

Eidas.2

Digital Identity Wallets on the way

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On June 3, the EU Commission released a draft amending eIDAS regulation

A key element of the draft is the recognition of European Digital Identity Wallets (EDIWs)

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Digital Identity Wallets on the way

- Why is eIDAS.2 talking about identity wallets?
- Mapping of eIDAS.2 to SSI concepts
- Open questions (preliminary list)



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Eidas.2 Digital Identity Wallets on the way

This is the start of
the regulatory
process – we are
still with eIDAS.1

Eidas. 1 explained

Negotiated in 2013/14 - published in July 2014
Partial entry into effect in July 2016 (Trust Services)
Full entry into effect September 2018 (eIDs)

Two pillars – only partially integrated

Electronic identification schemes & means (eIDs)

- No EU eID but EU-wide recognition of 'notified' national eID schemes
- focus on C2G (public) services
- Inter-governmental (sovereign) approach with 'peer-review' process
- Defines common LoA framework for eIDs
- Interoperability framework (nodes) based on SAML

Verdict – Limited success for a pioneer scheme

- Only 14 member States have notified an eID scheme;
- Limited range of ID attributes available
- Very limited cross-border usage

Trust Services

- Electronic signatures & seals (legal entities)
- Electronic registered delivery service
- Electronic time stamp & website authentication
- Fully open to private sector
- Based on certification processes and open standards (mostly ETSI) – access to the *EU Trusted lists*

Verdict - success

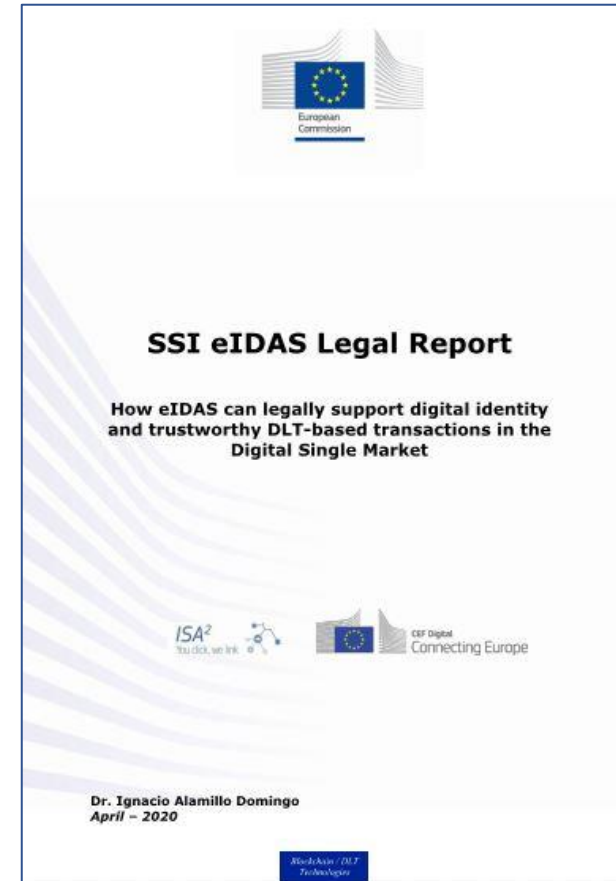


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eIDAS.1 does not
fit well with SSI
schemes

Very 'sovereign' approach & focus on public services

But the matter has been considered and options suggested in 2020



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Eidas.2 in a nutshell

Consultation process launched in July 2020

Three main options identified

Draft amending regulation proposal released in June 2021

Expected to reach the statute books by Q2 2022 – if everything goes well

eIDs

No significant changes... but now look outdated and likely to be replaced by EDIWs

