5c(6) Implementing Act.

## Certification requirements

The requirements are divided as follows:

- Process requirements,
- Functional requirements,
- Cross-functional requirements,
- Security requirements.



# EUDI Wallet certification - challenges

## Cybersecurity

There is no EU certification scheme covering the EUDI Wallet which is available.



## Transition

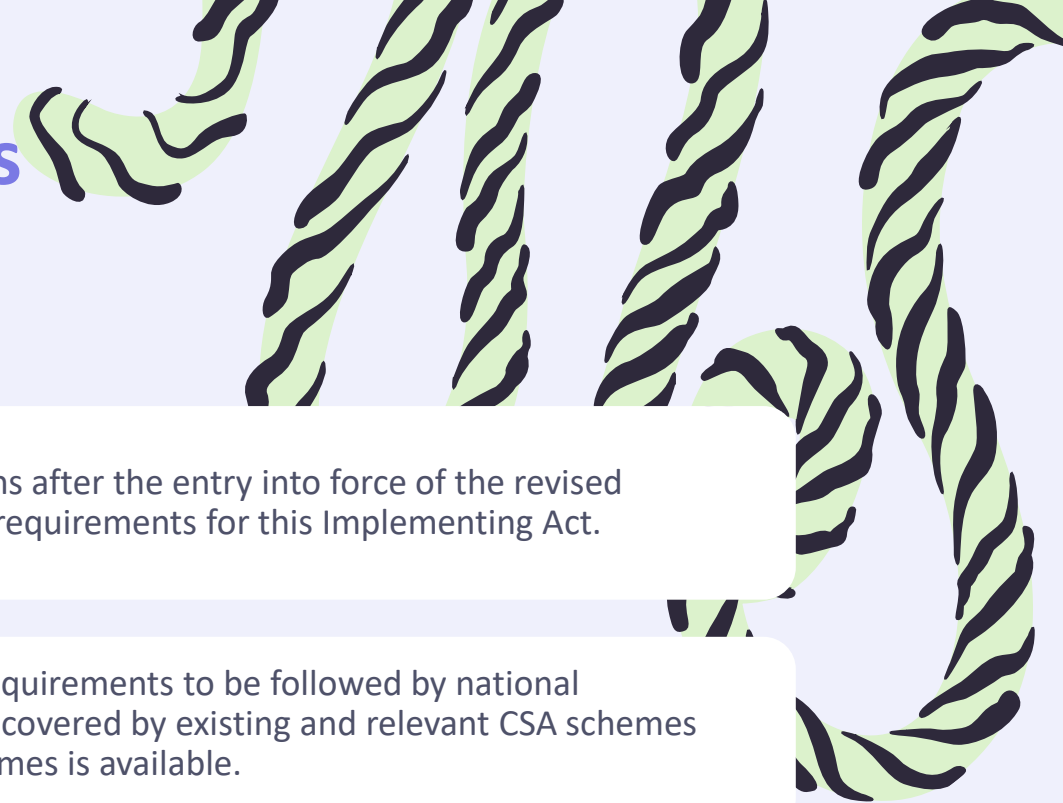
National schemes will serve as a transitory measure covering functional and security requirements.



## Harmonization

Harmonization between Member States' certification schemes is key ensuring a high-level of security and trustworthiness of the Wallets.

# EUDI Wallet certification – next steps



## Implementing Act

Article 5c(6) Implementing shall be adopted 6 months after the entry into force of the revised Regulation. The subgroup will focus on defining key requirements for this Implementing Act.

## National schemes

This Implementing Act will define the harmonized requirements to be followed by national certification schemes for those parts that cannot be covered by existing and relevant CSA schemes and only until dedicated European certification schemes is available.

