The Toolbox process

1st meeting

eIDAS Expert Group meeting,

30 September 2021

1. Opening of the meeting

eIDAS Expert Group meeting,

30 September 2021

Agenda

1. Opening of the meeting

   - Welcome

   - Approval of the agenda

   - Introduction and Objectives of the meeting

2. Process and roadmap

   - Terms of Reference (for information)

   - Process and Working Procedures (for agreement)

   - Private Sector Involvement

3. Priority Use Cases

4. Non-Paper Technical Architecture and Reference Framework Outline

5. A.O.B.

6. Conclusions

Objectives of the meeting

- Discuss / agree process and working procedures;

  - Working groups, roadmap, timeline, etc

- Start discussion of technical architecture outline and gathering input from Member states;

  - Use cases

  - Targeted questions to Member States on the non-paper

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2. Process and Roadmap of the group

eIDAS Expert Group meeting,

30 September 2021

Terms of Reference

- The Commission requires that all Commission Expert Groups have Terms of References that are published in the expert group register;

- They establish how the group operates and are a complement to the Rules of Procedure;

- The ToR are concluded by the Commission and uploaded in the Expert Group register for information.

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THE RECOMMENDATION ON A COMMON TOOLBOX FOR THE EUROPEAN DIGITAL IDENTITY FRAMEWORK

- As established in the Recommendation, Member States should work closely together, on the basis of a proposal by the Commission, to identify the **Toolbox**, made up of the following elements:

  ➢ a technical architecture and reference framework;

  ➢ common standards and technical specifications; and

  ➢ common guidelines and best practices.

Implementation schedule of the Recommendation (Art. 2(3))

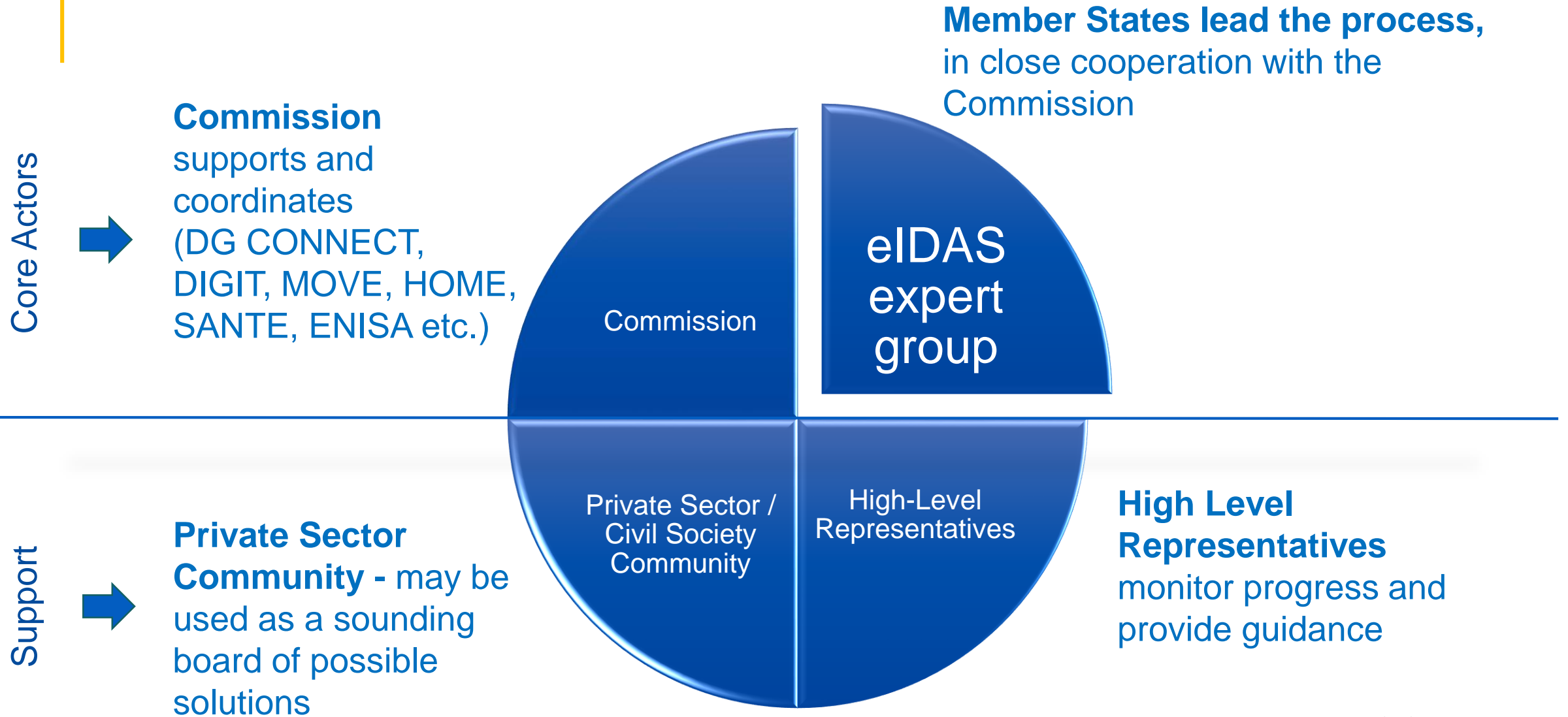|	
By September 2021	**agreement on process and working procedures**, launch of data collection exercise from Member States and discussion of technical architecture outline;
By December 2021	agreement on technical architecture outline;
By June 2022	identification of specific technical architecture, standards and references, guidelines and best practices;
By 30 September 2022	agreement on the Toolbox;
By 30 October 2022	publication of the Toolbox by the Commission