EDIWs

- Allow users to “store identity data, credentials & attributes to provide them to relying parties on request and use them for authentication online and offline and to create electronic signatures and seals”
- Like eIDs, issued or ‘recognised’ by member States under their own responsibility
- Can be certified – no more ‘peer review’
- Data usage under the control of the user – the issuer of the EDIW cannot collect information
- Must ensure ‘unique identification’
- Like eIDs – fully recognised within EU/EEA
- Must be accepted as alternative to SCA
- Must be accepted by ‘very large online platforms’
- Free to use (not compulsory and no charge to users)

Trust Services – new categories

- ‘Electronic archiving services’
- ‘Management of remote electronic signature creation devices’
- ‘Electronic ledgers’
- **‘Electronic attestations of attributes’**
 - verified against ‘authentic sources’ or via ‘designated intermediaries’
 - All ID attributes except core ID attributes
 - Include *inter alia* ‘qualifications, titles and licences and financial and company data’
 - Must be interfaced with EDIWs



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EDIWs

What we understand

Some EDIW principles are clear – but the fine print is missing (and the devil is in the details!)

(editorial comment : do not attempt to adjust the settings of your computer – blurring is intentional)



What is to be expected, based on the Commission's proposal

- EDIWs are user-centric solutions able to store ID and status data (e.g. driving licences)
- No user fee can be charged and Issuers/promoters or IDIWs are prohibited from using EDIW usage data
- EDIWs aim to offer the *'highest level of security for the personal data used for authentication'* and are to comply with eIDAS high LoA specifications
- EDIWs will be assessed by reference to *'common standards and technical references'*
- All EDIWs will be recognised equally throughout the EU/EEA
- EDIWs must be 'issued' or 'approved' by member States, with liability implications – the State can be held responsible in case of breach
- EDIWs are targeting private sector 'quality' use cases – especially those requiring strong authentication – but also 'Very large online platforms'



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EDIWs
A lot remain to be
decided...

... and there is a



Common Toolbox proposal (1/2)

Ambitious timetable to support the implementation of the European Digital Identity Framework – to be finalized in Q4 2022

Content of the commono toolbox

- Provision and exchanges of identity attributes
- Functionality and security of EDIWs
- Reliance on EDIWs
- Governance

In addition, the Commission envisages ‘**self-regulatory codes of conduct**’ to facilitate the availability and usability of EDIWs

- Technical architecture
- Set of common standards
- Set of guidelines and best practices

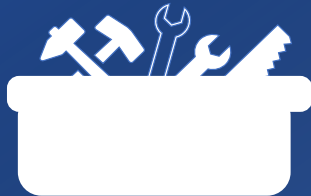
eIDAS expert group tasked as main counterpart (co-construction)



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EDIWs
A lot remain to be
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... and there is a



Common Toolbox proposal (2/2)

The aim is to ‘co-construct’ with key stakeholders a wallet framework based on a set of common EDIW standards and specifications, some of which are expected to be existing open standards, offering a set of technical requirements against which EIDWs can be audited

This leaves two basic requirements for ID wallet sponsors & promoters

- Meet the common EDIW specification requirements;
- Obtain the ‘permission’ of a member State. Note that there is no right to obtain the approval of a member State – this is a discretionary decision.

Open questions (amongst many...)

- Are EDIWs accessible to all EEA citizens, assuming approval of the relevant member State(s)?
- Can two member States approve the same wallet?
- Can an ‘industry wallet’ be considered – e.g. for financial services?