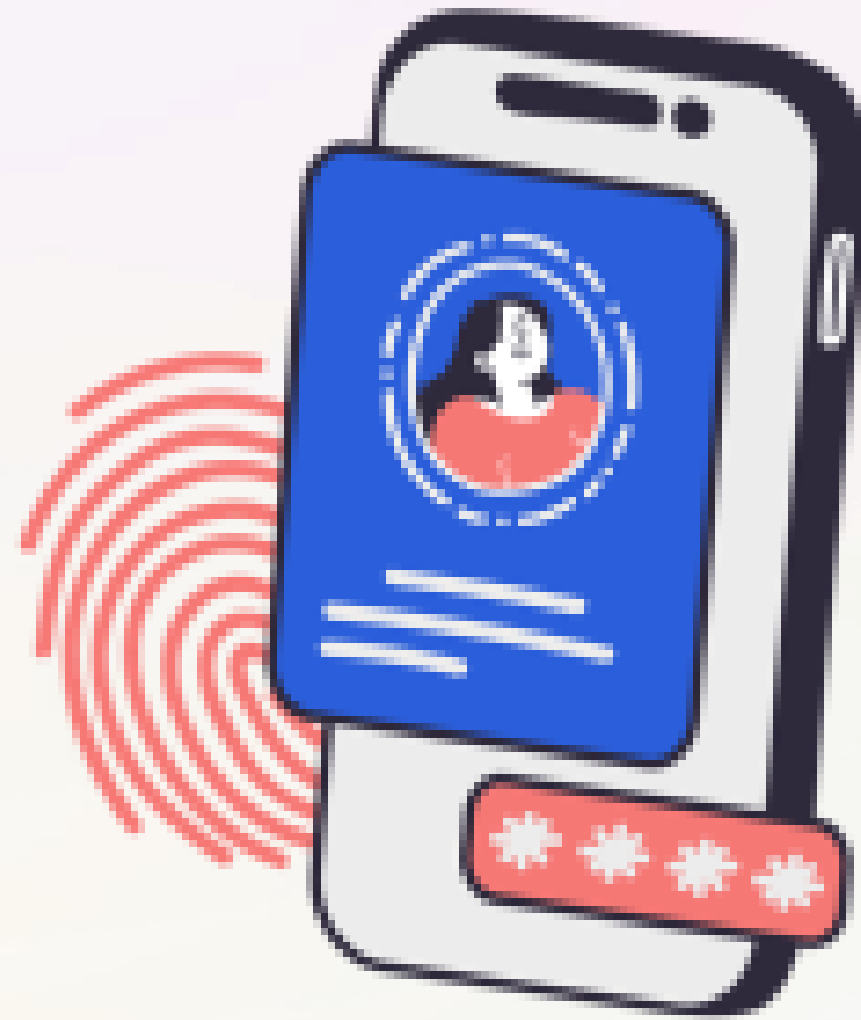
## Risk assessment

The subgroup will work on all EUDI Wallet envisioned architectures to identify the assets, threats and security measures to be implemented in order to reach LoA “high”,

## CSA

In parallel, the Commission will make a formal request to ENISA to develop a dedicated EUDI Wallet certification scheme under the Cybersecurity Act.

Thank you for your attention!