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Suggested process & working procedures

- The Recommendation suggest process & working procedures should be agreed.

- These "**Process and working procedures**" should *complement and build on* the

  - "Rules of procedure of the eIDAS Expert Group" and the

  - "Terms of reference for the eIDAS Expert Group"

- The "Process and working procedures" would apply only to facilitate the Toolbox process.
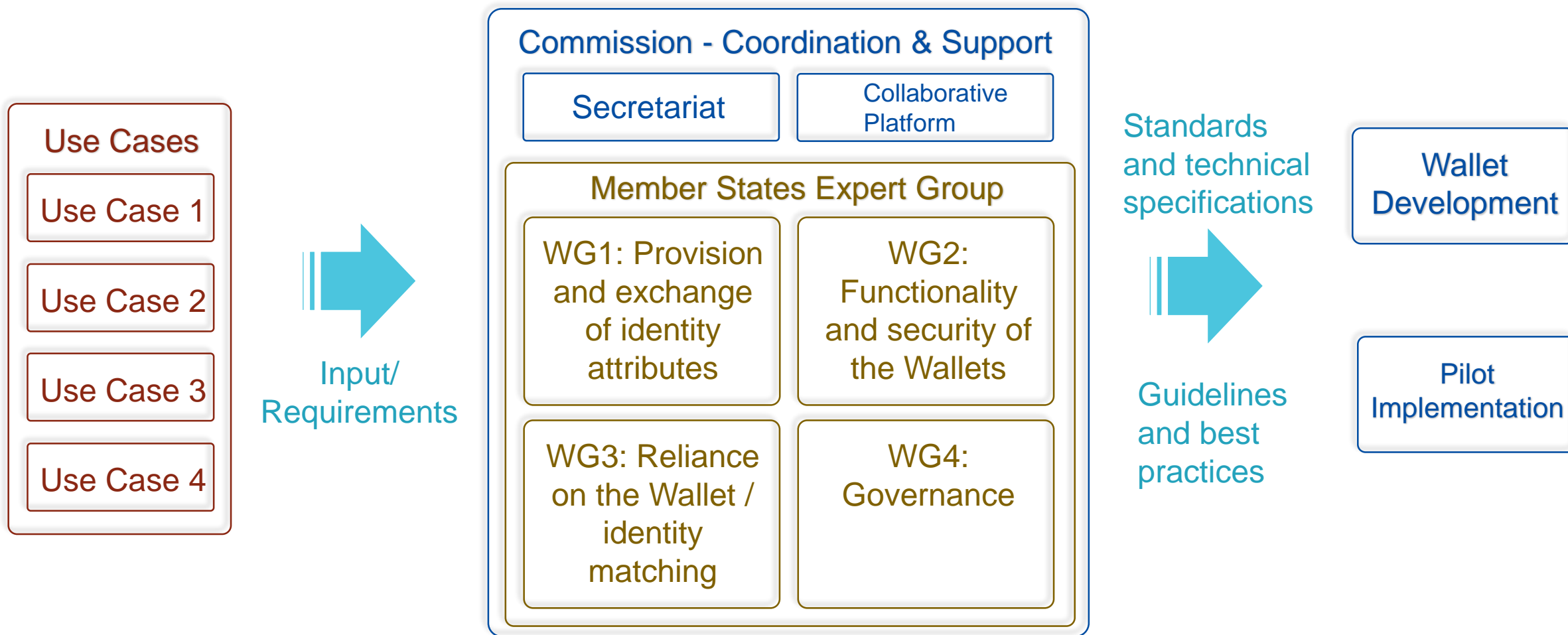
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How can we work together?

- Actors and Roles

- Proposed Organisation of work - Working Groups & Use Cases

- Indicative Roadmap 2021

Actors & Roles

Core Actors

Commission
supports and
coordinates
(DG CONNECT,
DIGIT, MOVE, HOME,
SANTE, ENISA etc.)