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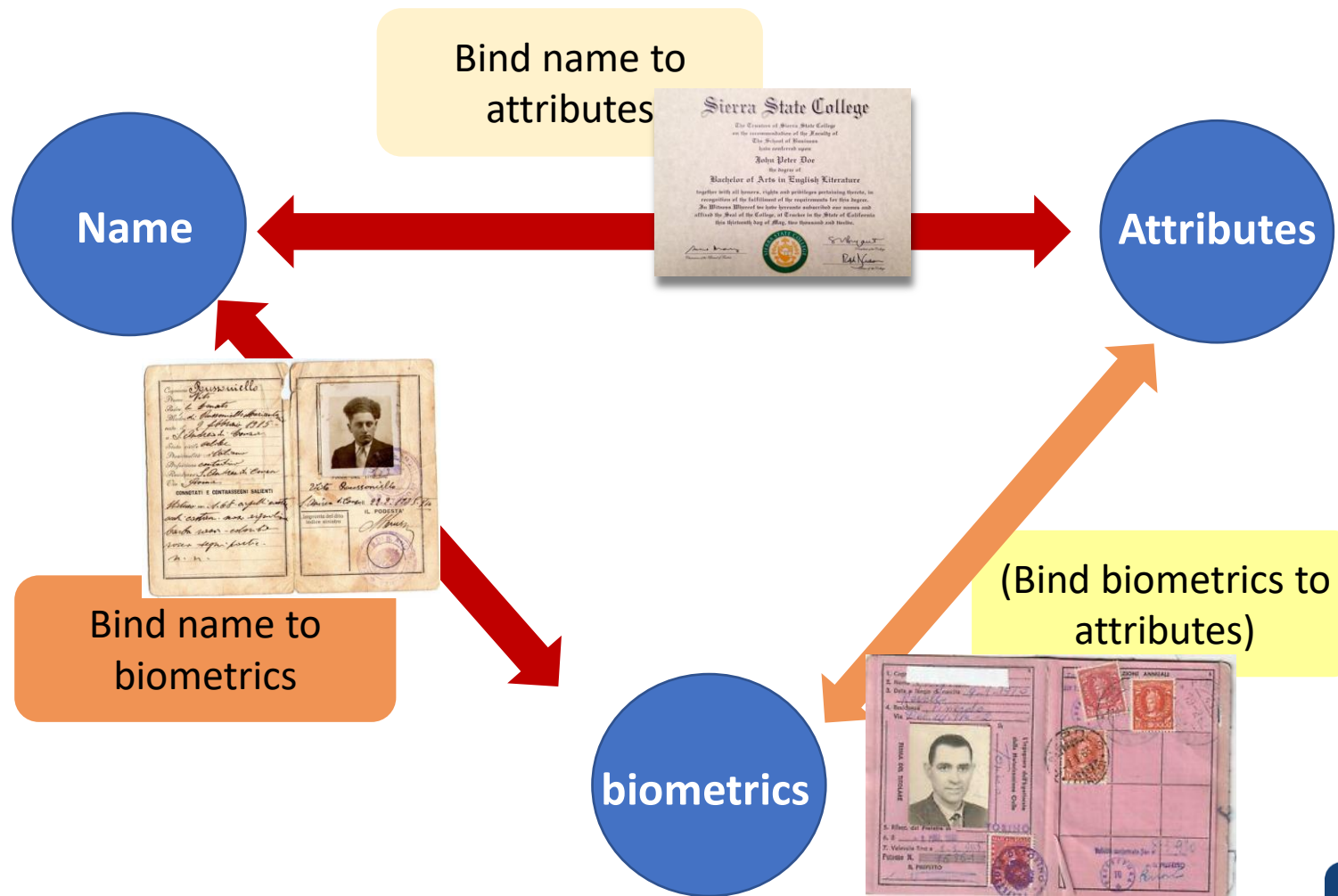


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Let's start from
pre-digital era

Physical world specifics:

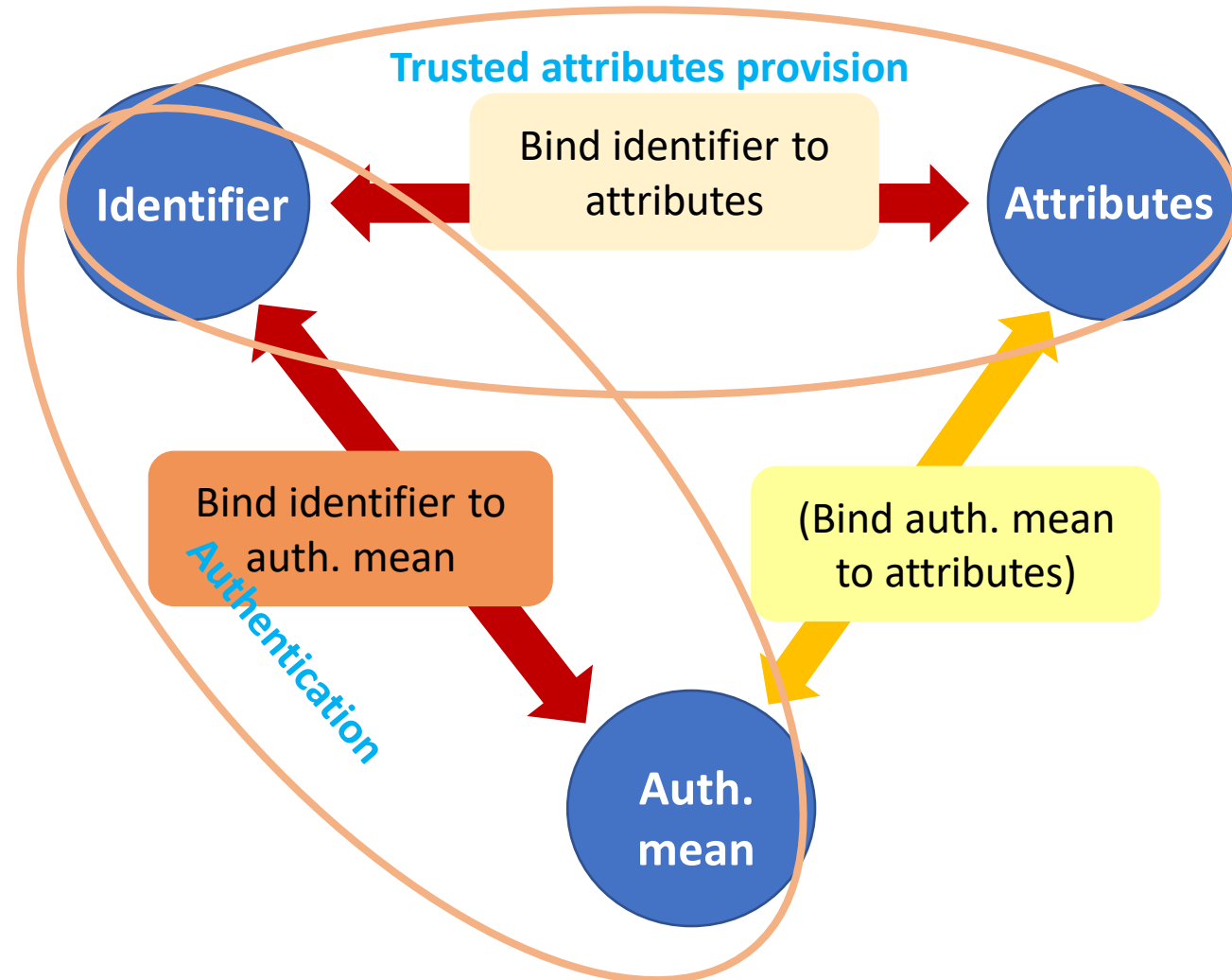
1. **Physical presence** allows to validate biometrics
2. **Validation:** by physical document characteristics (difficult to reproduce)
3. **Issuers are few** and well-known (trusted)



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SSI decoupling

- “authentication”
- “provision of trusted attributes”



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Eidas EDIW for authentication

- Eidas.1 was a bundle of «authentication» and «(core) identity attributes»
 - Take all or leave all
- EDIW supports authentication as an independent feature

*Where very large online platforms [...] require users to **authenticate** to access online services, those platforms should be mandated to accept the use of European Digital Identity Wallets upon voluntary request of the user*