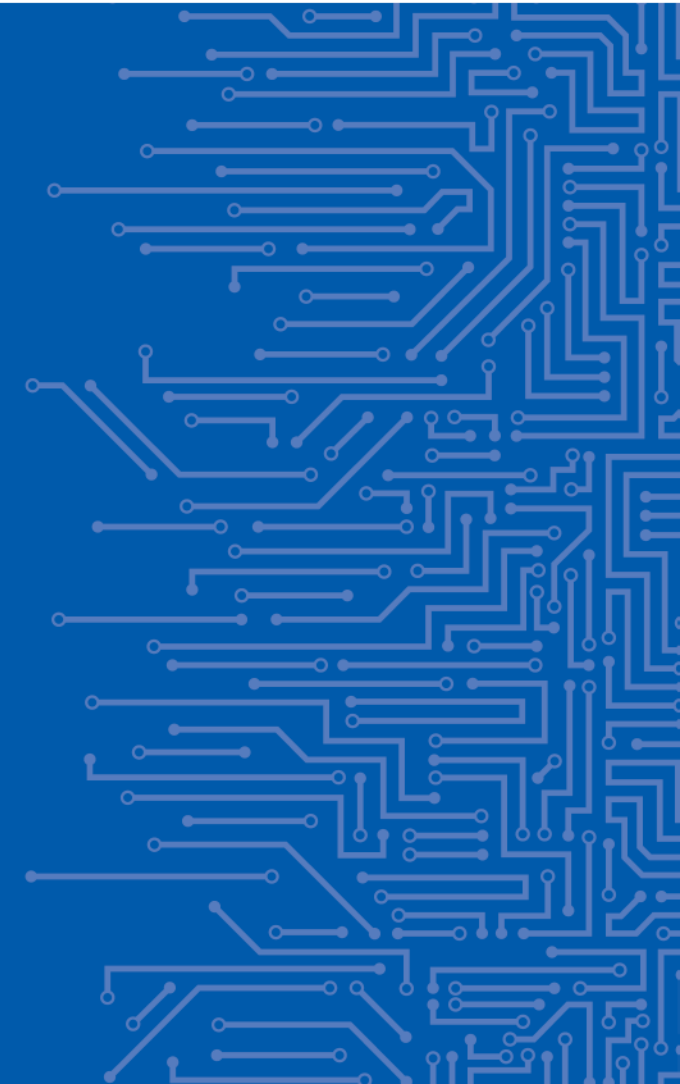


EUROPEAN UNION AGENCY  
FOR CYBERSECURITY

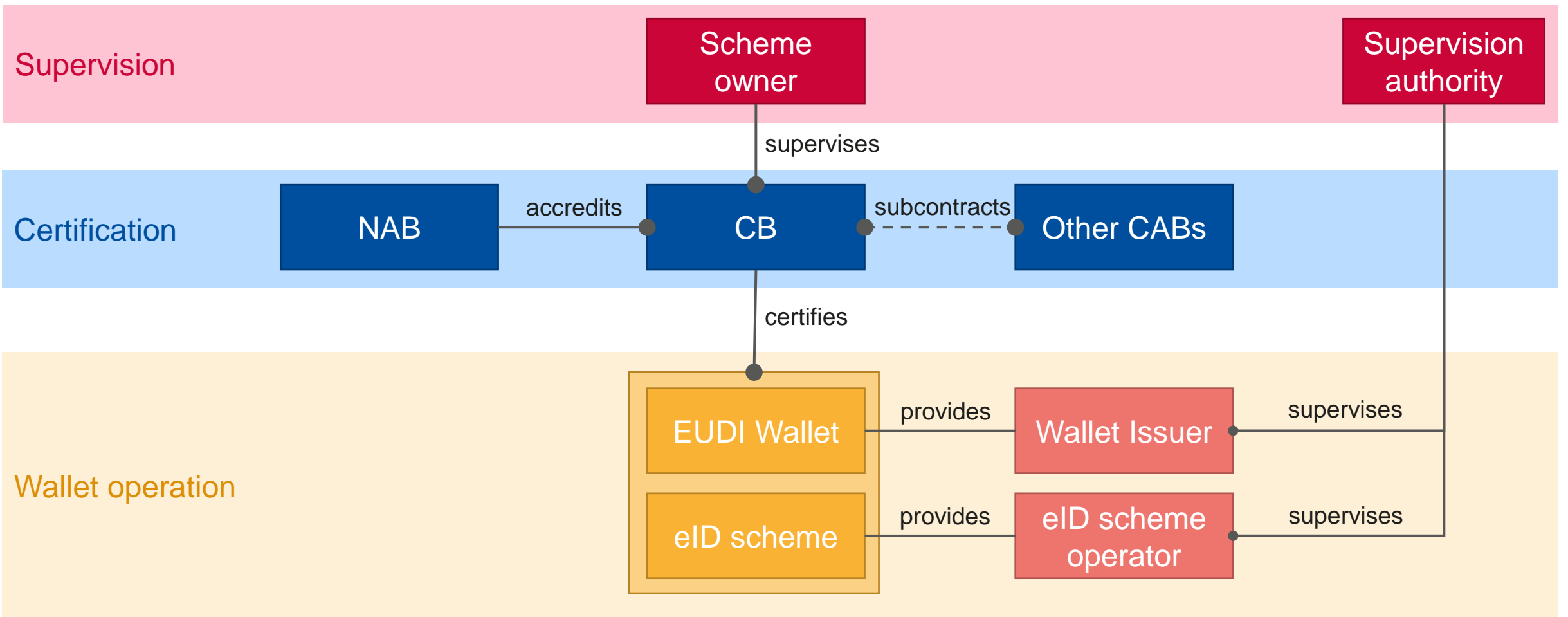
# CERTIFICATION OF EUDI WALLETS *FOR A SUCCESSFUL TRANSITION*

Eric Vetillard, Ph.D.  
Lead Certification Expert, MCS, ENISA

18 | 04 | 2024



# A FEW ROLES





# SCOPE OF CERTIFICATION

## In scope

### Components

- All wallet-specific components
- Wallet + eID processes
- Integrated as a service

### Conformity assessment

- Methods and procedures
- Overall assessment

WSCA

EUCC\* certified  
Based on a PP  
WSCD assumptions

Wallet App

Specific assessment  
Device and WSCA  
assumptions

eID + EUDIW  
management

Mostly audit  
Including effectiveness

## Out of scope

### Components

- All user-provided devices
- Generic IT/ISMS/Cloud (?)

### Conformity

- Dependency analysis
- Recommended assurance

WSCD

EUCC\* certified  
Based on VAN.5 domain

Device  
platform

Assurance doc  
Ad hoc evidence

ISMS / IT /  
Cloud

Assurance doc  
Ad hoc evidence



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Mostly audit  
Including effectiveness

## Processes

### Components

- Specific ID processes
- Development & deployment

### Conformity

- Existing certification
- Specific audits

On-boarding

Schemes exist  
as a basis

Provisioning  
Deployment

Mostly audit  
With effectiveness

Development  
Operations

Mostly audit  
With effectiveness





# SUPPORTING MULTIPLE ARCHITECTURES

## **There are many different architectures that can support an EUDI Wallet implementation.**

In general, sensitive crypto operations are performed on a CC-certified platform from one of the two domains defined in SOG-IS and EUCC.