Member States lead the process,
in close cooperation with the
Commission

Commission

eIDAS
expert
group

Support

**Private Sector
Community -** may be
used as a sounding
board of possible
solutions

Private Sector /
Civil Society
Community

High-Level
Representatives

**High Level
Representatives**
monitor progress and
provide guidance

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Proposed Organisation of Work

Use Cases

Use Case 1

Use Case 2

Use Case 3

Use Case 4

Input/ Requirements

Commission - Coordination & Support

Secretariat

Collaborative Platform

Member States Expert Group

WG1: Provision and exchange of identity attributes

WG2: Functionality and security of the Wallets

WG3: Reliance on the Wallet / identity matching

WG4: Governance

Standards and technical specifications

Guidelines and best practices

Wallet Development

Pilot Implementation

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WG1
Provision and Exchange of Identity Attributes

Topics include

- Person identification data (PID) set

- PID format

- PID issuance and validity management

- Electronic Attestation of Attributes (EAA) data set

- EAA Format

- EAA issuance and validity management

- EAA Catalogues of attributes and schemes
- Verification of attributes against authentic sources including via Designated Intermediaries

- ...

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WG 2
Functionality and Security of the Wallet

Topics include

- Wallet functionalities

- Wallet security features

- Create and use qualified electronic signatures

- APIs and Protocols
  - Communication between Person Identification Data Provider and Wallet
  - Communication between Electronic Attestation of Attributes Provider and Wallet
  - Wallet verifying Relying Party as authentic
  - User presenting Person Identification Data and/or Electronic Attestations of Attributes online
  - User presenting Person Identification Data and/or Electronic Attestation of Attributes offline
- Standards for certification of the Wallet
- …

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WG 3
Reliance on the Wallet

Topics include

- Unique Identification process

- Relying party verifying the received credentials as authentic

- Relying party authentication

- …

WG 4
Governance

Topics include

- Accreditation of certification bodies
- Trusted lists
- List of certified European Digital Identity Wallets
- Security breach of the European Digital Identity Wallets
- Business Models and Fees Structure
- …

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Example topic options:
Person Identification Data / Electronic Attestations of Attributes format

Requirements

- User should be able to obtain, combine and share

- Relying parties should be able to verify the authenticity and validity of data

Questions to Member States

- Selective disclosure, combine attributes across attestations, link with Wallet (public key, DID), etc.

Options

- Online
  - X.509 certificate
  - W3C verifiable credential
  - ISO/IEC 23220
- Offline:
 - ICAO 9303
  - ISO/IEC 18013-5 (mDL)
  - ISO/IEC 23220