*'EDIW' is a product and service that allows the user to store identity data, credentials and attributes linked to her/his identity, to provide them to relying parties on request and to use them for **authentication**, online and offline, for a service in accordance with Article 6a; and to create qualified electronic signatures and seals;*

*EDIW [...] provide a mechanism to ensure that the relying party is able to **authenticate** the user and to receive electronic attestations of attributes.*



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Eidas EDIW for authentication

- Private sector is addressed
 - When «identification» is required

Wide availability and usability of the European Digital Identity Wallets require their acceptance by private service providers. Private relying parties providing services in the areas of transport, energy, banking and financial services, social security, health, drinking water, postal services, digital infrastructure, education or telecommunications should accept the use of European Digital Identity Wallets for the provision of services where strong user authentication for online identification is required by

- And even when only «authentication» is required

national or Union law or by contractual obligation. Where very large online platforms as defined in Article 25.1. of Regulation [reference DSA Regulation] require users to authenticate to access online services, those platforms should be mandated to accept the use of European Digital Identity Wallets upon voluntary request of the user. Users should be under no obligation to use the wallet to access private services, but if they wish to do so, large online platforms should accept the European Digital Identity Wallet for this purpose while respecting the principle of data minimisation. Given the



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eIDAS EDIW for trusted attributes

- EDIWs support wide attribute sets

Furthermore, the current eIDAS framework does not cover the provision of electronic attributes, such as medical certificates or professional qualifications, making it difficult to ensure pan-European legal recognition of such credentials in electronic form. In addition, the eIDAS Regulation does not allow users to limit the sharing of identity data to what is strictly necessary for the provision of a service.

- Selective disclosure is required

Digital identity wallets are perceived more and more by the public and private sector as the most appropriate instrument allowing users to choose when and with which private service provider to share various attributes, depending on the use case and the security needed for the respective transaction. Digital identities based on digital wallets stored securely on mobile devices were identified as a main asset for a future-proof solution. Both the private market (e.g. Apple, Google, Thales) and governments already move in this direction.

(29) The European Digital Identity Wallet should technically enable the selective disclosure of attributes to relying parties. This feature should become a basic design feature thereby reinforcing convenience and personal data protection including minimisation of processing of personal data.



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eIDAS EDIW for trusted attributes

- Attribute attestation

- (44) 'electronic attestation of attributes' means an attestation in electronic form that allows the authentication of attributes;
- (45) 'qualified electronic attestation of attributes' means an electronic attestation of attributes, which is issued by a qualified trust service provider and meets the requirements laid down in Annex V;

