

List of Trusted Entities and EUDI Roles

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List of Trusted Entities

Context – Abstraction from trusted lists

- The general concept of “trusted lists”, or “list of actors/providers/entities that are trusted within a given context/community” has proven to be exceptionally useful and has inspired other initiatives such as:
 - The ISO MDL cbor VICAL structure
 - The W3C JSON Verifiable Issuer and Verifier List <https://github.com/w3c-ccg/verifiable-issuers-verifiers>
 - The ESSIF TRAIN JSON Trust List https://gitlab.grnet.gr/essif-lab/infrastructure/fraunhofer/train_project_summary

List of Trusted Entities

Context – Abstraction from trusted lists

- Recognizing both
 - The success of the trusted list model
 - The different needs of the various communities which are looking to emulate a trusted list model for listing actors that have been recognized as “trustworthy” for a specific scope in that community
- ETSI ESI is finalizing a new TS 119 602 which aims to provide a general data model for “list of trusted entities” which is:
 - Format agnostic
 - Flexible enough to accommodate the existing needs of the communities looking to re-use the trusted list model
 - Compatible with the existing TS 119 612 XML structure.

List of Trusted Entities

Standardization goal

- The TS 119 602 aims to be a format agnostic abstract model that allows the listing of
 - Information about the scheme in which the list is provided
 - Entities that are recognized as trustworthy within that scheme, including for which scope that recognition is granted.
 - Signature information
- Scheme information may be “implicit” or “explicit”. When a scheme is implicit, that is when information about the scheme can be retrieved out-of-band, then the list only contains minimal information such as the version identifier of the list, the sequence number of the list, the publication date of the list, the next update date of the list.
- Lists complying to the TS 119 602 are called “list of trusted entities”, or “LoTE”.

List of Trusted Entities

Standardization goal

- The TS aims to provide various “bindings” or serializations, in CBOR, XML, JSON at minimum.
- Interested communities will then be able to select a suitable “LoTE” syntax and based on that provide a community-specific **profile** which lays down community-specific requirements.
- A “binding” of the TS 119 602 provides a serialization of the data model in a given syntax, e.g. XML, JSON, CBOR, ASN.1.
- A “profile” provides a set of scheme-defined requirements regarding the **values** of the elements specified in the TS, and may provide further constraints in the sense of limiting the choices that are permitted under the generic TS 119 602 data model (e.g. making the presence of an element mandatory or forbidden when it is optional in the general data model).
- It is expected that various profiles will exist for each binding.
- It might however be a profile is applicable to multiple bindings, i.e. that multiple serialization can be used to convey the same payload.

EUDI Roles & LoTEs

Lists of various EUDI framework actors

- Various lists are to be published by the Commission:
 - List of wallet providers (CIR 2024/2980)
 - List of person identity data providers (CIR 2024/2980)
 - List of wallet relying party access certificate providers (CIR 2024/2980)
 - List of registrars and registers of wallet-relying parties (CIR 2024/2980)
 - List of Pub-EAA providers (CIR 2025/1569)
- The information to be notified to the Commission by the EU MS relating to all of those list is very similar.
- The TS 119 602 aims to provide a data model that is generic enough to encompass all of those lists.