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European Digital Identity Wallet
collaborative space
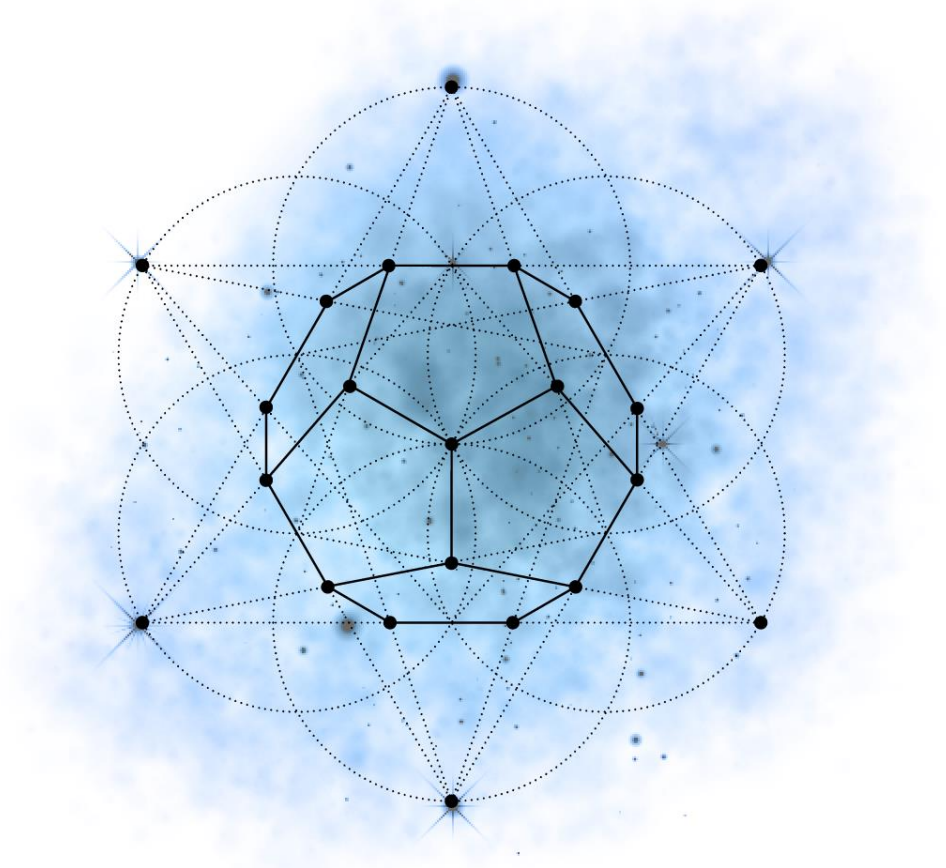
- **eIDAS EXPERT GROUP MEETING**
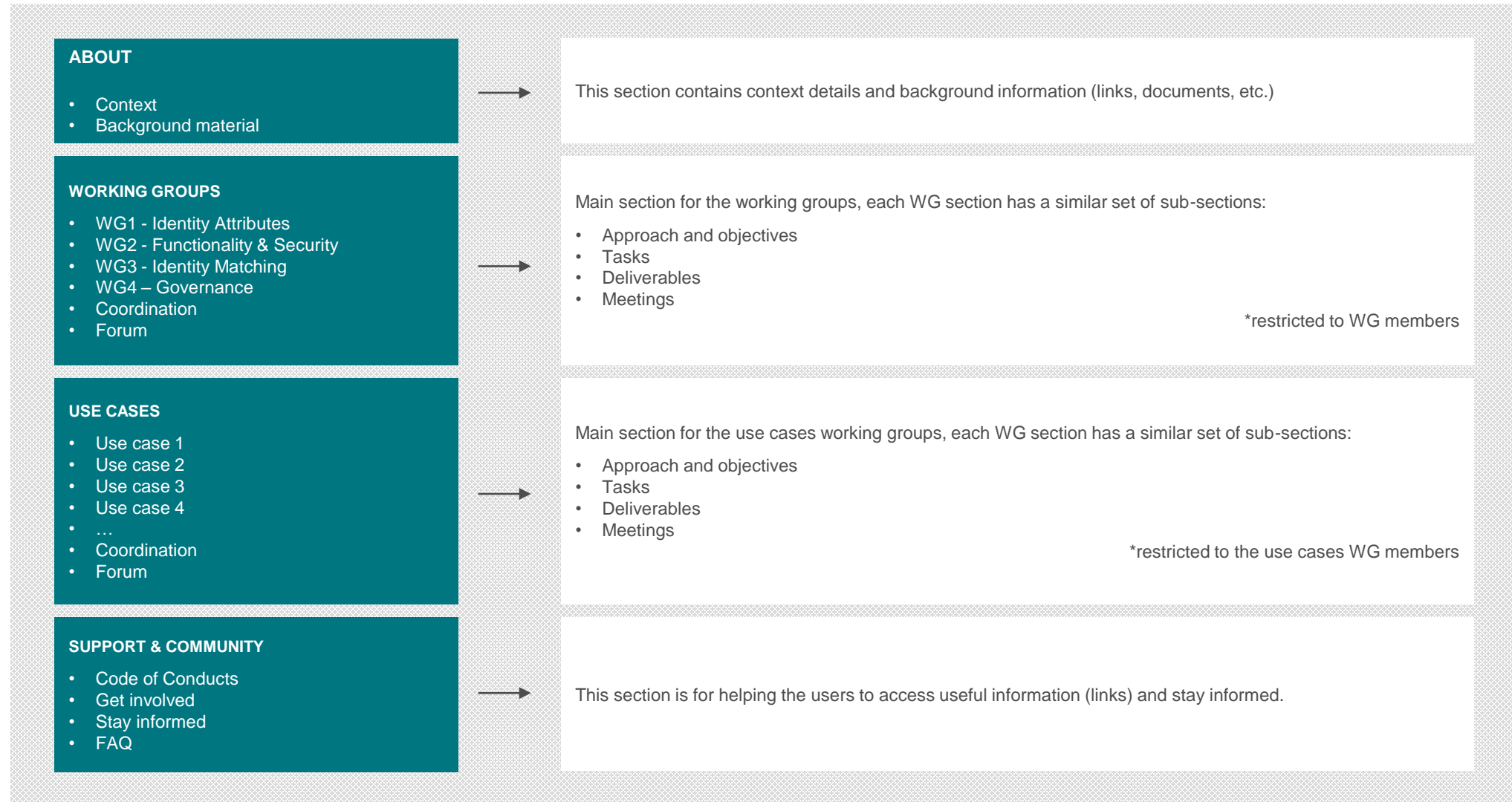- **30 SEPTEMBER**

Context and objectives

- The collaborative space **will aim at**:

1 Enabling working groups to work better together and **collaborate on a single platform**;

2 Allowing working groups to have a dedicated space to **keep track of the ongoing work** (discuss the project material, deliverables and store the meeting summary reports, etc.);

3 Offer the wider stakeholder community in the private sector to **communicate via open forums**;

- … and many others.