- Including local/proximity secure elements, and remote HSMs

Everything else, including end user authentication, is more blurry

- Yet, some harmonization is required

Every certificate needs to be based on a risk assessment based on an architecture analysis

- Based on a high-level risk analysis, which is refined for each architecture



# THE CHALLENGE OF NATIONAL SCHEMES

## **One of the Implementing Acts defines constraints on National Schemes.**

It starts by defining a common scope of certification

- Defining the EUDI Wallet as a service, covering both product and process aspects
- Also covering the aspects to be covered by the functional certification

Then, it continues by answering the questions from ISO/IEC 17067

- Ensuring that all National schemes share all characteristics that they can

Finally, it defines guidelines around methods and procedures

- Including the architecture analysis and risk assessment
- Also including guidelines for the reuse of certificates and assurance documentation



# WHAT ARE THE NEXT STEPS?

**There still is a long path towards a fully harmonized certification.**

First step: Harmonising some specifications

- The functional specifications and test suites on which the functional certification must be based
- The definition of the high-level risks that apply to all EUDI Wallet implementations

Second step: Harmonizing certification at EU level

- Ultimately, a full-fledged EU cybersecurity certification scheme
- The functional certification may be covered by it or not (remaining as a National certification)

# THANK YOU FOR YOUR ATTENTION

**European Union Agency for Cybersecurity**

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