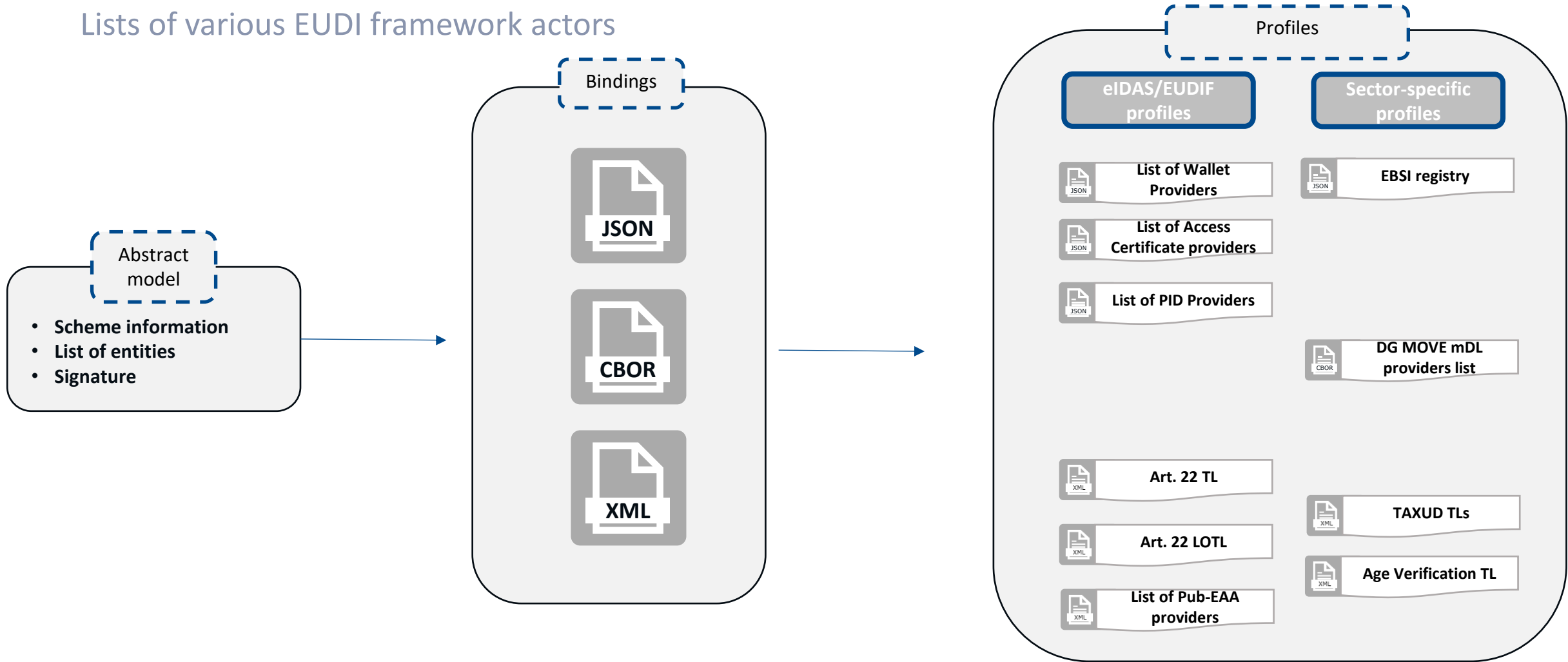
EUDI Roles & LoTEs

Lists of various EUDI framework actors

CIR 2024/2980 Annex II section 2 & 3 & 4 (1)(a)	Name of the trusted entity
CIR 2024/2980 Annex II section 2 & 3 & 4 (1)(b)	Trade name of the trusted entity
CIR 2024/2980 Annex II section 2 & 3 (1)(c)	Extension specifying a body associated with the trusted entity
CIR 2024/2980 Annex II section 2 & 3 (1)(d), section 4 (1)(c)	Address of the trusted entity
CIR 2024/2980 Annex II section 2 & 3 (1)(e), section 4 (1)(d)	Address of the trusted entity
CIR 2024/2980 Annex II section 2 & 3 (1)(f), section 4 (1)(e)	URI providing information on the trusted entity
CIR 2024/2980 Annex II section 2 & 3 (1)(g), section 4 (1)(f)	URI providing information on the trusted entity
CIR 2024/2980 Annex II section 2 & 3 (1)(h), section 4 (1)(g)	Digital identity of a trusted entity service