- Working group members will b able to **actively contribute to the dedicated pages** of the collaborative space (create content on pages, describe the approach and objectives of relevant working groups, add meeting notes and material, upload useful documents, etc.)

- The Wallet Coordination and Support Team will be there to support you.
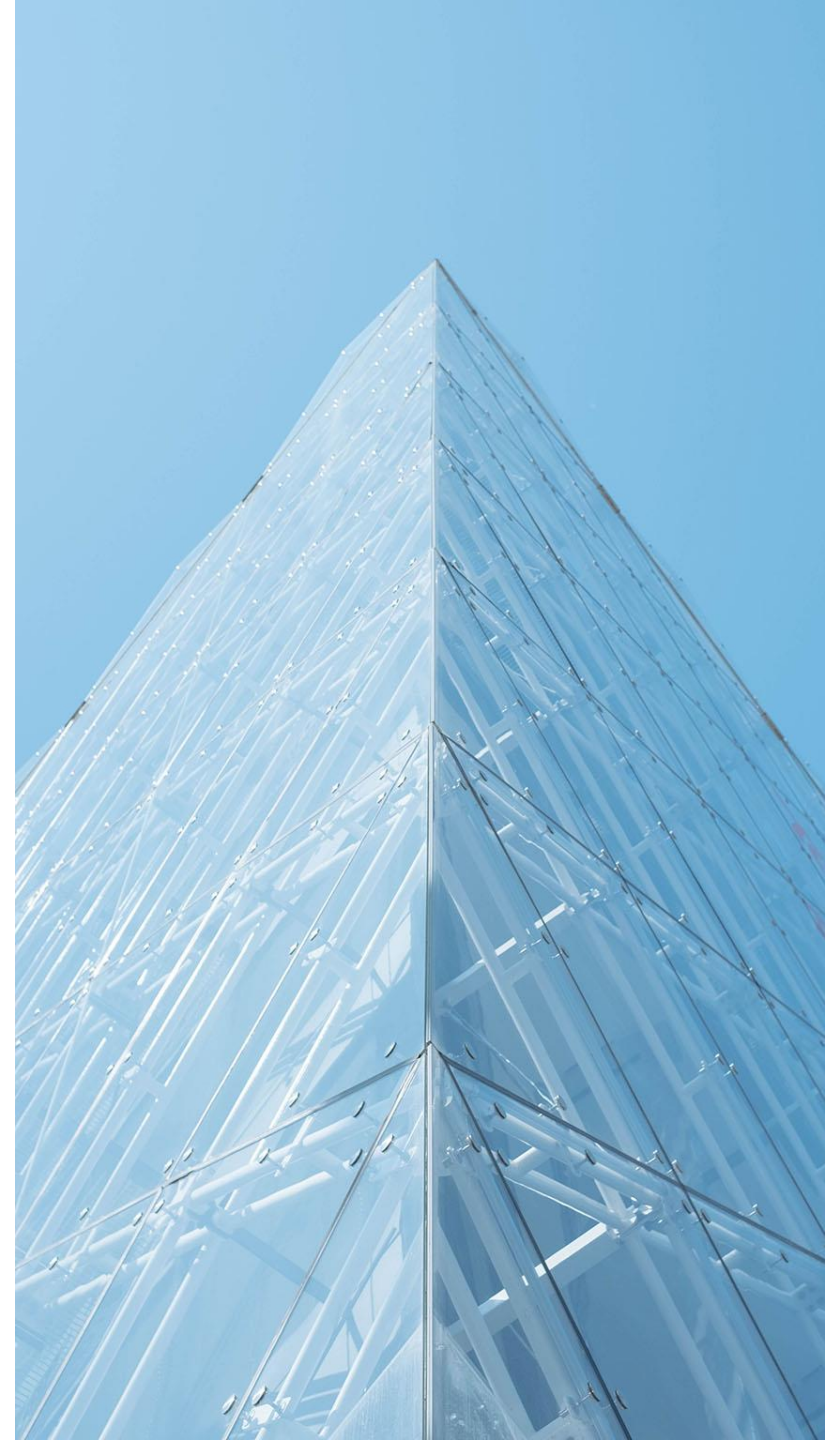
Proposed structure

The page tree of the collaborative space will be divided into several big sections and relevant sub-sections:

ABOUT

- Context
- Background material

→ This section contains context details and background information (links, documents, etc.)

WORKING GROUPS

- WG1 - Identity Attributes
- WG2 - Functionality & Security
- WG3 - Identity Matching
- WG4 – Governance
- Coordination
- Forum

→ Main section for the working groups, each WG section has a similar set of sub-sections:

- Approach and objectives
- Tasks
- Deliverables
- Meetings

*restricted to WG members

USE CASES

- Use case 1
- Use case 2
- Use case 3
- Use case 4
- …
- Coordination
- Forum

→ Main section for the use cases working groups, each WG section has a similar set of sub-sections:

- Approach and objectives
- Tasks
- Deliverables
- Meetings

*restricted to the use cases WG members

SUPPORT & COMMUNITY

- Code of Conducts
- Get involved
- Stay informed
- FAQ

→ This section is for helping the users to access useful information (links) and stay informed.