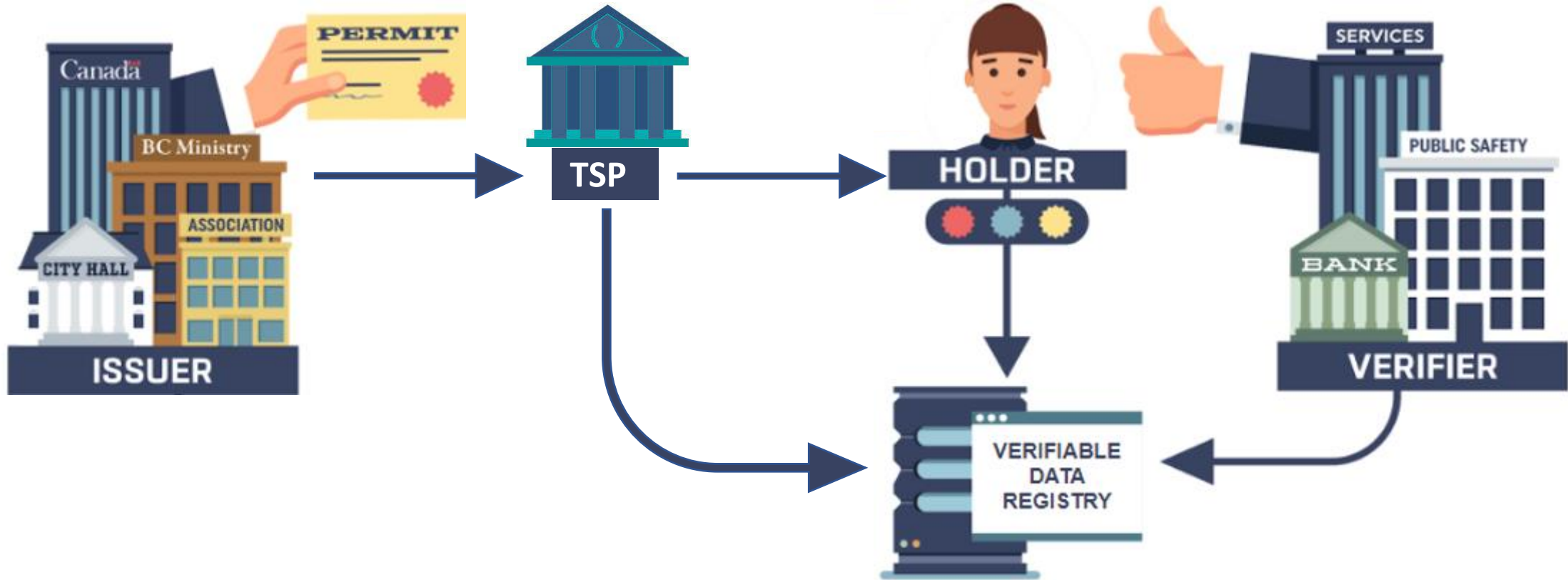
- Attribute validation

- 5. Member States shall provide validation mechanisms for the European Digital Identity Wallets:
 - (a) to ensure that its authenticity and validity can be verified;
 - (b) to allow relying parties to verify that the attestations of attributes are valid;
 - (c) to allow relying parties and qualified trust service providers to verify the authenticity and validity of attributed person identification data.



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- Trust service providers for attestation (and verification)



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Open points

- EDIWs project appears to be both an Official National Electronic Proof of Identity issued by each EU Country and a technical implementation which can be downloaded on Mobile. EU Commission will propose agreement in Q4 2022 on a common technical Framework, and with agreement, should begin pilot projects.
- One of the most important subjects will rely on governance model and the consequent technical implementation between EDIWs and third party private SSI platforms
- A major objective is build up of the Digital Currency Euro, for which EDIWs could play a key role.



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Which governance scenarios ?

- First announcements : » Major platforms, like Amazon, Google, or Facebook, will also be required to accept the use of the EU digital identity wallets upon request of the user – for example, to prove their age.” “sovereign line”
- Does EDIWs compliance appears like a huge opportunity or a real Threat for Third Party SSI service providers ?
- Which onboarding strategies would be possible in the EDIWs’ toolbox ?
 - From EDIWs to Third Party or Third party requiring “authentication “ to EDIWs ?
 - Will a “sovereign line” be strictly confirmed or a delegation under control to private sector can be accepted by EU Commission ? In this case, self-regulatory codes of conduct’ should take into account potential National authority audits



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Which governance Scenario ?

- *The eIDAS expert group shall be tasked as main interlocutor for the purposes of implementing [the Toolbox process]*
- *Catalogues of attributes and schemes for the attestation of attributes have already been established in other areas, [...] Alignment and reuse of that work should be considered to ensure interoperability considering also the principles of the European Interoperability framework*
- *International Mutual Recognition ? " Existing international and European standards and technical specifications should be re-used where appropriate for the EDIW framework..."*

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THANK YOU FOR YOUR ATTENTION

Still interested in eIDAS?

[Go.eIDAS Summit \(01 July 2021\)](#)

Also on the radar screen...

New draft AML Regulation
to be released on 07 July 2021