EUDI Roles & LoTEs

Lists of various EUDI framework actors



EUDI lists

LoTE profiles

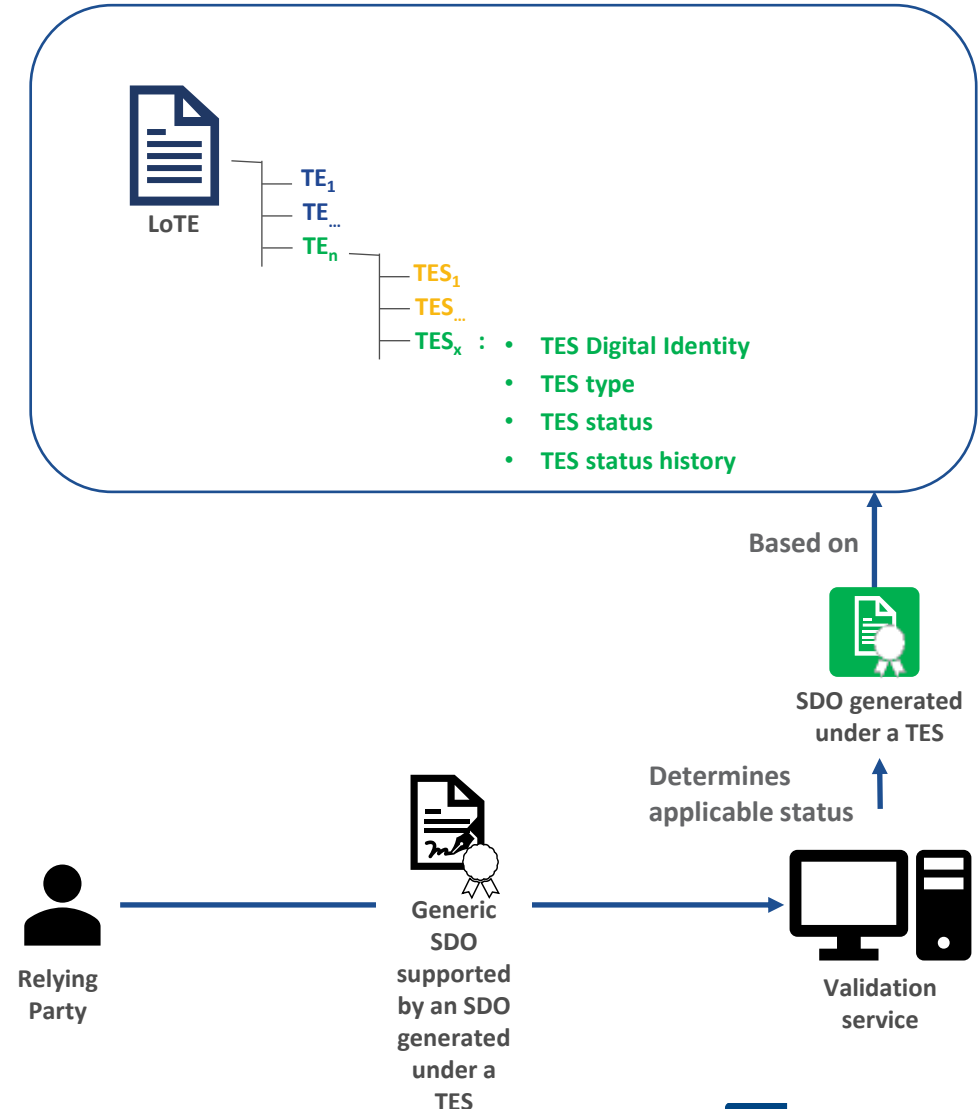
- The EUDI lists need to be fit for purpose in the context in which they are used
- The various lists use different syntaxes depending on their context
- Various constraints affect the lists, which means they may be very different from one another.
 - E.g. Some lists may not require keeping track of the status history
- The content of the lists need to be appropriate in the context in which they are used: List may contain only one type of trusted entities, or it may make more sense to have several type of trusted entities listed in one list.

Beyond TS 119 602

Consuming LoTE information

A List of Trusted Entities is used to verify the **approval status** of a PKI or non-PKI service provided/operated by an entity participating in a domain-specific scheme. PKI services generates SDOs (e.g. VCs) that are relevant to the domain within which the entity providing/operating the service operates:

- Approval statuses may reflect that there are various level of reliability when providing a service.
- Services can be of various types, in particular some services may enjoy better recognition than others, or be provided with a higher level of reliability.