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Indicative Roadmap 2021

Meeting 30 September

- Agree process & working procedures
- Discuss ARF outline non-paper and use cases
- Launch Data collection

15 Oct - Feedback
- WGs / Use Cases
- Q/A non-paper

WGs Use Cases

26 Oct a.m.

- Constitute WGs
- Identify deliverables, timeline, tasks

WG meeting(s)*

26 Oct p.m.

- Constitute WGs
- Identify deliverables, timeline, tasks

Meeting 27 October

- Discuss feedback on data collection
- Agree deliverables, timeline, tasks for WGs and use cases
- Agree next Steps

WG Use Cases

3-4 Nov

- Work on deliverables

WG meeting(s)

9-10 Nov

- Work on deliverables

Meeting 17 November

- Take stock of progress and agree on next steps

WG Use Cases

18-19 Nov

- Work on deliverables

WG meeting(s)

25-26 Nov

- Finalise deliverables for ARF Outline

Meeting 16 December

High-Level tbc

- Agreement on ARF outline

* Working group meetings

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Q&A

3. Priority Use Cases

eIDAS Expert Group meeting,

30 September 2021

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**

Wallet Use Case 1:
Online identification

September 2021

Online identification with the Wallet

- The Wallets will include Person Identification Data which can be used to identify and authenticate the identity of the holder of the Wallet
- eIDAS use case

- Dataset
  - Person identification data to be expanded
- Business and functional requirements
  - Identification and authentication online to be developed
  - Unique identification process to be developed
- Stakeholders
  - eIDAS expert group
    - Public and private (incl platforms) sector online service providers
- Next Steps
  - Dataset and requirements to be developed by the working groups in the toolbox process

Wallet Use Case 2:

Qualified electronic signatures

Qualified electronic signatures with the Wallet

- The Wallet would be a QSCD and a signature management software or an authentication method for a QSCD and relevant signature management service.
- Proposed Wallet use case in eIDAS

- Dataset
  - Based on eIDAS Annex 1, Annex 3
- **Business and functional requirements**
  - To be developed
- **Stakeholders**
  - eIDAS expert group
- **Next Steps**
  - Dataset and requirements to be developed by the working groups in the toolbox process

Proposed Wallet Use Case 3:

Mobile Driving License

Issuing and presenting driving licences using the Wallet

- The mobile Driving Licence can be a credential linked with the Wallet.
- The Wallet enables credential issuing, key management, presentation and provides a trust framework.
- Facilitates document issuing and renewal for issuers as well as document checks by law enforcement and commercial players.

Dataset
- Annex 1 2006/126/EC, mDL ISO standard

Business and functional requirements
- DG MOVE is working on developing a business requirements draft document for the Toolbox process triggering the first discussions in a meeting with the Working Group by end of October.

Stakeholders
- DG MOVE (unit C2) updates the sectoral rules and establishes business requirements. A legislative proposal for the revision of the Driving Licence Directive is planned for 2022, to establish a legal framework for the mDL to be recognised across borders.
- The Committee on driving licences and a working group on digital driving licences supports in consolidating business requirements for both law enforcement and issuance authorities

Proposed Wallet Use Case 4:

eHealth Patient Summary

Issuing and presenting Patient Summary using the Wallet

- The Patient Summary can be a credential linked with the Wallet
- The Wallet enables credential issuing, key management, presentation and provides a trust framework
- Facilitates unplanned, cross-border care by improving quality of care through better access to health information.

Dataset
- EN 17269
- ISO/DIS 27269
- eHealth Network Guideline on Cross-Border Directive 2011/24/EU

Busines and functional requirements
- Defined and implemented in MyHealth@EU, modifications needed for the Wallet integration

Stakeholders
- DG SANTE (unit B3)
- eHealth Network

Proposed Wallet Use Case 5: ePrescription

Issuing and presenting ePrescription using the Wallet

- ePrescriptions can be credentials linked with the Wallet
- The Wallet enables credential issuing, key management, presentation and provides a trust framework
- The Wallet could rely on the ePrescription and eDispensation electronic cross-border health service as part of My Health @ EU, an infrastructure that is currently operational in 8 EU countries, and being extended to all EU MS in the upcoming years.

Dataset
- eHealth network guidelines

Business and Functional Requirements
- Defined and implemented in MyHealth@EU, modifications needed for the Wallet integration

Stakeholders
- DG SANTE (unit B3) can facilitate establishing the business requirements.
- eHealth Network would be engaged.
- Next meeting of the eHealth Network to potentially present the use cases will take place next November

Proposed Wallet Use Case 6:
Digital Travel Credential

September 2021

Issuing and presenting Digital Travel Credentials using the Wallet

- A DTC can be a credential linked with the Wallet
- The Wallet enables credential issuing, key management, presentation and can provide a trust framework
- DTC can enable faster processing times at borders and can enable new use cases such as presenting documents in advance

Dataset
- eMRTD (ICAO Document 9303)

Business and functional requirements
- To be developed. ICAO is working on DTC Specifications:
  - A Technical Report detailing the Virtual Component and the Security Mechanisms – submitted to TAG/TRIP 2020 for approval through the extraordinary procedure and endorsed
  - A Technical Report detailing the Physical Component and Security Assurance Levels – In progress

Stakeholders
- **DG HOME** (unit B1)
- A newly set up **Travel Facilitation Group** of Member States is exploring a possible pilot initiative

Proposed Wallet Use Case 7: Payments

September 2021

Payments using the Wallet

- Payment info can be a credential linked with the Wallet
- The Wallet enables credential issuing, key management, presentation and can provide a trust framework
- The Wallet enables user authentication for payment initiation

Dataset
- To be developed

Business and functional requirements
- To be developed

Stakeholders
- DG FISMA - The use case would be consistent with the objectives of the Commission's Retail Payments Strategy and could also be of high interest to the retail payments industry.
- It would be developed in close coordination / consultation with Commission advisory groups on retail payments, the industry, the European Retail Payments Board, the ECB, etc.

Proposed Wallet Use Case 8:

Sharing Diploma

September 2021

Issuing and presenting education diplomas using the Wallet

- Educational info can be a credential linked with the Wallet
- The Wallet enables credential issuing, key management, presentation and can provide a trust framework
- The Wallet enables learners to prove their competences across education institutions

Dataset
- Rely on previous work by e.g. Europass, EBSI

Business and functional requirements
- To be developed taking into account existing services (eg the Europass Digital Credentials Infrastructure for issuing, sharing and verifying credentials)

Stakeholders
- **DG EAC** and **DG EMPL** are jointly the business owners of the use case.
- The use-case could leverage preparatory work carried out in the context of the **European Blockchain Partnership (EBP)**, the **European Blockchain Services Infrastructure (EBSI)** and the **Europass Digitial Credentials Infrastructure**.
- The **European Blockchain Service Infrastructure (EBSI)** and **DIGIT** would take part in the implementation stage.
- At this moment DG EAC and DG EMPL are working together with **EBSI** and **DIGIT** in the development of a cross-border pilot on the Diploma use case.

Other Use Cases

September 2021

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

Q&A

4. Non-Paper Technical Architecture and Reference Framework Outline

eIDAS Expert Group meeting,

30 September 2021

Simplified Wallet Ecosystem

Provides Wallet

Wallet provider

Provides attestations

Attribute provider

Registers info

User

Provides attestation

Relying party

Checks validity

Validity information

Process Flows 1: Issuing Wallets

Wallet provider

GET IT ON
Google Play

Download on the
App Store

EXPLORE IT ON
HUAWEI AppGallery

Updates, monitoring, logging

Trusted list of authorities to provide Wallets

Validity status service
(CRL, OCSP, Blockchain etc)

Local/ cloud storage

Local/ remote secure key storage

Process Flows 2: Onboarding

PID issuer

Identity proofing

National eID

Identifies (PIN, biometry)

PID validity status

Trusted list of PID issuers

PID linked with the Wallet

Process Flows 3: Issuing Attestations

Attestation issuer

Validity status
service
(CRL, OCSP,
Blockchain etc)