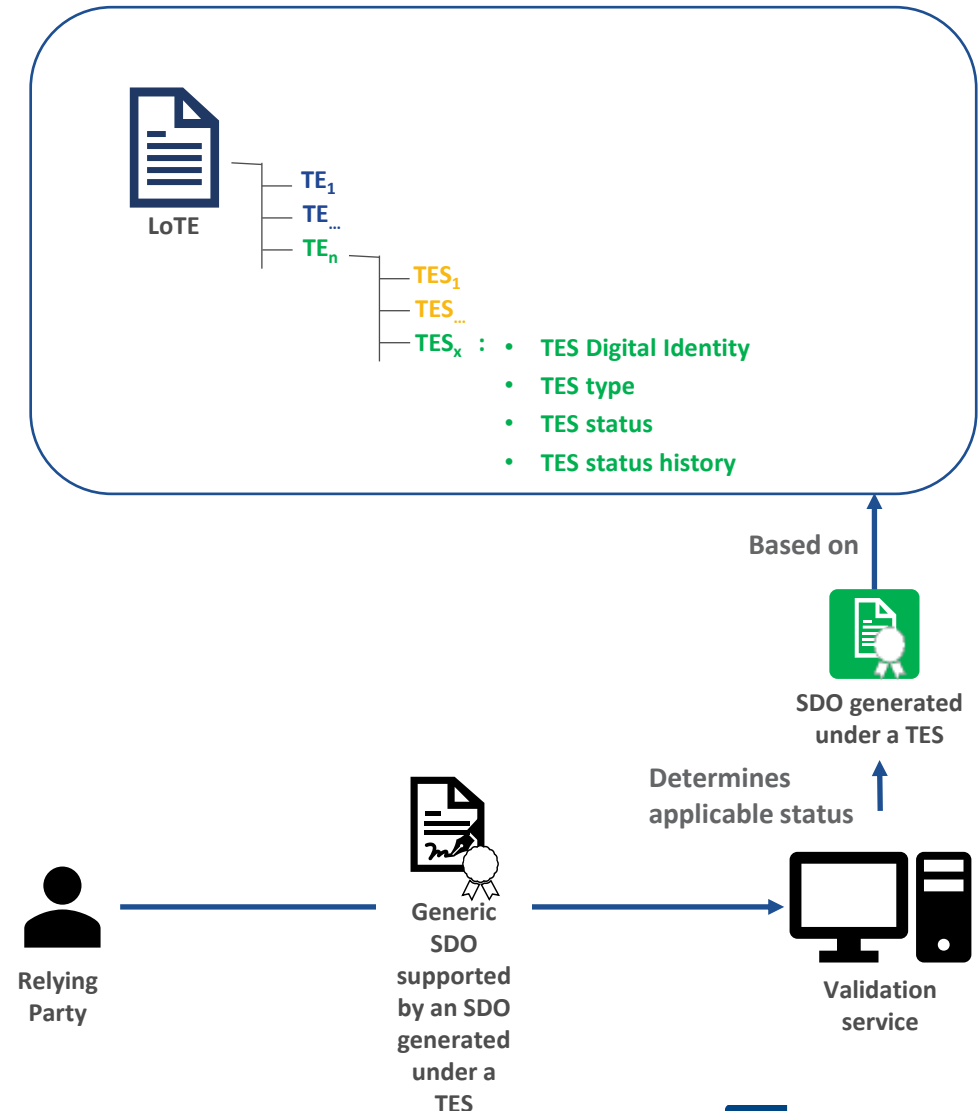


Beyond TS 119 602

Consuming LoTE information

Beyond the TS 119 602, ETSI ESI is aiming to provide another standard, the would be TS 119 605, that aims to provide a procedure for relying parties to determine whether a given SDO has been generated under PKI-service of a specific scheme-defined type listed in a given list of trusted entities (or a set of such lists), and whether a specific scheme-defined status (or a set of such statuses) is applicable to that PKI-service for a given date and time.

- This procedure would provide a unified approach to consuming the information provided in the EUDI list. i.e. a common procedure to verify the status of a PID provider, wallet provider, WRPAC provider, etc.





Thank you !

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