Trusted list of
authorities to
provide
attestations

Any attestation not
linked with the Wallet

Attestation linked with the Wallet
(attestation includes Wallet ID)
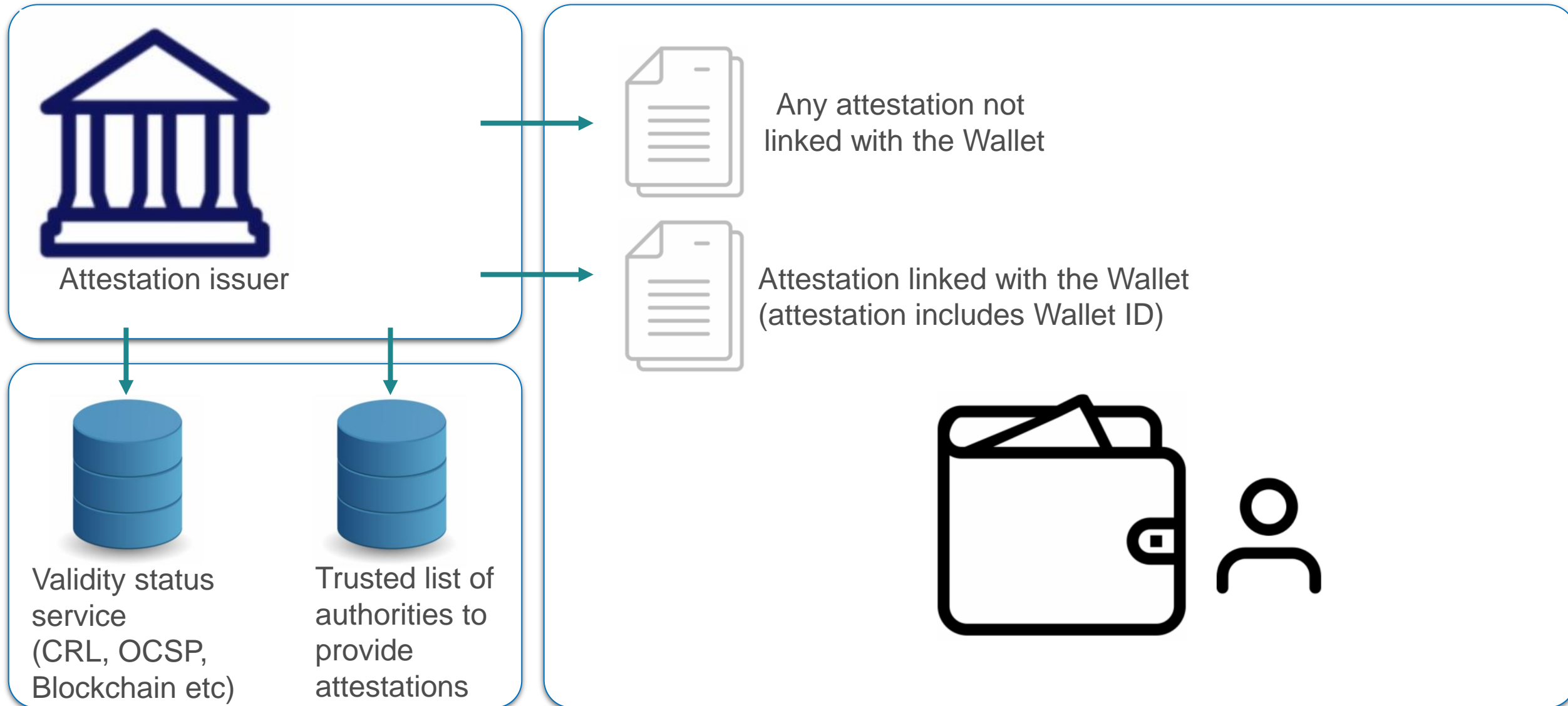
Process Flows 4: Handover of Attestations
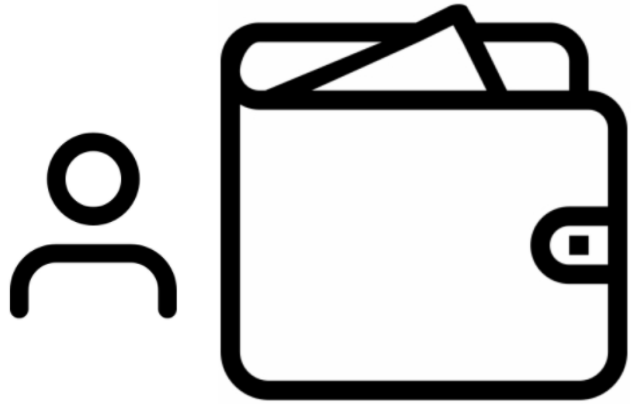
Offline handover

Online handover

Relying party

Trusted list of relying parties

Process Flows 5: Authentication of Credentials

Attestation

Trusted list of Authorities (PID, EAA, Wallet)

list of valid or not valid attestations

list of valid or not valid Wallets

Verification application (e.g. verification app, authentication server)

Process Flows 6: Qualified Electronic Signature

2. Local signature

1. Request to sign from assurance company

2. Confirm
The user confirms the will to sign.
This activates the private key in the mobile, whose public key is certified by a qualified certificate

3. Signature confirmation

Q&A

5. A.O.B.

eIDAS Expert Group meeting,

30 September 2021

6. Conclusions

eIDAS Expert Group meeting,

30 September 2021

Next Steps - October

- **Deadline for feedback on WGs and Use Cases** – 15 October

  - **Working Groups**: Do you agree with the proposed WGs? In which WG (attributes, wallet, relying parties, governance) would you like to participate in? For which WG will you be able to take a leading role?

  - **Use Cases**: Do you have any comments on the use cases presented? Which use-cases would you like to be retained? Which ones would you like to participate in? For which WG will you be able to take a leading role?

- **Deadline Feedback on Q/A / non-paper** – 15 October

- **Constitute WGs** – 26 October (physical tbc)

- **Next Expert Group Meeting** – 27 October (physical tbc)

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Thank you

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